# Exploring How Women Negotiate Pregnancy in Respect to Food Behaviours and Weight Status: An Interpretative Phenomenological Study

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Ву

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# **DEDICATION**

To my mother,

Mrs. Hope Mubiru

#### **ACKNOWLEDGEMENTS**

Throughout this journey, culminating into this thesis, I have had immeasurable support from my family, friends and colleagues that I would like to acknowledge.

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#### **ABSTRACT**

This study is a longitudinal exploration of women's eating behaviours and weight status during motherhood starting from pre-conception, through pregnancy and into the early postpartum period.

The study aimed to explore how women negotiate pregnancy in the context of food and weight status using IPA. The rationale was to capture from the diverse voices of different women what is important to them at these different time points and collectively how this informs behaviour in the motherhood journey. The participants consisted of three different, randomly selected sample sets of women 20- 40 years. Focus groups were carried out with 10 never pregnant women, followed by serial individual interviews with five currently pregnant women, and five women who had recently given birth, interviewed at 2 different time points.

The findings highlight a change in women's priorities described in superordinate themes along the motherhood cycle. Women's priorities changed starting in preconception with a strong sense of self and realisation of limited time for childbearing, to focussing on the baby at the expense of the self, during and after pregnancy.

The findings strongly show that women's eating has emotional, biological and gendered meanings during the transition to motherhood. Socialisation, social events, expectations and peer support also strongly influenced how women negotiated conflict in this continuum. There are tensions in the postpartum period between the new focus on the baby (emerging during pregnancy), which prescribes healthful eating, and the stresses of a new motherhood lifestyle which reverts women to emotional eating (present preconceptually). In negotiating these tensions, women adopt the digital discourse as part of self-support behaviours in addition to trust and desire for the support of HCPs and significant others. The findings have implications for lifestyle interventions that acknowledge these tensions, women's priorities and their coping strategies.

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#### **ABBREVIATIONS**

BED Binge Eating Disorder

BMI Body-Mass Index

DA Discourse Analysis

DH Department of Health

FG Focus Groups

GP General Practitioner

GT Grounded Theory

GWG Gestational weight gain

HCPs Healthcare Professionals

HV Health Visitor

HRT Hormonal Replacement Therapy/Treatment

IOM Institute of Medicine (USA)

IPA Interpretative Phenomenological Analysis

NHS National Health Service (UK)

NICE National Institute for health Clinical Excellence (UK)

PWR Postpartum Weight Retention

TPB Theory of Planned Behaviour

TRA Theory of Reasoned Action

WHO World Health Organisation

#### **DEFINITIONS**

**Body Mass Index (BMI)** is a person's weight in kilograms divided by the square of their height in metres (kg/m2) giving a ratio weight-for-height used to classify individual overweight and obesity status in adults.

**Double Hermeneutic:** Is a theory of a two relationship of understanding the lay concepts from research data. Firstly, the participant tries to make sense of their experience revealed in their stories, and then the researcher makes sense of the meaning of this experience to the participant.

**Discourse:** defined by Foucault as the manifold relations of power which permeate, characterise and constitute the social body and henceforth disseminated throughout the population (Wallbank, 2001). E.g. Scientific claims that place construction of motherhood as area of potential problems to both mother and baby. This then sets out rules and normative framework against which people engaging in motherhood have to conform.

**Discourses:** systematic bodies of knowledge, a group of ideas or patterned way of thinking identified in social communications and located on wider social structures. Also defined as meaning-making resources that constitute social reality, forms of knowledge and identity within specific social contexts and power relations (Hall, 1997:220).

**Discourse Analysis:** Defined as the analysis of language used in social contexts through focussing on ongoing flow of communication between several individuals to identify patterns among speakers (Alba-Juez, 2009, Thorne, 2000).

**Feminism:** is the acknowledgement of differences between sexes that impact on behaviour, specifically disadvantaging women within social contexts (Bordo, 1993).

**Feminist research:** is research that draws on women's experience of living in a world that prescribes different expectations and discourses by gender and purposes to

explore why and how women make sense of their experiences in defined contexts

(Wadsworth, 2001).

**Ideology:** is an interpretation or representation of a social relationship that creates

social meaning and has social consequences (Powers, 2001).

Medicalisation of pregnancy: involves interpreting pregnancy as a disruption to

health, requiring expert medical intervention. It involves technological medical

interventions and contact with clinics and hospitals, where women are assessed by

medical experts who are the authorities on their progress (Mullin, 2005 pp 54, Kukla

and Wayne, 2011).

**Motherhood:** The state and experience of giving birth to and raising a child.

**Obesity:** Defined as a BMI greater or equal to 30.

**Overweight:** Defined as a BMI greater or equal to 25.

Phenomenology: Idiosyncratic meaning to individual, a focus on a person's lived

experience of an event (Lopez and Willis, 2004).

**Social construct:** is anything that exists as a product of human interaction and not

merely by virtue of objective, human existence (Powers, 2001, Potter, 2004).

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#### **CHAPTER 1: INTRODUCTION**

#### 1.1 Overview

This chapter outlines the thesis, providing background information about maternal obesity and the aims and objectives of the study.

The focus of this study was to explore women's lived experience of pregnancy and how food behaviours and weight are super imposed during the transition to motherhood. The main argument from the findings of this study is that women's eating behaviours are developed over a long time, influenced by social and gendered constructs. The temporality of these constructs during motherhood reveals a shift in food behaviours mainly during pregnancy, but women soon return to previous eating behaviours in the postpartum. Peer support and the emotional state of women during the transition plays a role in how significantly women espouse discourses and constructs, and prioritising the baby over the self during this time impacts on food behaviours and meanings of weight.

#### 1.2 Maternal Obesity

#### 1.2.1 Overview to obesity

Overweight and obesity are a result of long-term energy imbalance (Jebb, 2005) resulting in abnormal or excessive fat accumulation, which may impair health (WHO, 2011). Obesity has more than doubled since the 1980's becoming a serious public health issue globally due to its role in increasing morbidity and mortality worldwide (WHO, 2011, WHO, 2007). Once regarded as a problem only in high income countries, overweight and obesity are taking an upward trend in all urban settings and even in low-income groups in developed countries (Lev-Ran, 2001, WHO, 2004), becoming the fifth leading risk for global deaths (WHO, 2011). In Europe, the prevalence of obesity and overweight is as high as 50-65% (WHO, 2007, Raben, 2003), and this is accompanied by a simultaneous rise in mental health problems and chronic diseases such as diabetes, heart diseases, cardiovascular disease, hypertension, and cancers, e.g. of the colon and breast (Raben, 2003), which have significant economic and health

service provision burdens. Therefore, action against obesity is urgently needed and it is recommended that prevention and treatment begin at an early age (Lev-Ran, 2001, WHO, 2007).

Young and adult women are said to be at an increased risk of overweight and obesity in their life trajectories (Gore et al., 2003) with pregnancy particularly cited as a major contributor to overweight status in this group (Gore et al., 2003, WHO, 2010, Johnston, 1991, Siega-Riz and Laraia, 2006, Guelinckx et al., 2008). Indeed, the most rapid rise in obesity and overweight in women is said to occur during the peak childbearing years (Lev-Ran, 2001, Azarbad and Gonder-Frederick, 2010). This is due to a mixture of biological, hormonal, environmental and cultural factors, with reproductive transitions such as pregnancy and menopause increasing women's risk of obesity (Azarbad and Gonder-Frederick, 2010).

#### 1.2.2 Pregnancy and overweight development

As soon as a woman becomes pregnant, her body begins to change in order to support both herself and the unborn baby. Pregnancy results in a series of continuous physiological adjustments that affect metabolism, making body functions work much harder (King, 2000) while the body undergoes many changes secondary to the progesterone and oestrogen hormones at play within a woman's body. All these adjustments in anatomic and physiological changes as well as nutrient metabolism enable foetal growth while preparing the mother for childbirth and lactation (King, 2000, IOM,, 2009).

The series of complex adjustments that evolve throughout pregnancy include increased energy intake, foetal and maternal tissue development as well as products of conception (King, 2000, Devine et al., 2000, Williamson, 2006). This leads to a gradual increase in maternal body weight during pregnancy (also called gestational weight gain), which is an important determinant of maternal and foetal health (Straube et al., 2008). Pregnancy weight gain is due to the growing foetus, placenta, and amniotic fluid accounting for over a third of this weight gain with the remaining

weight being increased blood volume, fluid retention and extra maternal body fat (Reifsnider and Gill, 2006). Whilst 30-35% of gestational weight gain can be attributed to the foetus and the placenta, the remainder is explained by an increase in maternal tissues and fat stores (Reifsnider and Gill, 2006, Devine et al., 2000, NICE, 2010). Williamson, in a 2006 briefing paper, reports data from an early British study estimating the percentage pregnancy weight gain composition at full term, most of which is lost at birth, to be the foetus (27.2%), and products of conception and maternal tissues (46%). This is based on the average weight gain of 12.5kg. The remaining 26.8% is assumed to be maternal fat deposition, which greatly increases if the pregnancy weight gain is higher than the average (Williamson, 2006). This gain in fat maybe normal as a necessary physiological reaction of pregnancy or merely excess unwarranted fat stores.

To sustain these rapid pregnancy weight adjustments, it is proposed that there may be an alteration in the use of dietary nutrients augmented by maternal behavioural changes (King, 2000). These maternal behavioural changes principally include change in food intake and physical activity, which affect the amount of energy and nutrients available for foetal growth (Williamson, 2006). It follows that nutrient metabolism is directly influenced by food intake and hormonal changes within the body. While hormonal changes are automatically triggered in the body by pregnancy, maternal nutrient supply relies on maternal food behaviour which varies during pregnancy and may be characterised by either a change in amount of food consumed or a change in food choices (Williamson, 2006, IOM, 2009). Food choices, for example, are known to be influenced by food cravings or food aversions as well as knowledge and beliefs about healthy food/diets with socio-economic status often reinforcing this polarised picture (King, 2000, Hinton and Olson, 2001).

For optimal physiological function, the body has a threshold in its capacity for nutrient metabolism. When this threshold is exceeded, foetal growth and development are impaired (King, 2000). For example, when food intake falls below this limit (as a result of food restriction or inadequacy), foetal growth and development are reduced

intensifying risk of poor pregnancy outcomes like low birth weight, preterm delivery and maternal complications (Straube et al., 2008, King, 2000). Also, when this threshold is exceeded (as a result of excessive intake), both the life of the baby and mother may be in danger through pregnancy complications due to overweight and obesity status. Increased food intake, if excessive, may lead to maternal obesity (Shrewsbury et al., 2009, Feig and Naylor, 1998) estimated to be as high as 25% in western countries (Guelinckx et al., 2008). Maternal obesity increases risk of adverse pregnancy outcomes such as labour complications, pre-eclampsia, birth defects and gestational diabetes with a subsequent burden on society and health services (WHO, 2007, WHO, 2010, Guelinckx et al., 2008, Siega-Riz and Laraia, 2006).

Excessive calorific intake during pregnancy may result in an increase in weight that persists beyond the pregnancy explaining the important role of postpartum weight retention in the pathway leading to obesity among women of childbearing age (Siega-Riz et al., 2010). Energy imbalance as a result of increased food intake and less physical activity common with pregnancy may lead to excessive accumulation of body fat (Hill et al., 2012). Moreover, hormonal changes, and general change in maternal behaviours during pregnancy may negatively impact on the body weight and food habits of the woman during and after pregnancy (Schmitt et al., 2007, Linne and Rossner, 2003) . Indeed, pregnancy is known to contribute to maternal body weight development in the short-term, and possibly contributing to maternal obesity in the long-term.

It is suggested that from the onset of pregnancy through to the postpartum period, women undergo a series of weight changes within just nine months. After pregnancy, some women do not return to their pre-pregnancy weight, hence postpartum weight retention. Arguably, the mechanism of maternal obesity is often suggested to be through postpartum weight retention, which is a positive weight difference between a postpartum visit and a pregnancy visit (Kac et al., 2004a, Kac et al., 2004b) and has been reported in different settings (Siega-Riz et al., 2010, Kac et al., 2004a, Kac et al., 2004b).

The prevalence of postpartum weight retention is not known due to different timeframe definitions of the postpartum period in various studies. These range from 6 weeks (Scholl et al., 1995) to 15 years (Linné et al., 2003) and even 21 years (Mamun et al., 2010). Studies however estimate that 15%–20% of mothers retain between 1.5 to 5.0kg of pregnancy weight gain at 6–18 months postpartum (Gore et al., 2003, Calfas and Marcus, 2007, Kac et al., 2003, Kac et al., 2004b, Schmitt et al., 2007), but this varies highly with some women retaining as much as 17.7 kg (Gore et al., 2003). The major concern about postpartum weight retention is the risk of obesity to the woman (Schmitt et al., 2007) resulting from the established positive association between postpartum weight retention and severe obesity in women (Shrewsbury et al., 2009). This predisposes women to long-term risk of chronic diseases especially cardiovascular disease (Williamson, 2006, Mamun et al., 2010) and a resulting public health issue of disease burden to health services.

Further, maternal obesity increases the child's risk of being overweight and obese (WHO, 2007, Feig and Naylor, 1998) while postpartum weight retention is a known predictor of subsequent obesity in the mother. This is because, in addition to the weight gain associated with age, each successive pregnancy is said to add a minimum of 1kg body weight (Johnston, 1991). This inter-pregnancy weight gain is strongly associated with adverse maternal and perinatal outcomes, increasing risk of hypertension, diabetes and certain cancers (Ramachenderan et al., 2008, WHO, 2007).

#### 1.2.3 Context leading to development of research question

It appears that pregnancy, food behaviours, postpartum weight retention and obesity are intertwined in a complex pattern, which includes a change in lifestyle, behavioural, and social-cultural factors; all of which are still not fully understood (Crawford, 2010, Linné et al., 2002, Harris and Ellison, 1997).

For example, reviews by Harris et al. (1998), Harris and Ellison (1997) suggested up to 31 predictors of maternal obesity and postpartum weight retention to include: maternal age, marital status, maternal height, heterozygosity, education, occupation,

social class, urbanisation, religion, ethnicity, husband's age, income, capacity to work, smoking status and husband's BMI. Other factors were previous obesity, birth weight of previous child, body weight during pregnancy, household size, age at menarche, contraceptive or HRT use, alcohol use, physical activity, health status, family history of cancer, menstrual cycle rhythmicity, dieting, lactation and inter-birth interval (Linné et al., 2002, Harris and Ellison, 1997).

Most of these identified factors have consistently been controlled for in studies on pregnancy, postpartum weight retention, and obesity (Linné et al., 2002), but it is the mechanism through which socio-cultural factors may influence body weight and risk of obesity that is not well understood (Crawford, 2010). This is due to little information about what prompts women to change their diets during pregnancy and what external pressures, personal beliefs and habits influence the dietary choices pregnant women make that may persist beyond pregnancy (Gross and Pattison, 2007, Crawford, 2010, Gore et al., 2003). Thus, there is need to explore pregnant and postpartum women's social, cultural and physical contexts in order to understand their effect on food behaviours and contribution to postpartum weight retention, which maybe an intermediary state predisposing women to maternal obesity (Crawford, 2010, Ussher, 2000).

These contextual factors are widely identified as under-researched by many studies (Harris and Ellison, 1997, King, 2000, Gunderson and Abrams, 2000, Ellison and Harris, 2000, Guelinckx et al., 2008, Linné et al., 2002), and a report on weight gain during pregnancy which re-examined US guidelines, recommended for research to specifically explore how dietary practices, social and cultural contexts may affect change in weight status during and after pregnancy (IOM, 2009). This was also echoed by the UK National Institute for Clinical Excellence (NICE) in its Public Health Guidance 27, calling for research on effective and cost effective ways of helping women to manage their weight, before, during and after pregnancy. The UK National Institute for Clinical Excellence especially calls for research to address gaps in qualitative

research exploring aspects of psychological and emotional issues linked to weight management as well as addressing issues regarding behaviour change (NICE, 2010).

In order to understand the complex pattern of pregnancy and maternal obesity calls for research into aspects of behaviour change, dietary and lifestyle practices (to include physical activity, smoking cessation, alcohol intake, food restriction and disorders), and oblivious influences to practices, for which there is paucity of information (Linné et al., 2002, Harris and Ellison, 1997). A critical review of the existing literature on these aspects was done to focus the study through identification of the gaps in the evidence.

#### 1.3 Research Aim and Objectives

The overall aim of this study is to explore women's experience of motherhood or pregnancy in relation to weight status and food behaviour. Taking a feminist position to explore pregnancy discourses and impact on food behaviours and weight status the following research question will enable the understanding of women's lived experience:

#### 1.3.1 Research Question

How do women negotiate pregnancy in regards to food behaviours and weight?

#### 1.3.2 Objectives

- i. To explore how the information women receive impacts on food and weight status in pregnancy and early motherhood
- ii. To identify the contemporary discourses that relate to food and weight status during pregnancy and postnatal period
- iii. To explore how women engage with that information and discourse to construct their personal beliefs and behaviours in relation to food and weight status in pregnancy and early motherhood
- iv. To determine the role that somatic symptoms play in food choices during pregnancy in the short and long-term

v. To explore how women negotiate conflict in pregnancy and the postpartum period in relation to food behaviours and weight status

#### 1.4 Reflexivity: elucidating the position of the researcher

#### 1.4.1 The need for reflexivity

This application of Interpretative Phenomenological Analysis (IPA) to explore the lived experience of participants requires reflexivity, to clarify the researcher's position and influence onto the research. Specifically how the research does, should or connects with our everyday experience (Smith et al., 2009), and how our preconceptions influence the conduct and interpretation of the research. Following from Husserl, phenomenology systematically and attentively requires reflection on everyday lived experience as both a first-order activity and second-order mental response to the activity (Smith, 2008). IPA therefore requires the researcher to self-examine how their context and experiences may influence the interpretation of participant's narratives of their subjective experience (Alvesson and Skoldberg, 2000). Because reflexivity requires self-examination, this reflexive account is written in the first person describing my preconceptions at the start of the research journey.

#### 1.4.2 Initial reflexive statement

Previously trained in Public Health (MPH) where I researched on the nutrition status of the adult Nottingham population, I wanted to explore wider research approaches around nutrition and women's health. The beginnings of this project were from a competitive PhD study project opportunity which offered a tuition fees bursary and the idea of researching women's food behaviours and weight status which resonated with my core research interests. On the backdrop of having personally faced weight insecurities due to increased weight following the birth of my first son, I wanted to find out how other women's experiences of their pregnancy affects their behaviours and weight status following pregnancy. I was interested in undertaking this research on women's eating and effect on their weight status, to bring out the voices of women in their journey to motherhood. Strongly embedded in the African culture, the social

constructs of the 'mother ideal' are as a larger woman especially after birth. I was therefore keen and open to learn from the women's experiences how uniquely they experienced their pregnancy within a different cultural context.

My research experience has predominantly utilised positivist approaches, with limited experience in purely qualitative research work. Therefore this project was appealing as I wanted to diversify and gain an understanding and tutelage in conducting academic qualitative research work. The choice of the methodology was determined by gaps in the literature and the emerging research question but importantly my unique social background and experience.

My first thoughts at project outset were expectations of difficulty to carry out primary research within a UK NHS system partly because of being constantly discouraged from primary research as problematic with an enigmatic ethics process. This was while doing my Master's degree in Public Health where messages and experiences proliferated; describing how it was 'impractical' to achieve data collection on short degree courses. In addition, being an international student, who is not medically trained, I expected difficulties accessing midwife teams to assist in recruitment and participant access. This, compounded by my being Black African with an accent could potentially make participants not free to speak with me or trust me with their stories as detailed in Chapter 3.

As described in the IPA approach, I used a reflective diary and audio recordings to enhance self-awareness, where I recorded my research journey, anxieties, thoughts and experiences to enable reflection on how these may have shaped the study. A mother of one at the start, and coming from a different background as non-British, positioned me to approach women as both an 'insider' and an 'outsider' (Smith et al., 2009) where the women could describe their experiences in more detail without assuming collusion. This enabled use of a double hermeneutic where I tried to make sense of participants experiences and the meanings the experiences had for them in line with IPA by combining empathy and questioning (Smith and Osborn, 2008). As an insider, it enables you to stand in the participant's shoes, while as an outsider, it

asks that you stand alongside the participant, to question and look at a different angle of the things they are saying (Smith et al., 2009). This gave me confidence to utilise IPA and feminist approaches while being more vigilant to the women's descriptions and meaning of their experience. My contextual and social preconceptions and experiences, and how they positioned me and influenced the research process, are detailed in the methodology Chapter 3 and the conclusive reflexive statement in discussion Chapter 7.

#### 1.5 Summary of the chapters:

The purpose of this thesis is to contribute to evidence of the contextual factors that influence weight and food behaviours during the transition to motherhood. This overview briefly describes how the thesis is arranged and what is included in each of the chapters hereby summarised.

**Chapter 1:** Introduction has provided a primer to the thesis, introducing obesity with emphasis on maternal obesity as well as describing the context leading to the research question. This chapter has also provided an initial reflexive account of the researcher's involvement in the study and how preconceptions, beliefs and physical person may have influenced the early stages of the study. It then lists the organisation of the thesis.

**Chapter 2:** Literature review: Gives a critical appraisal of the literature on predictors of postpartum weight before exploring the theoretical perspectives surrounding maternal weight status. It highlights the gaps in the literature which form the basis of the research question and the objectives that emerge.

**Chapter 3:** Methodology introduces Interpretive Phenomenological Analysis and its use to explore the research question and objectives of the study. It sets out the theoretical underpinnings of IPA and how together with feminist approaches they were adopted to structure the study from refinement, to data collection, analysis and presentation of the findings. The chapter highlights the alternative methodologies considered as well as the rationale of the data collection methods used before listing

the steps followed in the collection, analysis and presentation of the findings. Ethical considerations pertaining the research are discussed.

**Chapter 4:** Focus group findings: This chapter is the first of three data presentation chapters, setting the stage for women's experience of their bodies and knowledge construction of motherhood. Consisting of an interpretation of focus group discussions involving 10 never pregnant women, this chapter describes how social situations and context impact on women's perception and interpretation of food and weight status. The women acknowledge the expectation of motherhood as part of their life trajectory, reinforcing gender roles and constructs that women have to adhere to. Women reveal a focus on the self and enjoyment of events that permit indulgence and relaxed body image ideals, priming them for transference of behaviours such as emotional eating, body displays, and body satisfaction once they are pregnant.

**Chapter 5:** Antenatal findings is a presentation and interpretation of findings from serial interviews with five women during the perinatal period. The narratives show that women's experience of pregnancy is influenced by individual circumstances, cultural expectations and social discourses. Specifically, women view pregnancy as a calling; where their bodies are vessels for childbearing; a biological timing by age and a planned life event. Accordingly, women's view of their body, food and weight consciousness is mostly positive, accepting of weight gain. There is a shift in focus from the self, pre-pregnancy, to the 'baby' during pregnancy. The social description of pregnancy allowing public monitoring of pregnancy behaviours means that women's behaviour was pre-set to 'doing the right thing'. The implications of these and other constructs are explored in more detail in the chapter.

**Chapter 6:** Postnatal findings: This chapter brings together narratives from women in early postpartum who were followed into mid to late postpartum. Serial individual interviews from five women were analysed to explore their lived experience of motherhood in the postnatal period. In this chapter, the women's stories echo pregnant women's narratives that conceptualise motherhood as a gradual life

changing journey lived through constant negotiation of social expectations centred on good mothering. The women reveal undergoing continuous adjustments prioritising the baby over other needs. There are expectations and cultural constructs that women expose in their description of the meanings of the motherhood experience.

**Chapter 7:** presents a synthesis of the findings, bringing together the three findings presentations into an understanding and interpretation of the women's experiences across the motherhood continuum. Bringing together the stories from the three different groups of women, five key findings emerge; some specific to the individual time points of pre-pregnancy, pregnancy and postpartum; but most are interrelated, continuing along this continuum.

**Chapter 8:** The discussion chapter brings together the interpretation findings from Chapters 4-6, into a lifespan analysis of women's experience highlighting what is important before, during, and after pregnancy. The discussion brings out how the narratives compare with the evidence from the literature highlighting what is new leading to **Chapter 9** which sums up the study findings into conclusions and implications for practice, policy and research.

# CHAPTER 2: CRITICAL REVIEW OF MATERNAL WEIGHT AND MOTHERHOOD DISCOURSES

#### 2.1 Introduction:

This is a critical review of the evidence about the weight status of women, the interplay of behaviours and how different discourses underpin women's experiences during, and after pregnancy.

#### 2.1.1 Literature Review Methodology:

A literature search was carried out in online databases such as PubMed, Embase, Web of Science and Medline as well as library resources and targeted online journals. To maximise the article return, this search was done in phases, later organised into two themes: the first exploring predictors of maternal obesity, and the second exploring theoretical underpinnings of the pregnancy experience in relation to weight status and food behaviour.

#### 2.1.1.1 Searching literature on post-pregnancy weight retention

In order to understand obesity related to pregnancy, the literature search was carried out using a combination of the following key words:

Postpartum/pregnancy Risk factors/predictors

Weight retention Weight status

Eat/food/diet Body image

Obesity/overweight Motherhood experience

Maternal/mother Weight change/ weight loss/ gain

A summary of search results is hereby presented.

Records identified Records identified Identification through **OVID** through Web of databases (n= 1,559) Knowledge (n= 736) Keywords: Pregnan\* or mother\*, overweight or obes\*, weight or weight retention, food or Records after Records after diet\* or eat\*, duplicates removed duplicates removed maternal obesity (n=511)(n= 156) Screening: Records screened Records screened Limit search to adults (n= 511) (n=136)(18-64years), Limit to English, Limit to humans) Records assessed for Records assessed Eligibility content eligibility for eligibility (n=150)(n = 134)Articles read by abstract and title for content eligibility Records Full-text articles assessed for excluded (n= eligibility (n= 284) 147) (Duplicates, not humans, no full text Included Studies included in Articles read fully for qualitative synthesis inclusion in (n= 139) qualitative synthesis

Figure 2.1: Flow Diagram of Literature Search Results on Maternal Obesity

The articles were read and summarised which informed the themes discussed in this chapter. Further reference lists and key texts were scanned to identify articles not otherwise obtained from the initial search, which were then included at this stage.

Also because the literature review was done early on in the study, a monthly auto alert was set up in both Web of Knowledge and OVID databases for new published articles. An update of the review has been done with articles published up to August 2015 to include any new evidence.

#### 2.1.1.2 Search strategy on theoretical underpinning of pregnancy experience

Following on from reviewing articles in category 1, there was need to explore social aspects of pregnancy and motherhood behaviours in regard to overweight development. Therefore a second search was conducted to identify studies exploring discourses on motherhood. Here library resources were identified based on their content on pregnancy, motherhood and social aspects of women in relation to motherhood. The search was done online and at the University of Hull library as well as guided references from supervisors which all informed the discussion in section 2.3.

Published peer reviewed articles were also searched in different databases with a focus on journals such as the Journal of Midwifery, Journal of Gender and Society, among others. Article references were checked to identify more articles. The following search terms were used:

pregnan\* or postpartum motherhood

obesity or overweight transition

weight status culture

body image social support/location

For example, a search in *Sage* and *Web of Knowledge* using a combination of keywords gave the following hits:

Table 2.1: A summary of search results motherhood

No	Keywords	Limits	Hits
Α	From all Sage journals		
#1	Motherhood or body image	English, Humans	143
#2	Skim read title	Pregnancy, motherhood or transition, or body image or discourse, or weight status	60
#3	Skim read abstract	Relevance as above	17
В	From Journal of Gender and Socie	ety	
#4	Motherhood and Pregnan*	English, Humans	78
#5	Skim read title and abstract	Relevance	09
C.	From web of knowledge		
#6	Pregnan* AND obesity or overweight AND body image	English, Humans	127
#7	Selection by title and abstract	Relevance	14
#8	Sub-total	#3+#5+#7	40
#9	Removed Duplicates	from #8	11
	Total		29

#### 2.1.1.3 Review methodology

Journal articles from the two searches were identified for full text and reference lists scanned for any missed articles in the systematic search. All relevant articles and identified book chapters were reviewed using the hierarchy of evidence. As suggested in the literature, there was no rigid hierarchy followed but rather guidance on the study design and the quality of the evidence was used (Ho et al., 2008). Focus was put on the study design with systematic reviews and meta-analyses top and expert opinions at the bottom of the hierarchy. Where there was a wide evidence base, the quality of individual studies took precedence. For mostly quantitative studies, the hierarchy of evidence based medicine was used (Fig 2.2) while for qualitative works, preference was given to hierarchy described by (Daly et al., 2007).

Figure 2.2: Hierarchy of evidence used in the Critical Review

Systematic Reviews of RCTs or guidelines based on systematic reviews of RCTs eg. NICE, IOM guidelines

Randomised Controlled Trials

Trials without randomisation, quasi-experimental

Cohort and Case-Control Studies

Systematic reviews of descriptive and qualitative studies

Descriptive or qualitative studies

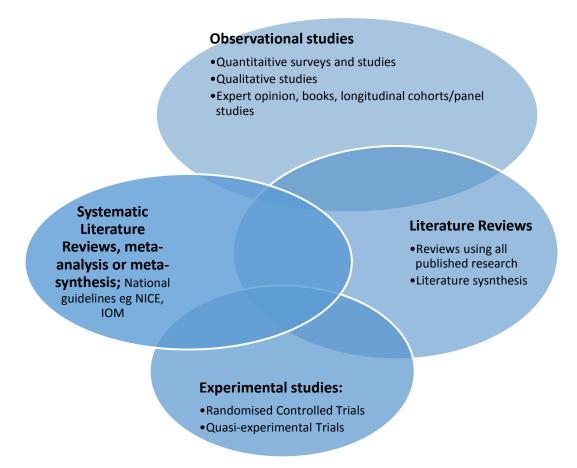
Expert opinion or reports of expert committees eg. book chapters

The Critical Appraisal Skills Programme (CASP) checklist was used to evaluate the evidence (Critical Appraisal Skills Programme, 2013). The critical review analyses the breadth, depth, relevance, gaps, contradictions and inconsistencies in the current evidence base regarding maternal obesity and food behaviours. Individual articles stressing differing positions on themes are highlighted in the review. The key journal articles for each section of the review are presented in **Appendix 11**.

#### 2.1.2 Diversity of the literature

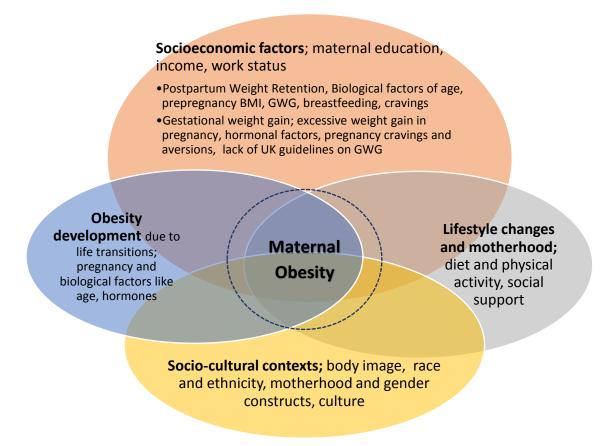
The literature review covers diverse aspects that influence or contribute to the development of maternal obesity. In this regard, maternal obesity is defined as obesity arising as a result of expereincing pregnancy, or weight gain attributable to pregnancy. The literature reviewed can be summarised methodlogically to include various types of research evidence in Figure 2.3.

Figure 2.3: Venn diagram showing methodological diversity of the literature



The diversity of the literature reviewed in this thesis is also summarized in four blocks of evidence which interact and overlap as summarized in the Venn diagram Figure 2.4 below. The overlapping interactions between these factors are not solid and have been researched in a mixture of combinations. The gaps in the literature are identified as multiple combinations of some of these factors.

Figure 2.4: Venn diagram showing the diversity of the literature



#### **2.1.3 Summary**

A critical review of the existing literature on aspects of food behaviour in pregnancy and motherhood is hereby presented organised into 2 sub-chapters. In the first part, I discuss predictors of changes in weight status related to pregnancy while the second part explores the theoretical understanding of maternal weight status and how it interrelates with food behaviours. An update on the literature was included in each section.

# 2.2 Predictors of Postpartum Weight Retention

A person's food behaviours and lifestyle practices determine energy balance that leads to healthy weight status. During pregnancy, the weight status of a woman is also influenced by their biological makeup, socio-economic position and the cultural environment and its influences (Harris and Ellison, 1997).

The biological make-up contributes to the body's physiological functioning, which includes determining the metabolic threshold and uptake of nutrients in the body. Socio-economic status is weighed in terms of accessibility to basic needs while the cultural influences give the context in which food behaviours thrive and contribute to maternal obesity in relation to pregnancy. The interplay of these factors on maternal weight status is hereby discussed.

#### 2.2.1 Biological factors: (Age, hormones, BMI, GWG, genes)

Evidence shows hormonal changes, age, maternal weight and pregnancy weight gain to be common contributors to postpartum obesity and overweight status among women (Gore et al., 2003, Crane et al., 2009).

#### 2.2.1.1 Age:

There is agreement that the age at which a woman first gives birth matters in whether or not they are likely to retain excessive weight after birth. This stems from the routine inclusion of age as a confounder in quantitative research on pregnancy and weight retention or obesity (Kac et al., 2004b, Conway et al., 1999, Crowell, 1995, Ellison and Harris, 2000, Gunderson and Abrams, 2000, Huang and Dai, 2007, Kac et al., 2004a). Whereas the prevalence of obesity in the UK is said to increase with age and currently lowest among 16-24-year-olds (Richens and Lavender, 2010), it has been shown that women younger than 23 years at time of birth are more likely to retain more weight postpartum compared to older women (Tovar et al., 2010, Siega-Riz et al., 2010, Harris et al., 1998). Moreover, Abrams et al found 24-30-year-old women were associated with a two to threefold increase in risk of becoming overweight by their second

pregnancy (Gore et al., 2003, Gunderson et al., 2000). Also, in recent studies among Hispanic and Brazilian women, older age was found to be protective of postpartum weight retention (Kac et al., 2004a, Hackley et al., 2010). This finding is similar in literature reviews showing that younger women gain more weight during pregnancy and subsequently retain more in postpartum (Gore et al., 2003, IOM, 2009, Siega-Riz et al., 2009).

However, most studies which have found this association of higher weight gain and retention in younger women also report that older women were heavier and overweight at baseline compared to the young women (IOM, 2009, Gunderson, 2009) showing only a change in weight between baseline and postpartum measurements but not necessarily in maternal overweight and obesity status. This implies that younger women may gain and retain more weight in the immediate postpartum, but the long-term pattern of obesity development may be the same across ages. For example, in the study by Prysak et al. (1995), older women (≥ 35 years old) had lower pregnancy weight gains, and yet obesity was higher in this group compared to the younger (25-29 years old) nulliparous women (Institute of Medicine, 2009).

A possible explanation for this age difference with postpartum weight retention could be the individual attitudes and choices regarding food behaviours during pregnancy. Some literature on obesity suggests that choice of more unhealthy food, especially fast food, is related to age; reporting younger women as less likely to have home cooked meals and engaging more in eating out at fast food restaurants (Gutierrez, 1999, Jebb, 2005). Also, it can be argued that since most studies include adolescents/teenage mothers (<18years) (Gunderson and Abrams, 2000), pregnancy behaviours coupled with increased energy demands (of both pregnancy and body growth) may lead to change in food behaviours including eating disorders, which could be problematic to break in the postpartum period.

It appears therefore that age plays an additive role in increasing weight status as women grow older. That is to say, while younger women may gain more weight during pregnancy, older women tend to weigh more as a result of a cumulative weight gain.

Thus, the ultimate public health goal is the early prevention of obesity, and identification of influential factors is paramount to tackle the increasing obesogenic status in women (Gunderson and Abrams, 2000). Exploring how factors such as age interrelate with food behaviours and issues of weight concern may give insight into the understanding of the mechanisms of postpartum weight retention and maternal obesity.

#### 2.2.1.2 Pre-pregnancy weight status:

In the UK, about 44% of women (25-34years) are classified as overweight or obese and are advised to obtain a healthy weight before trying to conceive (Williamson, 2006, Richens and Lavender, 2010). Epidemiological studies show that women who are obese prior to pregnancy are more likely to have excessive weight gain during pregnancy (Siega-Riz et al., 2010, Linné et al., 2003, Ramachenderan et al., 2008, Huang et al., 2010), resulting in consensus that being overweight or obese at baseline is a strong predictive factor for further excessive weight gain and weight retention (Hackley et al., 2010, Huang and Dai, 2007, Harris et al., 1998, Gore et al., 2003, Østbye et al., 2012). For example, studies show that between 90- 100% of overweight and obese women gained excessive weight during pregnancy and weight retention was most marked in the category of women who started pregnancy overweight or obese (Lederman et al., 2002, Gore et al., 2003, Crane et al., 2009, Linné et al., 2002). Indeed, a review of evidence by Gore et al (2003) concluded that being overweight before pregnancy places a woman at greater risk of excessive postpartum weight retention. This was after an analysis of several studies that all reported women overweight before pregnancy experiencing the most weight gain and retention postpartum, some retaining more than 17kg postpartum compared to an expected modest range of 0.5 to 3.0kg (Gore et al., 2003).

However, most studies on the effect of pre-pregnancy weight on postpartum retention either use self-reported measurements or weights recorded early in pregnancy (Tanentsapf et al., 2011). For self- reports of pre-pregnancy weight, the challenge, as reviews (Harris et al., 1998, Tanentsapf et al., 2011) have cautioned, lies in the fact that

overweight and obese women (who are prone to underreport their weights) may give self-reports of low weight before pregnancy creating an impression that they gain more weight following pregnancy than normal and underweight women (Harris et al., 1998). The measurement error due to underreporting becomes significant if a different weight measurement method is used to determine weight retention in the postpartum period (Schmitt et al., 2007).

Also baseline "pre-pregnancy" measurements based on recorded early pregnancy weights tend to overestimate pre-pregnancy body weight as has been demonstrated by Harris et al. (1998) and recently confirmed by Schmitt (2007), showing weight averages of 7-13% higher in the first pregnancy month than before conception. Using such measurements can therefore underestimate the amount of weight gained as a result of pregnancy (Harris et al., 1998, Schmitt et al., 2007). This is possibly one of the limitations with the meta-analysis review by Schmitt and colleagues that collated longitudinal studies but found average postpartum weight retention decreasing. This pooled effect did not consider the fact that the weight measurements were different at baseline from follow-up for all the studies involved in the meta-analysis except one by Butte et al. 2003 (Schmitt et al., 2007). This confirms conclusions of Harris et al. (1997) that demonstrated studies which used self-reports of pre-pregnancy weights as having higher estimates of long-term weight gain whereas lower estimates were reported by studies that used baseline measurements recorded in early pregnancy (Harris et al., 1998).

Irrespective of these measurement errors, and taking into consideration recent studies, on a general whole, pre-pregnancy weight is taken to be an important predictor of postpartum weight retention and indeed most studies control for this as a potential confounder (Tanentsapf et al., 2011). This is in part to account for the known effect it has on its own on postpartum weight retention and also the resulting effect on escalating food intake demands during pregnancy.

Further, some influences, especially lifestyle factors also affect pre-pregnancy weight status. It can be argued that some women may change their lifestyle as soon as they decide to start trying for a baby, which may affect the measurement of weight in early pregnancy, but also there is a possibility that these life changes may be related to generally transiting into motherhood. Factors such as change in eating behaviours, physical activity, and other behavioural changes are not well understood but research suggests that they are more likely to cause maternal obesity and influence behaviour beyond pregnancy (Harris et al., 1998, Linné et al., 2003, Schmitt et al., 2007, Linné et al., 2002). It would be important to take a feminist exploration of women's eating and how they experience this in the transition to motherhood. Understanding women's behaviour, with the purpose to know the 'why' and 'how' might help to unpick salient influences contributing to the development of overweight status following pregnancy. Moreover, the feminist insider perspective is vital to learning about cultural experiences of being a woman (Wadsworth, 2001) which might provide an insight into the meaning of motherhood and weight status beyond these reported biological factors.

# 2.2.1.3 Gestational Weight Gain (GWG)

For a successful pregnancy with good outcomes for both mother and baby, every woman is advised to gain weight during pregnancy within certain ranges. Not available in the UK (discussed later), these weight gain ranges are from the US Institute of Medicine (IOM) guidelines for weight gain during pregnancy (IOM, 1990), which have been recently reviewed and revised (IOM, 2009). The gestational weight gain guidelines are based on a woman's pre-pregnancy BMI, recommending weight ranges during pregnancy as follows:

Table 2.2: IOM Recommendations for GWG

Pre-pregnancy Weight Status	BMI range	Recommended GWG
Underweight women	BMI < 18.5kg/m <sup>2</sup>	12.5 to 18 kg
Normal weight women	BMI = 18.5-24.9kg/m <sup>2</sup>	11.5 to 16kg
Overweight women	BMI = 25.0-29.9kg/m <sup>2</sup>	7 to 11.5kg
Obese women	BMI >=30.0kg/m <sup>2</sup>	5 to 9kg

Extracted from: Rasmussen and Yaktine (2009), (IOM, 2009);

## 2.2.1.4 Weight gain in pregnancy:

Pregnancy weight gain is meant for a healthy pregnancy, proper growth and development of the foetus and preparation of the woman for nursing the baby after birth (Devine et al., 2000, Ellison and Harris, 2000). However, gestational weight gain (GWG) has been found to be a strong predictor for postpartum weight retention, (WHO, 2007, Calfas and Marcus, 2007) as well as overweight and obesity status of women in the short and long-term (Mamun et al., 2010, Calfas and Marcus, 2007, Gore et al., 2003, Crane et al., 2009). This is because failure to lose weight gained during pregnancy contributes to long-term weight change and higher BMI later in life (Mamun et al., 2010, WHO, 2007, WHO, 2010).

Studies suggest that pregnant women with high gestational weight gain retain more postpartum weight overall leading to a greater postpartum BMI with higher levels of subcutaneous fat and overweight status (Scholl et al., 1995, Siega-Riz et al., 2009). For example, a cohort study of 2055 women in Australia (Mamun et al., 2010) demonstrated that pregnancy weight gain is associated with higher risks of overweight and obesity 21 years after the index pregnancy, a finding also shown in the 15 year follow-up SPAWN¹ study which reported weight retention ranging from 0.5kg to more than 10kg for women with high GWG (Linné et al., 2003, Linné et al., 2002). There is consensus that in addition to high pre-pregnancy BMI, excessive weight gain during pregnancy is associated with overweight in the postpartum and subsequent maternal overweight and obesity (Ellison and Harris, 2000, Guelinckx et al., 2008, Scholl et al., 1995).

Systematic literature reviews have shown strong evidence for the association between excessive gestational weight gain and postpartum weight retention (Siega-Riz et al., 2009, Gore et al., 2003, Gunderson and Abrams, 2000, Harris and Ellison, 1997). In summary, a review by Harris and Ellison (1997), which pooled 71 longitudinal studies on maternal obesity and compared previous literature reviews, showed body weight

<sup>&</sup>lt;sup>1</sup> SPAWN: Stockholm Pregnancy and Women Nutrition: 15year follow-up study

to be greater after pregnancy than before by margins ranging from 0.2kg to 10.6kg with 0.4-4.8kg attributable to pregnancy. After taking into consideration methodological inaccuracies, they concluded that the mean body weight retained was 0.4-3.0kg higher, having controlled for socio-behavioural factors (Harris et al., 1998). In agreement with the evidence, an epidemiological review also reported a strong positive association between GWG and postpartum weight change by analysing studies in multivariable linear regression models. Gunderson and Abrams (2000) conclude from this review that GWG is the primary and most important determinant of weight change from preconception to postpartum (Gunderson and Abrams, 2000) having accounted for all the variability in postpartum weight change in linear models. This finding was echoed in a later review by Gore et al. (2003) showing that excessive gestational weight gain above the IOM guidelines appears to be an important predictor of postpartum weight retention (PWR) even for women with normal prepregnancy weight (Gore et al., 2003). They found PWR highest in women who had the highest GWG, with weights ranging from 6-10kg PWR for high GWG women compared to 2-5kg for moderate gainers; also associated with a two to threefold increased risk of becoming overweight by the beginning of the next pregnancy (Gunderson and Abrams, 2000).

However, a meta-analysis systematic review by Schmitt et al. (2007) found that average postpartum weight status decreased continuously until 1 year postpartum followed by a re-increase in body weight after this period. They concluded that lifestyle-related rather than biological reasons could explain this late increase (after one postpartum year) in body weight. Schmitt and colleagues then suggested that measurement of postpartum weight (weight related to previous pregnancy) to be within the 1<sup>st</sup> year after childbirth (Schmitt et al., 2007) as any changes in weight after this cannot be directly attributable to the pregnancy.

The conclusion of the Schmitt et al. review has been suggested in previous follow-up studies and systematic reviews; stating the uncertainty of whether these weight increases are simply a result of energy imbalance in the postpartum period or largely

influenced by changes in lifestyle behaviours that accompany pregnancy and motherhood, yet less studied or understood (Harris et al., 1998, Linné et al., 2002, Schmitt et al., 2007, Gore et al., 2003, Gunderson and Abrams, 2000). For example, breastfeeding is shown to contribute to a reduction in maternal weight status in immediate postpartum up to 12months (Dewey et al., 1993, da Silva et al., 2015), yet without difference in weight beyond 12months among the breastfeeding and non-breastfeeding groups (Dewey et al., 1993). This little or no difference in weight loss and sometimes weight gain beyond 12months postpartum could be attributed to sociocultural influences that give rise to new behaviour.

The meta-analysis is also limited in explaining whether there is a development of new behaviours after one year postpartum, which were absent before or during pregnancy and in the immediate postpartum period. If this were the case, one possible explanation could be attributed to the stress of adapting to motherhood and increased caring responsibility which leaves women drained in the first year (hence decreased eating and rapid weight loss related to stress) but progressively coping with the new tasks by the end of the first year. It remains a challenge for research to explore the experiences of women in regard to behaviours in the postpartum period and how they relate to weight status.

# 2.2.1.5 UK guidelines on weight in pregnancy

Whereas pregnancy weight gain is crucial for good pregnancy outcomes, yet a strong predictor of postpartum weight retention and obesity, it is important to note that optimal weight gain during pregnancy is still controversial (Straube et al., 2008). This is because there is no conclusive information on whether the US guidelines may be applicable to different populations with ethnic and cultural compositions different to that of the US (NICE, 2010, IOM, 2009). Also, as stated by the UK National Institute for Health and Clinical Excellence (NICE), the US guidelines are only based on observational data with no conclusive information on whether adherence to recommended ranges lowers risk of adverse outcomes to both mother and baby (NICE, 2010). It is not surprising therefore that weight gain varies significantly amongst

pregnant women with some studies showing on average most women having gains way above these guidelines (Linné et al., 2003, IOM, 2009).

The recently reviewed and revised gestational weight guidelines from the US Institute of Medicine (IOM) caution that they are intended for use among women in the United States (Rasmussen and Yaktine, 2009, IOM, 2009). Thus, the lack of UK national guidelines for weight gain during pregnancy (Richens and Lavender, 2010, NICE, 2010) leaves a number of implications to consider:

Firstly, the lack of UK guidelines escalates uncertainty among women about healthy weight and subsequently hindering their ability to monitor pregnancy weight gain (BBC Health, 2010, NHS Choices, 2010). Also, since weight gain is fundamentally a result of increased food intake coupled with less physical activity (Devine et al., 2000, Calfas and Marcus, 2007, Mamun et al., 2010), the inability of NICE to present or endorse clear pregnancy weight gain guidelines makes it yet another challenge for pregnant women to follow healthy weight gain practices without a reference point.

Knowledge about appropriate weight gain and how excessive GWG can be controlled is crucial to guide the population and health care providers. In various qualitative research, the majority of pregnant women respondents reported confusion about GWG and some did not consider weight recommendations to be important (Tovar et al., 2010, Richens and Lavender, 2010, Swinburn et al., 2004). The explanation was that the women simply did not know what was exactly recommended as regards GWG and others were generally confused about the calorie and fat content of foods (Tovar et al., 2010, Setse et al., 2008, Groth and Kearney, 2009). This is in agreement with evidence that nutrition knowledge is directly related to better food choices and healthy food behaviours (Crawford, 2010) through people understanding what is good in what quantities and even how much weight is safe or not. For example, in a study with pregnant Mexican-American adolescents, Gutierrez identified the lack of nutritional knowledge to have a negative impact on dietary habits with the respondents' lack of nutritional knowledge showing in their choice of junk food, low fibre intake and lack of concern about the consequences of poor diet choice (Gutierrez, 1999).

Secondly, where there are no national guidelines on pregnancy weight gain, it is also challenging for health care professionals to give appropriate advice or effectively monitor the weight status of pregnant women under their care. Indeed some research has shown a gap in provision of advice to pregnant women about weight from their health care professionals, who in turn cited lack of patient educational materials, low self-efficacy and limited diversity in the health care work force (Tovar et al., 2010). This has an impact on the level and nature of advice given in obesity management and during pregnancy health care visits (Siega-Riz and Laraia, 2006, Thornton et al., 2006). Recent qualitative work reported interviewed postpartum mothers not receiving any weight management advice from their physician/GP (Thornton et al., 2006, Tovar et al., 2010, Setse et al., 2008). This resonates with the lack of recognition of health professionals as effectively influencing pregnant women's attitudes about weight during and after pregnancy. Quantitatively, reviewed studies have reported 30-60% of women do not receive weight gain advice despite strong evidence showing that the amount of GWG is influenced by healthcare provider recommendations (Tovar et al., 2010, Gross and Pattison, 2007).

Therefore, some women previously concerned about their weight may find pregnancy a challenging time in terms of weight check and healthy outcomes. Indeed in the Tovar et al. (2010) qualitative study, some women were not sure whether to restrict their diets or increase intakes in order to meet this uncertain weight gain. Moreover, NICE recommends that women should not follow strict diets during pregnancy (NICE, 2010) and this may present food behaviours directly impacting on excessive gestational weight. Arguably, women previously on diets enter pregnancy and are not allowed to continue previous food restricting diets, are faced with a change in their food behaviours through increased food intake which may persist beyond the pregnancy. Also those already struggling with weight control see pregnancy as an excuse to eat more, piggybacking on pregnancy norm of no food restriction (Swann et al., 2009, Tovar et al., 2010).

Thus, in the absence of healthcare guidelines and advice from health care professionals (HCPs), women may construct their own views about weight gain and nutrition, in line with cultural practices and family expectations and, or experiences which may not be consistent with desired health outcomes (Tovar et al., 2010).

As a result, GWG identified as a major contributor to PWR, can be said to be a complex issue in the UK context, mediated by changes in food behaviours and a lack of national guidelines that these pregnant women and their health care professionals can use as reference points for weight related advice and interventions. If not checked, GWG, coupled with consistently unchecked food behaviours can have profound impact on maternal and foetal outcomes in the short and long-term.

#### 2.2.1.6 Hormonal factors:

The onset of pregnancy is followed by major hormonal changes and fluctuations lasting the entire nine months. In addition to changing body responses, the behavioural and genetic factors that influence fat metabolism regulation may contribute to sustained body weight increases related to pregnancy (Gunderson and Abrams, 2000). Hormonal factors often manifest as somatic symptoms of nausea, cravings and aversions which play a role in food choice and intake as hereby discussed.

#### 2.2.1.7 Pregnancy Nausea, Cravings and Aversions:

Yet another potential contributor to maternal weight status is food cravings and aversions, often tagged particularly to pregnancy (Gross and Pattison, 2007, Knoph Berg et al., 2011, Groth and Kearney, 2009) with studies reporting 66% to 85% occurrence of cravings and aversions among pregnant women (Gross and Pattison, 2007). The origins of cravings and aversions are said to be from the medical model relating pregnancy experiences to physiological and endocrinal changes within the woman (Gross and Pattison, 2007, King, 2000). Ordinarily, it is a widely held view that cravings and aversions are the body's mechanism that fosters optimal foetal development (Hook, 1978, Gross and Pattison, 2007) with cravings indicating a deficiency (physiological need for mother and foetus) while aversions suggest a foetal-

protective mechanism (repulsive, or harmful food intake) (Hook, 1978) resulting in nausea and vomiting. As a result, many people view these occurrences as strong indictors contributing to the health of the mother and baby. A typical example is cited from a study in which husbands expressed fears that if a woman did not eat what she craved then it might hurt the baby and therefore brought fatty foods for their wives in order to satisfy the cravings (Thornton et al., 2006).

It follows that cravings generally increase food consumption (especially for craved foods) while aversions can lead to decreased intake (Gross and Pattison, 2007, Hook, 1978). This decrease in food intake due to aversions is commonly brought about by morning sickness as women tend to avoid foods they relate with morning sickness. For example, Gross and Pattison (2007) report in their study, that 72% of women developed food aversions specifically linked with a vomiting incidence or smell and taste of these foods linked to nausea (Gross and Pattison, 2007).

These somatic symptoms of nausea, aversions and cravings are said to influence food choice and also play an important role in changing women's diet and their weight status during pregnancy. Research shows that there are changes in types of foods consumed as a result of cravings and aversions during pregnancy with women generally craving and increasing the consumption of milk (dairy) and chocolate, much more than pre-pregnancy, while the most common aversions are caffeinated drinks, meat and alcohol (Hook, 1978, Gross and Pattison, 2007, King, 2000).

The development of food aversions and cravings are mediated by changes in metabolism coupled with changes in the olfactory and taste sensitivity as a result of pregnancy (Hook, 1978, Tierson et al., 1983); implying that cravings and aversions are physiologically related to pregnancy. However, studies show that motivations of women's food choices are the same regardless of pregnancy, with physiological changes throughout the menstrual cycle playing a part in women's eating behaviour (Ussher, 2000, Groth and Kearney, 2009, Gross and Pattison, 2007, Knoph Berg et al., 2011).

It is argued that food cravings and aversions, rather than a characteristic of pregnancy, also reflect a way in which women respond to extreme circumstances and body changes just like during the menstrual cycle (Knoph Berg et al., 2011, Swann et al., 2009, Ussher, 2000). Specifically, it has been reported that there is an increasing trend in the frequency and severity of food cravings and appetite in pre-menstruum/ postovulation women (Gross and Pattison, 2007, Knoph Berg et al., 2011). A study which compared the impact of pregnancy on eating behaviours by comparing pregnant women with non-pregnant nulliparous women indeed found no significant differences in craving and overeating amongst these groups (Clark and Ogden, 1999). The probable explanation for this could be tied to the fact that women generally have significantly higher levels of emotional eating styles than men in a healthy adult population (Conner et al., 2004) and that food cravings are widespread amongst women even those who are not pregnant (Carter-Edwards et al., 2010, Knoph Berg et al., 2011). For example, in a UK based study on gender, sexuality, body image and eating behaviours, Conner and colleagues found women specifically exhibiting higher levels of health, mood and emotional eating motives. They concluded that women are highly likely to eat more based on their mood and emotional feeling and also eat more if they know any health benefits (Conner et al., 2004).

Therefore pregnancy, being a period of high emotional changes for the mother as a result of hormones and a new experience, can be said to predispose women to increased emotional eating (Ohlin and Rossner, 1994). This has been echoed in a study where women voiced their concerns of continuous inability to stop eating throughout pregnancy (Tovar et al., 2010) as well as a UK study which concluded that pregnancy legitimises increased food intake removing previous motives to eat less especially under the auspices of cravings (Clark and Ogden, 1999). This study by Clarke and Ogden also reported significant differences in the amounts of food eaten with pregnant women helping themselves to larger portions (Clark and Ogden, 1999).

On the other hand, even when morning sickness is said to reduce food intake, pregnant women with moderate and mild sickness, if stopped by the 3<sup>rd</sup> month, do

rapidly increase food intake and gain weight in the later stages of pregnancy (Abraham et al., 2001). This makes it difficult to explain the effect of nausea and vomiting, but partly this increased intake might be a way of replacing what was lost in the early months. As a result, nausea and vomiting could potentially lead to changes in food behaviours in pregnancy which on one hand might lead to inadequate intakes, but on the other hand mean excessive eating later in pregnancy which has been described to contribute to postpartum weight retention (King, 2000).

In the occasion of inadequate intake as a result of nausea and vomiting, there has been a suggested association between severe morning sickness (*hyperemesis gravidarum*) and eating disorders in pregnancy (Abraham et al., 2001). A large Norwegian mother and child cohort study about Binge Eating Disorder (BED) in pregnancy also concluded that there was early onset of BED amongst pregnant women. This study reached these conclusions after finding that nearly half of the BED cases were incident cases where women with previous normal eating patterns exhibited an increase in binge eating within the first half of the pregnancy (Knoph Berg et al., 2011).

Even when nausea and vomiting are said to reduce dietary diversity and nutrient intakes early in pregnancy, later increases in food intake could potentially mean increased risk of obesity most especially if maintained after the pregnancy (Ohlin and Rossner, 1994). These symptoms of pregnancy will not only lead to change in food choices, but also predispose women to higher weight status if maintained beyond pregnancy (Olson et al., 2003, Olson and Strawderman, 2003). Indeed, it has been proposed that an increase in energy intake mediated by enhanced appetite may be responsible for the weight gained during pregnancy (Harris et al., 1998) and also that some eating habits that change during or after pregnancy increase risk of weight retention (Kajale et al., 2015) unlike those which temporarily appear for pregnancy only (Ohlin and Rossner, 1994).

Thus, it appears pregnancy epitomises most factors that trigger overeating in women particularly seen as a "powerful legitimiser" of overeating (Clark and Ogden, 1999, Tovar et al., 2010, Ellison and Harris, 2000) which can have effects on gestational weight

gain, previously discussed as a primary predictor of PWR. Also this change in eating behaviour may have long-term effects by increasing food intake beyond pregnancy.

It is important to note that the increased consumption of craved foods after the morning sickness period is said to be interrelated with women's beliefs and cultural values (Gross and Pattison, 2007). Cravings and aversions are also enhanced by cultural influences with women craving what they have had previous exposure to, which is both culturally and geographically determined (Clark and Ogden, 1999). This is because foods are largely culturally specific and any related cravings can be said to be embedded within the culture, hence cravings are labelled a rich cultural practice by some researchers and not merely a physiological response to pregnancy needs or even exclusive to pregnancy (Clark and Ogden, 1999, Gross and Pattison, 2007). The most commonly craved food is chocolate and some women especially from minority groups (non-Caucasian) exhibit pica cravings. Despite differences reported by qualitative research in the motivations for cravings between pregnant and non-pregnant women, research overlooks the otherwise "long-time experience women have with food cravings" (Gross and Pattison, 2007) as an extension of a normal experience.

Further, most research exploring food behaviours, aversions and cravings has been amongst women with eating disorders, or minority women and largely assumes that dietary behaviour during pregnancy is a direct result of pregnancy. As Gross and Pattison (2007; pp 94) conclude, most "research is studied out of context of everyday lives and experience, ... impacting by directly sanctioning women's behaviour during pregnancy". Therefore, taking a feminist approach to understanding women's experiences (Sarantakos, 2012, Wadsworth, 2001) is paramount to give a picture of the context and cultural underpinning of women's relationship with food.

This section has highlighted the biological predictors of women's weight status in relation to pregnancy; specifically pointing out the role of physiological and emotional changes during pregnancy on resultant weight changes.

# 2.2.2 Socio-economic predictors of PWR (Work, lifestyle)

Probably one of the most researched determinants of postpartum weight retention; socioeconomic factors are strong contributors to maternal obesity. This section explores how different measures of Socio-Economic Status (SES) contribute to the burden of maternal obesity highlighting the interplay of SES in exacerbating food behaviours and biological predictors of weight status changes during motherhood. The SES factors discussed are education, income or work status and lifestyle as described hereafter.

## 2.2.2.1 Maternal education, income and work status:

There is consensus that low maternal education and low family income have significant independent effects on weight gain and retention (Crowell, 1995, Siega-Riz and Laraia, 2006, Kac et al., 2004a, Siega-Riz et al., 2010). This is possibly because more highly educated women are more likely to be aware of guidelines, understand nutrition content of food and the impact of unhealthy food choices, but also that high education leads to better jobs and better pay. Thus, these women can afford healthier food options hence a better diet comprised of fruits, vegetables, lean meats, and less fat.

Also, the influence of education means that women can explore avenues for information such as magazines, the internet, and are generally more likely to engage with health professionals in order to understand what to do for a healthier pregnancy. Indeed, a study on knowledge and attitudes of weight among Brazilian women found low education to predict higher postpartum weight retention, explaining that women with lower education levels tend to have greater difficulty in perceiving obesity risks (Kac et al., 2004a).

This finding is only reported in western, high income countries where socio-economic position is said to be inversely related to obesity (Crawford, 2010, Siega-Riz and Laraia, 2006) in that the higher the socio-economic position, the less likely women are to become overweight and obese. For developing countries, obesity is instead

concentrated in high income groups as a result of food abundance as well as increased sedentary work environments (Nasser, 1997).

Work status plays another role in determining weight retention with the return to work outside home significantly increasing weight loss postpartum (Crowell, 1995). Women who are employed have been reported to have lower BMIs compared to those not in paid work; and this was compounded by higher levels of family income amongst partnered women contributing to reduced BMI in a longitudinal survey of youth in the US (Averett et al., 2008). The work environment arguably influences the meaning attached to obesity and overweight status (Crawford, 2010) whereby work social situations require a slender body as culturally acceptable appearance for women (Paquette and Raine, 2004). In modern society for instance, the central role of fashion and body image amongst those with high education and income creates a distinction between the elite and low classes. It follows that peer pressure experienced by modern women might explain health consciousness within the confines of slender body image (Paquette and Raine, 2004) necessitating routine maintenance of such ideals lest they are ridiculed by their peers (Grogan, 2008, Crawford, 2010, Nasser, 1997) as discussed further under body image.

What is not clear about weight loss and return to work is whether it is work per se, or a mixture of other factors like peer pressure and advice associated with going back to work or even trying to fit in the workplace that enable women lose weight postpartum. Specifically, the role of peers and any societal or work related influences on weight is not extensively researched. Exploring issues surrounding this can help clarify women's behaviours and what influences dominate or steer change in weight status in the postpartum period.

#### 2.2.2.2 Dietary behaviours:

There is paucity of information regarding the role of pregnancy dietary behaviours on postpartum weight retention. As previously stated, pregnancy is initially associated with food aversions that lead to decreased food consumption at outset, but later,

cravings increase food intake and contributing to maternal obesity. In addition, research suggests behavioural factors like restricted food intake, increased physical activity and binge eating having an effect on post-partum weight change (Williamson, 2006).

In agreement with other scholars (Swinburn et al., 2004, Ellison and Harris, 2000, Gore et al., 2003), Lyu and colleagues found in a two-year prospective study involving 151 women that increased dietary energy intakes during pregnancy and after childbirth were a key reason for postpartum weight retention (Lyu et al., 2009). This can be exacerbated by unhealthy diets characteristic of low socio-economic class (Tovar et al., 2010), which might explain the increased risk of postpartum obesity found in low income households. The paradox is that women from low-income households have a higher risk of postpartum obesity even when they at the same time have an increased risk of food insecurity (Siega-Riz and Laraia, 2006). Low income women, already vulnerable to limited choice in food as they can only buy what they can afford, often resort to unhealthy diets an excess of which can lead to long-term energy imbalance (Ellison and Harris, 2000, Swinburn et al., 2004). For example, Thornton et al. (2006), in a study of pregnant and postpartum Latino women reported that some participants when faced with financial constraints, opted to buy less "healthy foods" sacrificing especially vegetables and fruits and rather stocking on cheap meat and energy dense foods (Thornton et al., 2006).

Coupled with an increase in food intake from somatic pregnancy symptoms and other factors, any excess intake of poor and energy dense diets may result in increased GWG, and subsequent PWR accentuating risk of obesity in the long-term. Indeed, Tovar et al. (2010) in a study among Hispanic, low-income women, surmised that overeating and consumption of junk food by pregnant and postpartum women was rather an individual choice and not otherwise influenced by suggested biological factors like cravings, and nausea. Agreeably, socioeconomic disadvantage therefore puts women at increased risk of unhealthy weight gain with women often unable to appreciate

obesity risks, mediated by factors of education, social circles, work and dietary choices due to low income (Crawford, 2010, Kajale et al., 2015).

Knowing that pregnancy legitimises increased food intake and removes any previous intentions to eat less (Clark and Ogden, 1999, Ellison and Harris, 2000), makes food self-efficacy crucial for a healthy weight during pregnancy and in the postpartum period. This is in line with Hinton and others who postulate that food self-efficacy is associated with decreased food intake hence weight reduction postpartum (Hinton and Olson, 2001, Shrewsbury et al., 2009, Østbye et al., 2009). These relationships of pregnancy discourses and women's engagement with food merit broader investigation.

# 2.2.2.3 Physical activity

An increase in physical activity is necessary for energy expenditure that maintains healthy weight status. In the postpartum period, this is crucial to foster weight loss (Østbye et al., 2009). Whereas many women will desire to return to their pre-pregnancy weight status (Crowell, 1995, Vallianatos et al., 2006), women are generally less physically active in the postpartum period (Gross and Pattison, 2007). Different studies have highlighted physical inactivity to be higher in women compared to men in a general population, but even much higher among postpartum women (Calfas and Marcus, 2007, Hinton and Olson, 2001, Crawford, 2010). Further, socio-economic status exacerbates this problem by priming high status women over low status in regard to physical activity such that women with higher economic status are more likely to participate in organised sport and leisure time physical activity (Crawford, 2010).

The general low levels of physical activity in motherhood are possibly because of a lack of knowledge about postpartum weight loss strategies, lack of time and resources (Vallianatos et al., 2006, Tovar et al., 2010) coupled with challenging adaptation to motherhood with its related expectations. Also the inability to lose weight postpartum could be attributed to perceived barriers including cost of weight loss programmes,

lack of time to exercise, postpartum depression, household responsibilities and sustained excessive eating behaviours hindering efforts for weight loss (Siega-Riz and Laraia, 2006, Setse et al., 2008, Thornton et al., 2006, Vallianatos et al., 2006).

The role of physical activity notwithstanding, there is need for piloting and implementing of diet and lifestyle interventions to enable women achieve strict targets in weight management by avoiding overeating especially in stressful situations like pregnancy (Hinton and Olson, 2001, Ramachenderan et al., 2008, Messina et al., 2010). The challenge now lies in the fact that there are no such interventions (Smith et al., 2008, Siega-Riz et al., 2010) evidenced by a recent call for effective interventions in the UK for sustained weight loss postpartum (NICE, 2010). Therefore, understanding women's food behaviours and influences during pregnancy and in the postpartum period is important as it will give a baseline for relevant and appropriate interventions to be tailored specifically for groups at risk.

## 2.2.3 Summary

The weight status of a woman can be summed up to be influenced by biological, social and cultural factors; all closely intertwined with food behaviour changes during pregnancy. Socioeconomic status is highlighted to negatively skew this relationship putting disadvantaged women at increased risk of unhealthy weight gain and obesity. Weight related behaviours during and after pregnancy cannot be isolated without considering underlying factors and influences.

It has been established that obesity is socio-culturally distributed; however, the mechanism through which socio-cultural factors influence food behaviours and maternal weight status are not fully understood. Most studies disregard previous eating behaviours of women and how culturally embedded beliefs influence behaviours and impact on postpartum weight retention. Therefore, to understand maternal obesity requires a sociological and feminist exploration of the cultural construction of pregnancy and resulting food behaviours with a specific focus on the

traditional, social, cultural and physical contexts which are responsible for shaping women's choices and the meanings attached.

The literature review on the widely researched area of postpartum weight retention has highlighted rich evidence on predictors of weight retention, yet at the same time there is limited evidence of effective interventions to halt and reverse currently increasing trends in maternal obesity across different socio-economic levels (NICE, 2010, Messina et al., 2010, Tanentsapf et al., 2011). This presents a research need to explore salient, alternative and otherwise neglected aspects to pregnancy and related weight status changes in the transition to motherhood and the meanings these have for women.

## 2.3 Theoretical understanding of maternal weight status

#### 2.3.1 Background

The findings on maternal obesity highlight an interplay of behaviour in a complex, dynamic and reciprocal way in which personal factors, environmental influences and behaviour continually interact. For example, although many women struggle with weight loss in the postpartum period, some women quickly return to their prepregnancy weight. These women are said to be resilient as a result of their biological makeup, for example white women compared to black women (Boardley et al., 1995), as well as a mix of other factors not well explored, enabling them to revert to their prepregnancy weight (Crawford, 2010). Accordingly, behaviour capability is said to be influenced by attitudes and beliefs related to pregnancy, social expectations, self-efficacy in regard to diet and positive reinforcement mechanisms present at different points of the pregnancy cycle.

Differences in the social world structure the way people experience their lives and any efforts to group women or universally address them through the reviewed determinants described earlier in 2.2, have proved futile when implemented in

interventions (Messina et al., 2010, Campbell et al., 2010). As Miller (2005) argues, there are embodied gendered and unequal positions within the social world from which we make sense of experiences such that behaviour becomes a result of our internalisation of social and societal expectations. As such, pregnancy and motherhood in the western world is historically, socially and culturally shaped; underscoring the need for research to focus on women's experiences of pregnancy in order to examine how the biological is overlaid by social and cultural contexts that influence behaviour (Miller, 2005, Gross and Pattison, 2007).

During pregnancy, women are faced with different ideologies in regard to their physical health, personal growth and pregnancy outcome concerns (Miller, 2005). With a mixture of social, emotional, physiological and medical ideologies, it is often assumed that women prioritise the health of the baby over theirs. These ideologies, if dominant, may influence women's experiences and behaviour, impacting on pregnancy and postpartum practices such as exercise and diet. Hence exploring discourses in regard to pregnancy related changes in behaviour is paramount to understanding the long term development of maternal obesity.

Understanding these complex socio-cultural influences on weight concern and food behaviours is a first step to the development of interventions to address postpartum weight retention (Crawford, 2010, Carter-Edwards et al., 2010). This is because when women are faced with a wide range of contradicting ideologies during pregnancy, they may go through "sieving" of these influences, inherently deciding which are dominant and important for them. Following through these discourses then seems to underpin behaviour change responsible for escalating factors known to predispose women to long-term maternal obesity.

In order to understand women's experiences, there is need to question the social processes that frame motherhood while also challenging biological assumptions that assume women's experiences to be generalised (Miller, 2005, Wallbank, 2001). This is possible through an interpretive feminist approach. Using feminist theory to explore issues surrounding pregnancy takes into consideration the fact that the social world is

gender organised so that behaviour comes from the internalisation of social expectations of the self, while at the same time mindful that women's experiences can significantly vary from these culturally scripted expectations. A review of the literature about social cultural aspects of pregnancy and influences on women's sense of self is fundamental to understanding pregnancy related behaviours.

There is little research about the definition and range of socio-cultural influences important in understanding maternal obesity. These factors are not well elucidated (Crawford, 2010) with especially few studies exploring the attitudes and beliefs of pregnant women towards weight gain (Tovar et al., 2010, Setse et al., 2008, Thornton et al., 2006). The socio-cultural influences on maternal obesity stem from cultural ideals of women's body image on the one hand and expectations of motherhood on the other hand, with cultural issues such as ethnicity, social support and relationships playing a mediating part. These issues are hereby examined.

# 2.3.2 Body Image:

Today's ideal woman in the western world is a slim and shapely woman. The idealisation of slenderness is said to have begun in the 20<sup>th</sup> century and associated with attractiveness, self-control, social skills, youth and occupational success (Grogan, 2008). Currently, especially among women in affluent western cultures, this idealisation of slenderness is still associated with happiness, success, youthfulness and social acceptability, while being overweight is associated with laziness, emotional instability, personality disorders and being out of control (Grogan, 2006, 2008, Schwartz and Brownell, 2004).

This idealisation of thinness has led to societal pressure on women to conform, specifically as thinness is today a heterosexually based definition of attractiveness in women (Conner et al., 2004). Taking the definition of body image by Grogan (2008), as "a person's perception, thoughts, and feelings about their body" (Grogan, 2008),

this implies that some women are bound to have negative body image. Indeed many women today are reported to be on some sort of diet in order to conform to this ideal slim body (Gross and Pattison, 2007). For example, in a review about obesity and body image, Schwartz and Brownell (2004) found that social messages reflecting being fat as a deficiency and personal failing are so powerful and persistent that they lead to high levels of body dissatisfaction among women (Schwartz and Brownell, 2004). This is in line with findings of high cultural standards and value of slimness as the norm, especially in Caucasian populations, resulting in high stigmatisation of overweight and obese individuals, a finding resonated in current body image research (Johnson et al., 2004, Gross and Pattison, 2007, Conner et al., 2004).

In addition, Mussap and Cahill (2007), among others, argue that socio-cultural pressures to conform to unrealistic physical ideals of slenderness can contribute to unhealthy body change, attitudes, and behaviours especially disordered eating among women (Grogan, 2008, Johnson et al., 2004, Cahill and Mussap, 2007, Algars et al., 2010). It is suggested that there is a great impact of socially prescribed body shapes on eating motivations and body shape concerns in women (Conner et al., 2004). Such expectations imposing on women to conform to the slender ideal, result in women over-exercising, dieting and women may sometimes develop eating disorders like anorexia and bulimia (Cahill and Mussap, 2007, Conner et al., 2004, Fairburn and Welch, 1990) common among young women obsessed with weight loss today. Conner points out that the key characteristic of eating behaviours in western societies is restricting food intake because of body shape, which is strongly implicated in the subsequent development of unhealthy eating patterns (Conner et al., 2004) such as Binge Eating Disorder (BED) particularly cited among women overly worried about weight gain (Fairburn and Welch, 1990, Knoph Berg et al., 2011). The social discourses on body image may have implications on women's engagement with food, which needs to be explored in light of pregnancy.

Conversely, recent research has shown a positive relationship between obesity and attractiveness among African women (Carter-Edwards et al., 2010), which seems to

assert their cultural influences and expectations that are a total opposite to the western cultural influences. It is said that weight consciousness among Black women follows a "maternal look" with curvy bodies equated to womanhood (Nasser, 1997). Accordingly, Black women in America and most African countries are reported to be less dissatisfied with their overweight and obesity status because culturally having a "womanly body" is taken with prestige, maturity and a sign of femininity, while slimness is seen as a personal choice, and in extreme circumstances, a sign of malnutrition among these populations (Crawford, 2010, Carter-Edwards et al., 2010, Lederman et al., 2002, Grogan, 2008). In such situations therefore, where a "womanly body" is ideal compared to slimness, the food choices of women are emphasised by the cultural endorsement and this may underpin the reportedly high obesity rates especially amongst Black American women and women with an abundance of food in developing countries (Crawford, 2010). In addition, low prevalence of eating disorders reported among minority Black populations could be explained by the different societal and cultural discourses in regard to body image, and well documented high body satisfaction among non-Caucasian women.

For Caucasian and acculturated women, when experiencing pregnancy, the implications of the slim body ideal may lead to a conflict between accepting the inevitable pregnancy weight gain and conforming to the idealised body image. Thus, women already worried about their weight may continue with their restrictive dieting which is strongly advised against as unsafe for both the growing foetus and the mother. On the other hand, women who stop restrictive eating when pregnancy sets in have been reported to experience challenges like increased body dissatisfaction (Mehta et al., 2011), onset of eating disorders (Knoph Berg et al., 2011), and increased GWG beyond the USA IOM guidelines (Mehta et al., 2011, Knoph Berg et al., 2011, Grogan, 2008).

For example, the study by Knoph-Berg and colleagues found a surprising 49% cases of Binge Eating Disorder (BED) in pregnancy to be incident cases; meaning that onset of BED was after the individuals got pregnant (Knoph Berg et al., 2011). Also Mehta et

al. (2011) found that women with a previous "ideal body" had the highest level of body dissatisfaction, and increased risk of gaining weight during pregnancy beyond the guidelines. These findings and others are suggestive of the impact of social discourses attached to body image as a woman on one hand (slimness) and the subsequent changes of these social influences when one becomes pregnant.

It is suggested that pregnancy legitimises the contravention of the idealised slim feminine body (Schwartz and Brownell, 2004, Johnson et al., 2004, Grogan, 2008, Gross and Pattison, 2007, Mehta et al., 2011) so that there may be a relaxation of body image ideals as pregnancy progresses. This, it is argued, would lead to relaxation of weight concerns in pregnancy allowing women to either be less dissatisfied with their increasing body size (Johnson et al., 2004, Loth et al., 2011, Davies and Wardle, 1994) or even justifying it simply as "I am pregnant" (Johnson et al., 2004). The social acceptability of these changes in weight as a result of pregnancy on one hand, while valuing non-pregnant women as slim and slender on the other, appears to be a social expectation requiring women to change their lifestyle in preparation for motherhood (Maher and Saugeres, 2007).

Indeed, in agreement, Johnson and colleagues argue that pregnancy both offers protection against body image concerns (in light of weight gain) as well as legitimising transgression of usual eating habits (Johnson et al., 2004). In their research, women voiced increased dis-inhibitions while justifying the increased eating behaviour during pregnancy (Johnson et al., 2004, Groth and Kearney, 2009). This resonates with the widely held view of "eating for two" in pregnancy (Gross and Pattison, 2007, Groth and Kearney, 2009, Grogan, 2008, Fairburn and Welch, 1990).

"Eating-for-two" is a strong pregnancy related belief emphasised in most cultures (Tovar et al., 2010, Groth and Kearney, 2009), and a known predictor for both excessive GWG and subsequent maternal overweight and obesity (Gross and Pattison, 2007, Calfas and Marcus, 2007, Groth and Kearney, 2009, Swann et al., 2009, Clark and Ogden, 1999). This is because family members tend to overfeed or put pressure on pregnant women to increase their food intake under the auspices of preventing poor foetal

outcomes (Groth and Kearney, 2009), which in turn may result in disinhibition and excessive gestational weight gain. The traditional notion of eating-for-two is reportedly becoming less common in affluent and western societies due to the availability of information and increased media attention although still practiced by many women worldwide.

Nonetheless, for all women, pregnancy is seen as a legitimate reason to gain weight, characterised by increased food intake due to relaxed inhibitions (Conner et al., 2004, Crawford, 2010). This change in the western slim discourse appears to predispose women to excessive food intake during pregnancy and if not checked, could then lead to higher rates of GWG, identified as a predictor of PWR. Also, food behaviours developed over a 9 month period may not be easy to stop after pregnancy, hence difficulty in losing weight in the postpartum period.

Also, in western culture, there is a social construction of femininity viewing women's bodies as "commodities" (Grogan, 2008) so that women's choices are constrained by a social context which values them for their appearance (Schwartz and Brownell, 2004, Ussher, 2000). Society tends to see women as 'objects' rather than as individuals (Dacey and Travers, 1994, Johnson et al., 2004, Grogan, 2008), which can have lasting effects on how women view and feel about themselves. It follows that, with the western value of women in terms of their looks and reproductive function, women's bodies can be variously constructed. During a reproduction phase of pregnancy, women's bodies are expected to transgress beyond this ideal body image, but then expected to or desired to return to this ideal after pregnancy as evidenced by for example phrases of "getting back to normal" (Johnson et al., 2004, Fairburn and Welch, 1990) common among postpartum women. The western feminist view of beauty and body image requiring the female body to be pleasing and to conform to specific ideals is thus said to be dynamic and always culturally related (Johnson et al., 2004, Twigg, 2004, Davies and Wardle, 1994).

Further, with the changing social expectations in regard to body image during a woman's life, there could arise conflict when changing from pre-pregnancy to

pregnancy and then to postpartum. What is unknown is the dominant discourses women follow when faced with these conflicting social influences and expectations and how these may impact on their weight status and behaviours during pregnancy and in the postpartum period. Throughout the reviewed literature on body image, and echoing Bailey (2001), on gender shows, the current focus on women's experiences is lacking in body image research, a gap this study will hope to address.

#### 2.3.3 Motherhood:

It is well established that motherhood is central to feminine accomplishment of gender, with pregnancy and birth being regarded as peak experiences in a woman's life by society (Miller, 2005). However, the period of transition from pregnancy to parenthood has been viewed as a challenge requiring significant changes in lifestyle for parents (Ussher, 2000, Gross and Pattison, 2007), especially to suit motherhood. For example, Maher and Saugeres (2007) in their study about women's perceptions of mothering show how women with and without children all agree that pregnancy expectations require this "change in lifestyle".

There is however, little research on adaptation to motherhood, which does not "pathologise" women (Johnson et al., 2004, Furber and McGowan, 2011) as most research and society treats pregnancy as a time of sickness. This is depicted even in the way care for the pregnant woman has been largely *medicalised* today (Richens and Lavender, 2010, Gross and Pattison, 2007, Ussher, 2000) with a focus on foetal health during pregnancy, labour and delivery (Furber and McGowan, 2011) but not preparing the mother for the sometimes daunting new experience of motherhood (Nelson, 2003). These dominant ideologies in the western world powerfully prescribe cultural scripts without accommodating the diversity in women's lived experience (Miller, 2005).

Whereas becoming a mother constitutes a natural, emotionally satisfying and ultimately fulfilling experience, women's bodies become the focus for comments and

advice from others during pregnancy (Grogan, 2006, Ussher, 2000, Grogan, 2008). Also, pregnancy is a highly visible, public event focussed on foetal health (Gross and Pattison, 2007, Ussher, 2000). This has a direct impact on women's food and lifestyle choices in that any dos and don'ts are bound to be endorsed by society, but are also strongly culturally based (Gross and Pattison, 2007). For example, there are strong culturally grounded expectations of motherhood with studies reporting the ideal image of a mother as much larger (than non-pregnant body) irrespective of race or cultural grouping (Crawford, 2010, Carter-Edwards et al., 2010). Also, as a result of culture and western society expectations, most women stop certain health-related behaviours at onset of pregnancy, like dieting, smoking, and consumption of alcohol (Campbell et al., 2010). This could partly be resulting from health professionals' advice, but also from societal and public disapproval of pregnant women who still engage in such.

Further, in their analysis of quality of life in pregnancy and the postnatal period, Martin and Jomeen (2010) posit that transition to motherhood consists of emotional and social dimensions. The social dimensions to motherhood transcend from effects of cultural value and treatment of pregnant women, as a result of which it appears, as Bailey (1999) argues, that imminence of motherhood brings about "revolutionary changes" in women. This is argued in reference to women's reports of special treatment they received from total strangers once the pregnancy started showing, ranging from being given seats or extra exit space on buses to courteous greetings and treatment at work (Bailey, 1999, Patel et al., 2005). Moreover, women report their experience of motherhood as entering a new realm involving changes in the conception of their bodies and also a time with different rules in regard to body image as depicted by how they were looked at by others, the advice they got but also how they conceptualised their own bodies as a result (Bailey, 1999). This coupled with the change in women's bodies that exposes the pregnancy may result in a change in selfidentity highlighting the importance to understand how mothers negotiate and integrate a new identity into their lives; societal and private stresses notwithstanding (Patel et al., 2005, Smith, 1999).

The transition to motherhood is said to involve disruptions and responses to these disruptions (Nelson, 2003), hence argued to be a time when the woman's identity is liable to change (Bailey, 1999). This is because, like everyone else, women's experiences are set in particular cultural contexts. Also individual differences as well as socio-cultural influences mean that women, most of whom are said to undergo conflict in adapting to the new demands, may respond differently to motherhood. For example, in a Nelson literature review (2003), women reported increased disruptions to their life especially after birth, characterised by a shift in roles, conflicting information from family, friends and professionals as well as strengthened social relations.

These disruptions are reported in accounts of women's realisation of motherhood sacrifices as well as exhaustion and feeling drained. Nelson (2003) concludes that with the arrival of the baby, women may be overwhelmed by the daily burden of infant care and lifetime responsibility, more so for first time mothers (Nelson, 2003). The resulting effects of this challenging motherhood experience can be argued to trigger changes in behaviour like increased comfort food eating, or even a mere lack of time to engage in physical activity that would otherwise enable mothers to lose weight in the postpartum period. Indeed there is evidence from systematic reviews that the stresses related to adaptation to the new lifestyle after childbirth often leads to lack of exercise, repeated fatigue, depression, inability to cope and subsequently may lead to poor diets and inadequate sleep, most of which have been related to weight gain and obesity (Messina et al., 2010, Campbell et al., 2010, Patel et al., 2005).

Also, cultural influences still view motherhood as the centre of femininity, equating it to success and women's validity (Maher and Saugeres, 2007, Johnson et al., 2004, Gross and Pattison, 2007, Ussher, 2000). Such motherhood definitions may leave some women vulnerable to different cultural and societal influences which are said to guide their decisions on practices during this transition. Specifically, there are culturally sanctioned images of good mothers and women have been reported to be burdened to some extent by expectations of appropriate mothering identities, in terms of body image (large mother figure compared to slim ideal) (Ussher, 2000, Gross and Pattison,

2007, Befort et al., 2008). Indeed, most women identify the transition to motherhood as a precursor to weight gain (Befort et al., 2008, Bordo, 1993), which might be because of already developed eating behaviours which have not stopped in the postpartum period, or the expectations and changes in weight ideals.

Thus, the postpartum period is said to be a paradox, with some research suggesting it is a time of crisis for women in that the disruptions may be good on one hand as women join a new club of mothers, while on the other hand making them unhappy and distressed about the new experience characterised by drastic changes in identity, disruptions to their routines and lives (Patel et al., 2005, Nelson, 2003, Smith, 1999). Accordingly, women, especially young mothers, reportedly fear the demands of motherhood citing "fear of losing control of oneself" (Johnson et al., 2004, Ussher, 2000).

Losing control of oneself has been reported in reference to cultural and social beliefs that motherhood not only changes someone's body image in reference to size, but also someone's life (Maher and Saugeres, 2007, Gross and Pattison, 2007). Further, the transition to motherhood is marred with contradicting societal expectations reportedly making the motherhood experience difficult for most women and sometimes responsible for some degree of postnatal depression, identity crisis, and resultant inability to cope (Smith, 1999, Bailey, 1999).

Further, widely held expectations of pregnancy and motherhood leading to positive motherly choices (which may include food choices) could explain the changes in dietary behaviour for some women. Wethington and Devine in (Olson, 2005) explain that changes in expectations and networks are a result of societal and cultural ideologies of women's body image which change at the onset of pregnancy. However, women experience the transition to motherhood differently and as Nelson (2003) notes, not all women are transformed by motherhood. Thus the expectations of women to choose the right foods during and after pregnancy may not be met by some women, which may cause distress and disruptions to daily life in an attempt to fit in the new daunting motherly role. It can be argued that these expectations can

negatively affect and influence food choices especially for first time mothers in that due to frustration for not doing "mothering right", some women will engage in comfort eating previously associated with weight gain in distressed and depressed women.

On the other hand, some women may adjust and show positive food choices. For example, in the study tracking food choices across the transition to motherhood, Olson (2005) posits a linkage between transition and a change in dietary behaviour succinctly reporting positive food choices initially manifesting in experienced women and later in first time mothers characterised by increased breakfast and fruit and vegetable intake (Olson, 2005). This, she concluded, was in line with the life course perspective that suggests change in health attitudes and food choices as a result of adaption to life transitions. It is noteworthy that at the time of the study, there were many food behavioural campaigns going on, which could have increased the likelihood of women engaging in positive behaviours. This can impact on study results of positive changes in behaviour as it has been shown that pregnant women and new mothers are more receptive to nutrition and health education (Campbell et al., 2010, Olson, 2005).

Some research suggests another trend reported among middle and upper class women, that the special status of mothers (bigger size, supposedly all-knowing) is becoming quickly lost in the postpartum period citing increasing pressures among these women to return to their pre-pregnant weight or body (Patel et al., 2005, Nelson, 2003). These expectations, contradictory of traditional motherhood notions, have been reported to be responsible for the development and escalation of body dissatisfaction and eating disorders (Patel et al., 2005, Schwartz and Brownell, 2004). As a result, pregnancy is seen to offer an opportunity to those who want to change; a recourse to the body image ideal, but increasingly an expectation to revert back to the slim ideal in postpartum (Bailey, 1999). Thus, there is a need to understand contextual factors that shape behavioural change (Olson, 2005) and influences on decision making in regard to food and lifestyle choices of women experiencing motherhood in order to understand which dominant discourses women draw upon over others.

For most women who decide to get pregnant, motherhood is seen as a natural progression influenced by societal expectations and subsequent changes in behaviour (Kent, 2000). The different discourses and changes in pressures to conform, provide women with an expedient with which they can resist certain discourses by drawing on others. This has been described as having control over the process of motherhood (Bailey, 1999) which is less explored in regard to how it influences behaviour. What is not understood is whether there is indeed a choice for these women as regard to motherhood or whether society simply imposes on them expectations and choices to which women must conform. It is thus paramount to understand women's decisions in an effort to deconstruct activities and contest dominant discourses surrounding mothering (Maher and Saugeres, 2007). Specifically in the era of increased maternal obesity, understanding these dominant discourses that contribute to food and lifestyle behaviour changes that persist beyond pregnancy, will give evidence to feed into the development of effective interventions.

It would be important to explore how motherhood disruptions and experiences on one hand, and excuse from previous body ideals on the other, affect women's engagement with food and related lifestyles (Hodgkinson et al., 2014), but also if they are only postponed and not carried on for long in the postpartum period (Olson, 2005). This is because, most studies on motherhood transition have either a geographical bias as they are mostly American (Campbell et al., 2010), with restricted scope to first time mothers (Olson, 2005, Johnson et al., 2004), among middle class women (Bailey, 1999), or mothers with known eating disorders (Patel et al., 2005). Exploring these themes with experienced and first time mothers may give broader insight into choices and behaviours of women in the postpartum period (Brunton et al., 2011).

#### 2.3.4 Culture and motherhood:

As previously highlighted, motherhood is a feminine discursive and dynamic process that is culturally positioned (Bordo, 1993). The theoretical underpinning of maternal obesity and its interplay with cultural construction of motherhood is hereby explored.

Often defined in regard to race and ethnicity, culture plays a key role in predicting obesity because it directly influences behaviours. In most studies culture has been defined by the race or ethnicity of participants (Carter-Edwards et al., 2010, Shrewsbury et al., 2009), for example: White or Black; British or Asian; Hispanic or Caucasian. Studies which examine race or ethnicity and its role in obesity are mostly American, and all have found racial and ethnic differences in risks of obesity and increased postpartum weight retention. It follows that excessive postpartum weight retention is especially prevalent among minority women (Gore et al., 2003, Boardley et al., 1995); with Black women more likely to retain weight than white women (Vallianatos et al., 2006, Lederman et al., 2002, Tovar et al., 2010, Kac et al., 2004b, Boardley et al., 1995).

However, some studies describe culture as environmentalist, consumerist, individualist or secular (Vallianatos et al., 2006, Crawford, 2010). Following this grouping, culture influences and often dictates behaviour in a way that the environmentalists are more likely to engage in activities friendly to the environment, such as walking, cycling, rather than driving cars, which makes them routinely more physically active as is the case of Nordic countries for example (WHO, 2007). Consumerist cultures on the other hand, lean towards purchase of ready-made convenience meals - a phenomenon common in western countries and America in particular (Crawford, 2010, Richens and Lavender, 2010, Vallianatos et al., 2006). These ready-made meals are often higher in energy than homemade meals hence higher energy intakes which can lead to obesity if not spent through physical activity.

For the purpose of this review, an encompassing definition of culture will be used as follows. Phillips (2010) defines culture as a stereotypical expectation of attitudes and behaviours that are seen to characterise all individual members within that cultural group. She asserts that those groups are clearly bound with a focus on cultural membership which can be grouped into psychological, social and normative culturalism. With this, cultures set constraints and expectations on members (often oblivious) requiring them to conform. This is because culture and society create "perfect everythings" including roles of perfect mother, perfect woman, perfect man;

that members of these cultures keep struggling to emulate. The individual desire to conform to cultural expectations has been argued to play a big role in explaining behaviour as culture provides the context, within which people make meaningful choices (Phillips, 2010).

Extrapolating this to the relationship with maternal obesity, cultural expectations in terms of body image require women to conform to these ideals as a cultural standard of attractiveness (Schwartz and Brownell, 2004). Because culture may not be self-consistent, and is often open to other influences (Phillips, 2010), it is paramount to explore the interplay of cultural expectations with other life influences on women's choices in regard to their engagement with food in the transition period to motherhood.

The definition of culture as a stereotypical shared meaning that is debated, amended and transmitted from one generation to another (Phillips, 2010), highlights how we live within a web of cultural references and meanings exhibiting internal differences in terms of gender, age, social class and other factors. Also, cultural practices have attached social meaning and significances such that they are best understood by those who engage in them. However, it is also suggested that those who engage in these cultural norms and practices may be least able to recognise the social construction of their preferences (Phillips, 2010, Mac an Ghaill and Haywood, 2007). This presents a complexity in defining the cultural values, and beliefs, hence innovative research is required to explore this in the context of motherhood (Crawford, 2010). Exploring what these influences may be is crucial in understanding women's adaptation and transition to motherhood; which is possible by taking a feminist perspective to describe motherhood cultural ideologies.

Whereas culture does influence behaviour, it does not entirely determine what people do, or not. Rather, it is the contextual factors which shape and constrain behaviour change (Olson, 2005) such that we are shaped by culture but are not driven by culture (Phillips, 2010). Thus, for most people engaged in a cultural activity or norm, it is the sense of belonging that sustains the practice and the knowledge that everyone is

doing the same thing. However, there is a tendency to highlight the role of culture in explaining events especially reported in non-western culture, which calls for further exploration of how culture may influence women's decision making in regard to pregnancy and motherhood practices in a western context. In addition, understanding social location as an experience beyond commonly researched socio-demographic information and its impact on decisions and choices will give further insight into understanding women's experience of pregnancy in regard to food and weight status.

Present research acknowledges the influence of socio-economic factors, age and gender on attitudes and behaviour, but there is limited research on how culture and social location is experienced, and the impact on adapting to new roles and responsibilities. It appears that in everyday life, people use culture in explaining why they act the way they do especially in situations of cultural or societal conflict (Gross and Pattison, 2007). For example amongst women who "change" as a result of pregnancy and imminence of motherhood, cultural beliefs and values around motherhood are used as a fall back to explain irrational eating behaviour and becoming overweight under the pretext of, say, eating-for-two.

Further, culture is sometimes depicted through media marketing and image portrayal of these expectations. The media is said to have a socio-cultural influence, playing a big role in the lives of many women through putting on view societal expectations from which people can draw. This is through portraying "the woman of today" in the form of brushed up slim models and celebrities on television, tabloids and magazines found everywhere today. This has a direct impact on women in terms of increased body dissatisfaction as a result of continued media reminders of the rigid expectation of thinness (Carter-Edwards et al., 2010, Grogan, 2008, Grogan, 2006). It is hypothesised that when women cannot achieve slim bodies like those of models and celebrities seen in magazines (Takimoto et al., 2011), frustration can lead them to either develop eating disorders or start "comfort eating", hence overweight development (Conner et al., 2004, Cahill and Mussap, 2007, Vallianatos et al., 2006). With such a

media-propagated slimness culture, pregnancy is seen as a personal challenge for the common woman and more so when she cannot shed the weight postpartum.

It is also generally assumed that one can "simply lose the extra weight gained" after a pregnancy and therefore no need to "starve the baby" during pregnancy (Tovar et al., 2010, Setse et al., 2008). This belief is fuelled by the frequent media portrayal of celebrities who have succeeded in quickly losing weight postpartum (Setse et al., 2008). However, research shows that multiparous women voiced their frustration about failure to lose weight after their last pregnancy (Setse et al., 2008) in agreement with other studies (Groth and Kearney, 2009, Shrewsbury et al., 2009). A recent study estimates a very high percentage of women desiring to return to their pre-pregnancy weight at 85.9%, concluding pregnancy and postpartum to be disturbing periods to most women (Takimoto et al., 2011). Indeed, inability to lose weight has been confirmed as one of the contributors to postpartum depression and the onset of Binge Eating Disorder among mothers (Nelson, 2003, Knoph Berg et al., 2011, Siega-Riz and Laraia, 2006, Bailey, 1999).

The cultural construction of motherhood in a western world revolves around the normative expectation of embracing medicalised maternal services such that the authoritative power puts mothers at a subordinate end as consumers of professional maternity care (Gross and Pattison, 2007, Miller, 2005). This medicalised motherhood focus which starts and ends with the health of the baby (from pregnancy to postnatal checks) further consolidates the "good mother" ideology requiring women to conform (Kent, 2000, Brunton et al., 2011). With an ever changing context in which childbearing takes place, reflecting other social shifts, Miller (2005) highlights the need to pay attention to how this shift shapes expectations and ways of doing. Thus, motherhood needs to be measured beyond societal norms and normative practices to encompass the diversity of women's experiences (Miller, 2007, Linné et al., 2002).

Therefore, cultural ideologies interlink with behaviours, as already discussed, to influence women's concept of their body image, motherhood, and general engagement with issues in the public domain. Also, culture cannot merely be changed,

rather people are said to react or adjust to the challenges and disruptions it poses. It is thus important to explore what cultural attributes women follow, the underlying reasons for conformity or non-conformity and their resulting effect on women's choices and activities and how this may impact on women's weight status in the postpartum period. This is because there are few studies on cultural influences on maternal transition, and for this reason Nelson's meta-synthesis and literature review (2003) did not explore these issues calling for more research in this field.

### 2.3.5 Social Support:

Social support plays an important part in women's physical recovery (Devine et al., 2000) with a major influence on weight related issues, diet and eating patterns (Gutierrez, 1999). A strong family support system has been shown to affect women's health-related beliefs and behaviours (Thornton et al., 2006). This is in the form of advice, mainly from husbands or partners, mothers, and other immediate family, an absence of which limits women's ability to maintain healthy practices during and after pregnancy (Thornton et al., 2006, Harris et al., 1998, Ellison and Harris, 2000). The most important dimensions in social support to influence weight and dietary behaviour have been information and emotional support (Gutierrez, 1999, Thornton et al., 2006, Setse et al., 2008).

Another aspect of social support is reported to be from other pregnant women or mothers in the same situation, for example, during immediate postpartum. This interaction enables the sharing of information and experiences about motherhood in general and similar concerns related to body image and weight status (Patel et al., 2005, Bailey, 1999, Nelson, 2003). For example in a study by Patel et al. (2005), pregnant women reported improved relationships with their neighbours and friends who "were in the same situation" or Bailey (1999) "entering a new club" where women felt a sense of belonging with others who had been through the same experience, sharing tips, and activities as well as building new friendships (Patel et al., 2005, Bailey, 1999). This

socialisation with peers is recommended in some intervention studies as facilitating quicker and positive behaviour in postpartum (NICE, , 2010).

Further, other psychological factors like depression, worry, isolation, sleep deprivation and infant hospitalisation at birth are reported to predict postpartum weight retention (Siega-Riz et al., 2010, Ellison and Harris, 2000, Tovar et al., 2010, Swann et al., 2009), but are also factors which can be markedly reduced with social support among other interventions. This is evidenced by results from a study where beliefs and opinions of others consistently influenced the motivation for healthier lifestyles among pregnant Latinas (Thornton et al., 2006) with the strongest influence being from relatives. Increased social support from immediate family and friends enhances the adaptation to motherhood, playing a significant role in reassuring and building mothers' confidence in mothering (Nelson, 2003).

However, not all social support has positive influences on postpartum weight loss or positive food behaviours. Often, social support provided by family and friends takes on a level of protectiveness, especially when the woman is overweight or obese. This is done mainly to avoid hurting the woman's feelings, hence family and friends boost the mother's self-esteem which may eventually reduce her prioritisation of overweight and obesity as a health issue (Carter-Edwards et al., 2010, Patel et al., 2005). Reassurance phrases to overweight women are common from their partners and mothers like; "you look great" or women remarking that their husbands think it "silly" to worry about the new weight status as result of pregnancy (Patel et al., 2005). Further, it has been reported in many studies that women receive vague, confusing and often conflicting information during and after pregnancy from friends, family, media and even health professionals who are all supposed to be sources of social support (Messina et al., 2010, Campbell et al., 2010). The impact on women's responses to this conflicting information has not been analysed in its relation to decision making in regard to lifestyle and food behaviours during motherhood.

There is evidence that nutrition knowledge is directly related to better food choices and healthy food behaviours and is a key mediating factor between socio-economic position and diet (Crawford, 2010). For example, in the study with pregnant Mexican-American adolescents, Gutierrez (1999) identified the lack of nutritional knowledge to have a negative impact on dietary habits (Gutierrez, 1999). Coupled with already confusing and conflicting information from social support sources, a lack of consistent information can have negative impacts on women as they transit through motherhood. This may further be exacerbated by health professionals who reportedly are more critical than helpful in addressing obesity concerns. Studies have reported that often health professionals only monitored women's incompetence and not offering any support (Nelson, 2003, Furber and McGowan, 2011, Setse et al., 2008). Also, recent systematic reviews by the Sheffield School of Health and Related Research (ScHARR) commissioned by NICE (Campbell et al., 2010, Messina et al., 2010), found that health care professionals reported lack of time to give weight related information during pregnancy, while others felt pregnancy was already too late a time to give any meaningful weight related education. This was reported to be compounded by communication difficulties whereby most health professionals were not comfortable to broach such sensitive issues with already overweight or obese women (Campbell et al., 2010, Messina et al., 2010, Furber and McGowan, 2011).

In critical analysis of social support, marital status is the commonest researched factor with longitudinal studies showing marriage as a predictor of weight gain in both women and men in the general population (Crawford, 2010, Klos and Sobal, 2013). Being married is said to increase the risk of becoming overweight and obese, and has been the attention of recent media discussion (Alleyne, 2009, Mukhopadhyay, 2008, The and Gordon-Larsen, 2007, Collins, 2011). A suggested reason is that women are in constant need of approval about their bodies and try to get this from their partners (Cahill and Mussap, 2007), as shown in a recent study about body image where heterosexual women exhibited higher body dissatisfaction compared to others (Algars et al., 2010). Another possible explanation is that once women "settle down" into long-term relationships or marriage, they become comfortable about their bodies and often plans of keeping in shape or fit are discarded. Coupled with marital activities that promote weight gain such as shared meals, less personal time for physical activity,

dietary temptations, childbearing and childrearing (Klos and Sobal, 2013), a change of combined income may result in "comfort" and reduced money worries compared to when single which can influence weight status through eating behaviours. All these may contribute to a more problematic scenario for married pregnant and postpartum women as other influences about motherhood and social factors come into play. Also, single women are reported to gain less weight during pregnancy, but also more likely to lose their weight postpartum compared to married women (Crowell, 1995, Tovar et al., 2010, Kac et al., 2004b) possibly in an attempt to keep the slender attractive ideal.

In short, motherhood is a time when women have a multitude of influencing factors and ideologies requiring them to uphold and conform. However, it is also a time that entails challenges and confusion in regard to the different messages put across, which when not sieved, can be emotionally, psychologically as well as physically detrimental to the health of the mother and her baby. These complex and contradictory dimensions of motherhood need to be explored within a feminist framework in order to understand how women cope within discourses, priming them over others and how they influence women behaviour in the transition to motherhood.

The recognition and acceptability of social discourses on motherhood by individuals and society transforms them to be used as standards against which women evaluate their experiences and construct their ideas and beliefs (Nelson, 2003, Grogan, 2008). Drawing on the feminist and "doing gender" theories, it is anticipated that this study will explore how mothers experience motherhood and how they make sense of these discourses in light of societal expectations.

### 2.3.6 Summary

Feminist researchers have highlighted the unrealistic assumptions embedded in gendered discourses that pattern women's lives. A continuation of these efforts is important with a focus on women's own experiences of these powerful discourses that surround motherhood expectations. The literature review in this chapter has

highlighted gaps in the evidence to be addressed by this research. However, the literature reviewed had some methodological issues worthy of note.

## 2.4 Methodological issues in the literature

Firstly, there is no definite standard time as the "postpartum period", hence studies use postpartum timeframes of convenience (mainly study resources constrained) ranging from 6 weeks to 21 years after the pregnancy. This makes it difficult to compare the magnitude of outcomes in research and has also made it difficult to determine when exactly to intervene. It is anticipated that whereas this will continue, looking at different dimensions and players in the overweight problem might provide answers as to why women follow certain discourses and how these interlink with food behaviours and weight status.

Secondly, present research is mainly quantitative with a small upcoming qualitative research base. Most present studies generally report change in weight (pre- and postpartum), and overall effects on predictors of increased weight status. The methodological inaccuracies of point weight measurements have been highlighted in an earlier review by Harris (Harris and Ellison, 1997, Harris et al., 1998) with baseline weight time measurements far from factual (Tanentsapf et al., 2011). The majority of the literature is skewed with a wide research base on the statistically quantifiable predictors of postpartum weight retention and issues of weight concern during motherhood, but less on behaviours and attitudes. Research on biological and socioeconomic predictors takes a vast share of the literature with extensive intervention studies, RCTs, literature reviews and systematic reviews, as discussed. Other sections are however less studied based mainly on descriptive literature, hence limiting indepth critique; sometimes one-sided and opinionated. Gaps in the literature along these lines have been identified for further research.

No research has explored issues of decision making and food behaviour discourses during the pregnancy cycle. As such, the proposed study will be qualitative in nature, taking a feminist perspective focussed on the phenomenology approach to understand the lived experiences of women as they negotiate pregnancy and motherhood in the context of food behaviours.

Thirdly, research is dominated by studies from America with sample populations leaning towards minority groups. This has implications in the applicability of findings to other societies of different cultural mixes, even though all are modern societies. Aggravated by the lack of pregnancy weight gain guidelines in the UK, women may generally rely on the dominant influences within their circles which are often pointed towards the health of the baby, as already discussed. In keeping with feminist research approaches, understanding these discourses will help identify lines of potential intervention in the fight against the growing obesity problem among women.

### CHAPTER 3: METHODOLOGY

### 3.1 Introduction

This chapter discusses the methodology that was employed in the collection of data to explore women's experiences of pregnancy in relation to food behaviours and weight status in a city north of the UK.

The literature review highlighted that the existing research base is mainly skewed towards positivist approaches. Most of these methodological issues have been listed to include: an over-representation of women with previous weight concerns, different research questions limited by the positivist ontological assumptions; while not exploring the meaning, context and complexity of pregnancy and motherhood and how these impact on women's ways of being (Johnson et al., 2004). Therefore, this study set out to explore these salient aspects using the Interpretive Phenomenological Analysis (IPA) approach as described by Smith and Osborn (2003) IPA purposed to explore the meanings women attach to the different ideologies (Smith and Osborn, 2008) they face during pregnancy and motherhood and how they negotiate the pressures and expectations of becoming a mother.

This chapter is structured according to the process followed in data collection and analysis, but first, a discussion of the philosophical assumptions on which the study is hinged, second, the strategy of inquiry and methods used, and third, the procedures used for data collection and analysis.

# 3.2 Philosophical and theoretical foundations

A methodology is concerned with the rationale, and philosophical underpinnings of the study design, influencing its execution, while drawing on the researchers ontological perspectives (Neale, 2009). A method, on the other hand relays the steps, procedures and strategies of data collection and analysis (Creswell, 1998, 2009). For this study, IPA was chosen, applying focus groups and individual interview techniques

to explore women's experience of pregnancy in relation to food behaviours and weight status.

This section discusses the theoretical and philosophical approaches on the use of Interpretative Phenomenological Analysis (IPA) as a methodology to explore the research question. The study is situated within the qualitative research paradigm, resulting from the gaps identified in the literature review in Chapter 2 stating that research regarding weight status and motherhood is skewed towards a positivist approach with an over-representation of women with previous weight concerns (Johnson et al., 2004). Although maternal obesity literature explores diverse angles, it is limited by the positivist ontological assumptions. It is necessary to explore the meaning, context, and complexity of pregnancy and motherhood and how these impact on women's ways of being (Johnson et al., 2004, Hodgkinson et al., 2014, Maher and Saugeres, 2007).

Taking a feminist approach to IPA, this study builds on previous work by Johnson (2004) and Gross and Pattison (2007) looking at the meaning, context and complexity of women's experiences of motherhood and how they are shaped and impacted on by different ideologies and discourses. This was done through asking women to define and explain what these concepts meant to them, using a qualitative approach to facilitate description and interpretation of participants' lived experience (IPA).

### 3.2.1 Rationale for Methodology approaches used

#### 3.2.1.1 Qualitative paradigm:

This section discusses the theoretical issues involved in the methodology choice made, describing how the study differs from the current trend of a positivist philosophical stand on research in this area to a naturalistic interpretive knowledge generation paradigm. The choice of qualitative design follows the ontological assumption that women's experience is constructed with multiple subjective dimensions as opposed to the positivist belief in an objective measureable world (Bryman, 2004, Creswell, 1998).

Preference of the interpretive naturalistic paradigm hinges on key ontological assumptions highlighted by Crotty, 1998 in Creswell (2009) pp8 as:

- i. "Meanings are constructed by human beings as they engage with the world they are interpreting
- ii. Human beings engage with their world and make sense of it based on their historical and social perspectives- we are all born into a world of meaning bestowed upon us by our culture and
- iii. The basic generation of meaning is always social arising in and out of human interaction."

It follows that the goal of qualitative research is to identify cultural patterns that will enable understanding of the social processes behind behaviour (Hollins Martin and Fleming, 2010); in this study, related to pregnancy and women's engagement with food. This was done through an exploration of the lived experience of women, how they negotiated pregnancy in regard to eating behaviours, and weight status.

In order to understand women's experiences of pregnancy and motherhood, there was a need to attempt to interpret and make sense of meanings women bring to their everyday experiences which is not well researched in the available literature(Smith, 1999, Carter-Edwards et al., 2010). This is because women variously construct their experiences and make meaning depending on a multiplicity of factors, which is a subjective process that can better be explored using the naturalist paradigm (Denzin and Lincoln, 1998).

Therefore this study adopted a qualitative "naturalistic" design in order to explore how women negotiate different discourses, expectations, information and personal beliefs in pursuit of motherhood. To unpick the meanings of the different influences onto women's behaviour, Interpretive phenomenological Analysis was fitting.

### 3.2.1.2 Interpretative Phenomenology Analysis (IPA)

The study utilised IPA as described by Smith (1996). The goal of IPA is to explore the process through which people make sense of their lived experience, translating this experience into choices and behaviour (Brocki and Wearden, 2006). IPA aims to explore people's subjective experiences in order to describe and understand the processes by which they make sense of their experiences (Smith and Osborn, 2003), specifically, trying to understand what it is like from the perspective of the participants (Smith and Osborn, 2008, Larkin et al., 2006). This is in line with the understanding that human beings are not passive perceivers of reality, rather that, they interpret and understand their world by formulating their own biographical stories into a form which makes sense to them (Eatough and Smith, 2008).

To explore women's subjective experience of pregnancy required a methodology that makes sense of the meaning of events, states and lived experiences of the participants. This would lead to understanding women's food behaviours and weight status through analysis of their lived experience to explore how the 'personal' intertwines with the 'social' to create or reinforce norms and acceptable practices regarding women's engagement with food. This was possible through use of IPA which describes these aspects based on the underlying philosophical assumptions as discussed in 3.2.2.

In addition, to explore how women negotiate pregnancy in the context of food and weight status, an interpretive phenomenology methodology was ideal as it examines how human beings construct and give meaning to their actions in specific social situations, applicable to the multi-dimensional state of pregnancy and motherhood experience to be investigated (Denzin and Lincoln, 1998, Creswell, 2009, Saks and Allsop, 2007). This facilitated an alternative approach in response to the already discussed weaknesses of the positivist approaches that assume knowledge generation to be objective, but have principally failed to halt and reverse the current maternal obesity problem (Campbell et al., 2010).

Motherhood has been termed as a complex period of constant transition, a "rite of passage" for most women necessitating choices and decisions which are suggested to influence maternal obesity (Nelson, 2003, Miller, 2005). IPA provides the mechanism to understand the processes through which people make decisions and base their behaviour within a broader context while facilitating description and understanding of participants' perspectives. IPA is specifically ideal in "unfurling" a person's uniquely embodied perspectives and meanings of a complex experience like motherhood (Smith and Osborn, 2003, Smith et al., 2009) and context of people's situated behaviour (Brocki and Wearden, 2006).

IPA was also chosen for its ability to robustly and flexibly explore individuals' perception of the situation, construction of meaning and how people make sense of their personal and social world (Smith and Osborn, 2003). Exploring the lived experience of women using IPA enables the unravelling of this complexity and arising conflict as a result of societal expectations and how women negotiate these through their lived experience in pursuit of motherhood. This is because the phenomenology approach attempts to understand empirical matters from the perspective of those being studied. This means that the concept of **epoche** is central: where the researcher brackets their own preconceived ideas about the phenomenon in order to understand it in the voices of the participants (Creswell, 1998 pp. 54), by listening to participant's stories of their lived experience.

Pregnancy is a highly visible, public event focussed on foetal health (Ussher, 2000, Gross and Pattison, 2007). This has a direct impact on women's food and lifestyle choices in that any do's and don'ts are bound to be endorsed by society, but are also strongly culturally based (Gross and Pattison, 2007). The dominant ideologies powerfully prescribe cultural scripts without accommodating the diversity in women's lived experience (Miller, 2005). Exploring women's experiences through IPA enabled the understanding of the complexity and diversity of women's lived experience and helped identify lines of potential intervention in the fight against the rising obesity problem among women.

Because of the uniqueness of pregnancy, a phenomenon specific to women, it was paramount that, in order to understand maternal obesity, a sociological and feminist approach be employed. Specifically, feminism would enable exploring women's experience of pregnancy and food behaviours with a focus on the social-cultural triggers of behaviour attributed to overweight development in this group. Therefore, adoption of aspects from feminist approaches to IPA required an understating of these concepts as hereby discussed.

## 3.2.1.3 Feminist perspectives

The choice of feminist approach is in acceptance of gender as a basic organising principle that shapes conditions of our lives (Akman et al., 2001) through social values, context and pressures (Hartley and Todres, 2001). This augurs well with phenomenology positing that the lived experience is shaped by the social values, context and pressures (Hartley and Todres, 2001, Larkin et al., 2006) of everyday living. It follows that "individuals seek understanding of the world in which they live and work, developing subjective meanings of their experiences" (Creswell, 2009). The subjective meanings can be multiple and varied (Nigel, 2001) requiring the researcher to unravel the complexity of people's views and context in which people live and work, while being reflexive of their personal, cultural and historical experiences (Knight, 2002) in order to recognise how researcher background shapes the interpretation of these experiences (see reflexive account 7.1.3).

Feminist research assumes that the world is socially constructed (Sarantakos, 2012) and therefore taking feminist perspectives for this study was an effort to look at the influences and social conditions of women, in order to unpick the taken for granted practices that disadvantage women (Wadsworth, 2001). Considering pregnancy is gender specific, there could be underlying social practices and expectations that make women's experience through this transition put them at a disadvantage (compared to men) as described in the literature review. This calls for feminist approaches to unpick discriminating social practices and expectations regarding food and weight in women's experience of motherhood. Therefore taking a feminist epistemological

standpoint prescribes that research be conducted by women in order to understand women's issues and their unique position in society (Sarantakos, 2012). An important end to this goal is the conduct of research by women, on women and for women (Wadsworth, 2001) as in this current study.

In keeping with IPA, which focusses on meaning making of the individual experience, triangulation with a feminist approach was important as argued by (Larkin et al., 2006); that the researcher's interpretation of participants' experiences may draw on varied theoretical traditions. The feminist aspect was important in this study because, starting from my personal experience as a woman and a mother, it provided an opportunity to explore the experience of being a woman, the unease regarding our changing experience of our bodies and the way it reflects various information, pressures, and contradictions we face being in and out of pregnancy in the transition to motherhood (Hartley and Todres, 2001, Bailey, 1999).

In line with the stated IPA ontological assumptions, this study focussed on the position of women and how various influences shape their pregnancy experience (Ussher, 2000). Taking a feminist approach to IPA builds on and extends previous work by Johnson (2004) and Gross and Pattison (2007), in exploring the meaning, context and complexity of women's experiences (Ussher, 2000) of pregnancy and how they are shaped and impacted on by different ideologies and discourses (Smith and Osborn, 2003). This was done through asking women to describe their experiences and what the concepts of pregnancy, motherhood, food, and weight status meant to them.

Taking an insider feminist perspective, IPA was used for its ability to robustly and flexibly explore individuals' perception, construction of meaning and how people make sense of their personal and social world (Smith and Osborn, 2003). Specifically, taking feminist viewpoint enabled application of IPA to explore the complex process of motherhood in a broader context while facilitating description and understanding of participants' perspectives in negotiating the pressures and expectations of becoming a mother. Moreover, being reflexive of my influences as a researcher on the participants and findings enhanced the establishment of collaborative and non-

exploitative relationships placing the researcher within the study so as to avoid objectification (Hartley and Todres, 2001).

In summary, this study explored the meanings women attach to their lived experience of pregnancy or motherhood and how they negotiated the pressures and expectations of becoming a mother using the Interpretative Phenomenological Analysis (IPA) approach as described by (Smith, 1996). The feminist proposition that women are better placed to explore and understand the world of women due to their personal and social experience as females (Hartley and Todres, 2001), while being reflexive, complimented the application of IPA in this study. The feminist approaches were applied for resonating with and taking an insider perspective to interpret women's accounts of their experience of food and weight status during the perinatal period.

### 3.2.2 Theoretical positions on feminism

Feminism is a diverse area that brings women as the centre of analysis for the reconsideration of the question of "womanhood" and recognition of differences between women (Beasley, 1999). It specifically critiques the conventional thought that men are superior to generate varied positions and possibilities of analysis within the social and political thought (Beasley, 1999, Ussher, 2000).

There are various feminist approaches including liberal, radical, Marxist/socialist, Freudian, postmodern/poststructuralists, Lacanian psychoanalytic and feminists concerned with race and or ethnicity.

In acknowledging the significance of sexual perspectives in modes of thought, feminism challenges western thought that universalises experiences based on the male supremacy for which men are taken as the central object with the tendency to extrapolate from their experience (Beasley, 1999, Meyers, 2007). The implications of this is in the design of expectations of women throughout their adulthood without

considering their unique position and experiences that shape their behaviour(Mac an Ghaill and Haywood, 2007).

In following feminists argument that sexual difference shapes the intellectual geography of our social life, the experience of pregnancy only specific to women therefore can be said to shape what women think and how they think that can impact on their food behaviours subsequently weight status (Bordo, 1993, Beasley, 1999). It is the lack of acknowledgement of women and their difference through these transitions and how different they may experience these periods from the mainstream (Miller, 2005) that is critical to the use of feminist approaches in this study.

### 3.2.2.1 Radical feminist viewpoints

By seeking women's stories, and illumination on their experiences and meanings for women through IPA will enable to overcome this marginalisation and potentially offer pointers on what is of importance to women during the transition to motherhood. The study borrows viewpoints from radical and post-structural feminisms with the argument that society imparts restrictions on women through systematic application of systems made for and run by men while focussing on the body (Beasley, 1999, Bordo, 1993). The application of these viewpoints especially argues for championing of the sexually specific body as critical to social analysis within social contexts (Shilling, 2012). This sexual difference is significant and relevant in the pursuit of meaning from women's experience. In light of food and weight status in the transition to motherhood, taking these feminism viewpoints is to acknowledge social life as embodied such that women's experiences are lived within a social context with particular interconnections between the view of the body and society.

#### 3.2.2.2 Post-structural feminism

In addition, feminism viewpoints of social contexts in which sexual difference arises and is experienced, together with the use of language are important in the exploration of maternal obesity through looking at the "body's own experience of its embodiment (Shilling, 2012). Following on from the necessity to understand women's voices,

viewpoints that posit the contextual fluidity and continuous production of meaning as a result of experiences in social life are paramount (Ussher, 2000, Beasley, 1999). Specifically, Michael Foucault's recognition of meaning as an important influence on social life through discourses and knowledges (Beasley, 1999) are best suited to explore the underlying contextual and social influences on maternal obesity. Following Foucault therefore requires that we look at the practices, institutions, and technologies that sustain women's disadvantage (Bordo, 1993). The important divergence of feminism in this study from Foucault is the assertion that all meanings are gendered, socially constructed, shaped and interpreted.

### 3.2.2.3 Summary

This study borrows from radical and post-structural feminist viewpoints (Beasley, 1999) that:

- i) Gender is a basic organising principle marginalising women's viewpoints in relation to a masculine norm or universality. The research focus on the woman as the subject of analysis with attention to differences within and between women.
- ii) The social context is important in understanding difference and experience. Meaning, even of the self, is not neutral but is socially contextualised and constructed.
- iii) Language is important in understanding meaning by looking at different knowledges (discourses) that influence this meaning
- iv) Power is exercised in actions and is inherent in all social relationships

To understand maternal obesity requires an exploration of research which starts from the perspective of the social construction of motherhood. Taking on feminist approaches to this end requires that research sets women in their social context, looking at the issues as complex, interactive and multifaceted while recognising the diversity in women's voices and experiences (Ussher, 2000, Shilling, 2012).

#### 3.2.3 Theoretical basis of IPA

Interpretative Phenomenological Analysis, IPA, is an approach to qualitative research that enables us to explore the "*lived experience*" of a given phenomenon (Smith, 2008). Championed by Smith (1996) as a methodology in its own right rather than a method of data analysis, IPA unpacks the way participants experience and make sense of their experiences, events, states; how this then informs their choices and practices and its impact on social norms as a means of knowledge generation (Smith and Osborn, 2008, Smith et al., 2009).

Further, Interpretative Phenomenology attempts to understand phenomena through the meanings people assign to them; aimed at producing an understanding of the context and the process where their lived experience influences, and is influenced by the context (Walsham, 1995, Lopez and Willis, 2004). In choosing IPA, we purposed to explore, describe, interpret and situate the means by which women make sense of their experiences (Larkin et al., 2006). IPA focuses on the complexity of sense making as a phenomena emerges (Kaplan and Maxwell, 1994). Accordingly, IPA as a methodology is grounded on the theoretical perspectives of phenomenology, hermeneutics and idiography (Smith et al., 2009) as hereby explained.

## 3.2.3.1 Phenomenology:

IPA is hinged on Husserl's description of phenomenology (Smith et al., 2009) which calls for paying attention to a person's experience and perception, by encouraging participants to tell their own story in their own words (Smith et al., 2009). This requires a researcher to acknowledge and use 'fore-knowledge' of the phenomenon to determine a proper perspective in which to approach the phenomenon (Giorgi and Giorgi, 2009). In this respect, a literature review was done to understand the phenomenon of maternal obesity and identify research gaps before setting out for data collection. IPA also utilises the phenomenological assumptions of the 'lived experience' as context driven, mediated by social, historic and cultural influences (Smith, 1996, Smith et al., 2009). As a result, the individual's understanding of an

experience is impacted on by the varied relationships with others, culture and society (Giorgi and Giorgi, 2009, Eatough and Smith, 2008). Therefore, to understand maternal obesity, the perspective and approach used was aimed to explore how expectation, onset, and experience of pregnancy, influences women's food behaviours and weight perception.

#### 3.2.3.2 Hermeneutics:

Defined as the interpretation of meaning of texts, hermeneutics is crucial to IPA as it provides the basis for analysis. Hinged on the works of Heidegger, Gadamer, and Schleiermacher, hermeneutics requires articulating and clarifying meanings that emerge from the analysis, with the researcher's interpretations bringing out the relevance to the phenomenon and study of interest (Eatough and Smith, 2008, Giorgi and Giorgi, 2009). Heidegger's hermeneutic phenomenology was used to provide both a descriptive (phenomenological) methodology allowing the exploration of the context of women's experiences; and an interpretive (hermeneutic) methodology (Giorgi and Giorgi, 2009) allowing the exploration of meanings of women's experiences in line with IPA as described by Smith (1999).

Using hermeneutic assumptions in analysis resulted in three levels of interpretation. Linguistic analysis exploring literal meanings of texts; psychological analysis exploring what is said and how; and interpretation moving between 'the part' and 'the whole' using the hermeneutic circle (Eatough and Smith, 2008). Simply put, the hermeneutic circle posits that for example, the meaning of a word (the part) becomes clear when seen in the context of the whole sentence (the whole) (see extract of process in Appendices 12-15). Also, the meaning of a sentence (the whole) depends on the cumulative meanings of the individual words (the parts). Therefore, to understand the whole, you look to the parts, and to understand the parts you look to the whole; effectively describing the process of interpretation as a dynamic, non-linear way of thinking about the data (Smith et al., 2009).

The contributions of Gadamer posit that the lived experience of the researcher can be both a way into the text or a hindrance to understanding (Smith, 2008). This is because in the process of analysis, an interpreter's fore-meanings or prejudices become adjusted by the new meanings, which prompts more questions to be asked and hence new meanings emerge (Patton, 2002, Brocki and Wearden, 2006). Accordingly, use of IPA in analysis, the final account is a construction of the participant and the researcher requiring acknowledging how pre-understandings affect interpretation (Larkin et al., 2006). To access reality is through social constructions such as language, consciousness and shared meanings (Myers, 1997) and the resultant analysis should be iterative moving back and forth through different ways of thinking about the data (Smith et al., 2009). This is described in detail under data analysis where the transcripts were individually read and meanings highlighted moving back and forth from the section to the whole transcript before collating these together into the three participant groups.

### 3.2.3.3 Idiography:

Defined as the study of the individual person in psychology, idiography contributes to the theoretical understanding of IPA in looking at specific individuals and, or specific situations or events (Larkin et al., 2006). Applied to IPA, an idiographic approach posits that individual experiences are not isolated accounts but rather to be understood in relation to the phenomenon. This is because even though the phenomenon maybe unique to the individual, it is lived and experienced in a particular shared context (Larkin et al., 2006, Smith et al., 2009). Because of this prescription for a specific situation, event, person or both, IPA uses idiography methodologically by necessitating an intensive and detailed analysis of experiences produced by a small number of participants (Eatough and Smith, 2008, Larkin et al., 2006). It follows that using idiography allows for the importance of the individual to be emphasized in analysis as a unique entity within the collective interpretation of the phenomenon (Lopez and Willis, 2004).

Idiography feeds into the hermeneutic circle of interpretation where there is movement between the part, say individual experience as a single case, to the group experience which is the whole (Smith et al., 2009). This highlighting of unique individual perspectives as well as shared experiences is one of the cornerstones of IPA (Smith and Osborn, 2008, Brocki and Wearden, 2006). Details of how ideographical tenets of IPA were applied to this study are detailed in the data analysis section, but briefly, individual transcripts were read and reread to unpick the underlying contexts and how it shaped their experience.

### 3.2.4 Alternative methodologies considered

The theoretical underpinnings of IPA together with the rationale for its use to answer the research question have been listed in the preceding sections 3.2.1 to 3.2.2. Here below, is a comparison with other methodologies which could have been used to answer the research question, highlighting why IPA was chosen over these methods. The methods considered were qualitative founded, and especially needed to look at the experience of the participants. These methods are Discourse Analysis and Grounded theory.

#### 3.2.4.1 Discourse Analysis

Discourse Analysis (DA) is a qualitative method emerging from social constructionism and focuses on the use of language to understand underlying social structures about a phenomenon (Fulcher, 2005, Gee, 2014). As an analysis of language in use, DA emphases the ontological perspectives of interpretation based on social constructivism where human experience is shaped, transformed, and understood through linguistic representation (Powers, 2001). Used as either descriptive or critical discourse analysis, the approach explores the content and structure of language used in explaining the meaning of an experience through a close examination of the flow of communication between several individuals to identify patterns (including temporal interaction among speakers) (Thorne, 2000, Alba-Juez, 2009). Perhaps the most alike to IPA in qualitative methodologies exploring the experience of participants, discourse

analysis emphasises situating the data within its context (Neale, 2009, Alba-Juez, 2009, Fulcher, 2005).

The aim of the study suggests use of IPA and DA theoretical perspectives that seek to inductively develop knowledge through understanding the experiences in reference to culture and society. Further, both IPA and DA are concerned with cognitions (Smith et al., 2009), emphasizing social practice as shaping the social world such that actions are individual and context bound but also institutionalised and socially anchored (Jorgensen and Phillips, 2002, Smith, 1996).

Also, DA is a way of understanding social interactions in which the researcher's position is declared in a reflexive manner. This follows social constructionist views that a researcher will have a position (expectation, bias, belief, or set of cultural values) when conducting research, which impacts on and affects their engagement with, and interpretation of the findings (Gee, 2014, Fulcher, 2005). In agreement, phenomenological approaches require the researcher to "bracket" their preconceptions about the phenomenon so as to generate entirely new descriptions and conceptualisations (Larkin et al., 2006). This is possible through engaging with the data for a richer description of the experience while highlighting deeper essential structures underlying a particular human experience (Thorne, 2000).

There are shared concerns and interests between IPA and DA. However, the two approaches differ in that IPA purposes to provide detailed insight and understanding of the concealed meaning of everyday life experiences (Smith and Osborn, 2003, Larkin et al., 2006), while DA principally emphasizes the power inherent in social relations (Jorgensen and Phillips, 2002). DA is more committed to social constructionism aimed at deconstructing mainly power and social interaction of an experience (Wetherell et al., 2001, Smith et al., 2009). IPA on the other hand is focussed on hermeneutic, idiographic and contextual interpretation of how participants see meaning in their experiences and is therefore more relevant to the research question.

Even though DA is said to be action-oriented, situated and constructed, it rather treats participants as acting in and responding to social settings, both seen as products of discourse (Potter, 2004). This is in stark contrast to IPA which posits the essence of a shared experience within social contexts (Brocki and Wearden, 2006). This means that while DA focusses on understanding structure of the context and how language is used to construct a version of the experience (Neale, 2009), IPA on the other hand is concerned with the individuals involvement in a particular context in order to unpick the fine grained experience of women in the transition to motherhood (Smith, 1999).

For this study, the major theoretical influences on DA are social constructivism and feminism. Both describe how groups of people exist in relation to the historically based dominant ideologies that structure their experience such as gender and culture (Whittle and Inhorn, 2001, Ironside, 2001). They are of relevance as they would provide a platform for women to change oppressive situations through telling their story situated in social contexts (Mac an Ghaill and Haywood, 2007). However, that is not enough to understand the experiential context and influences of maternal obesity. Therefore, IPA was best suited as it provides greater insight into the situated contexts through generating interpretive claims of not only the experience of discourses but also meanings that the experience and context have for groups of people (Smith et al., 2009), in this case women in the transition to motherhood. Also, IPA diverges from DA in its recognition of assumptions that beliefs about health status influence behaviour change, cognition and physical state (Brocki and Wearden, 2006, Smith, 1996), which is important in understanding development of maternal obesity.

As a way of communicating social purpose, DA allows the deconstruction of conversations attempting to identify features of the conversation relating to social identities (discourses). This enables the understanding of the social relations and how they contribute to knowledge generation responsible for behaviour and practices within that group which may not be applicable to other groups (Potter, 2004). However, women are said to transition to motherhood, which means that discourses may change over their life course (Miller, 2005, Nelson, 2003, Mitchell, 2011). It is therefore

paramount to understand their essence of preparing for and going through this transition, which is possible with IPA that examines the meanings people make from their lived experience.

In analysing discourses, the attention to language use in relation to social, political and cultural aspects (Alba-Juez, 2009) is based on the social constructionist assumption that "the same phenomenon can be constructed in different ways" (Willig, 2001). Therefore DA seeks to find patterns and commonalities within human experience (Johnston, 2010) in contrast to phenomenological analytic methods which explicitly orient the researcher towards the depth and detail of the participant's lived experience (Mason, 2002) that can be appreciated only through exhaustive, systematic and reflective study of their lived experience (Brocki and Wearden, 2006). In this case, women's experiences were analysed through a thematic analysis in first instance, followed by second phase interpretation of aggregating clusters of themes to enable broader meaningful interpretations (Brocki and Wearden, 2006, Johnson et al., 2004).

## 3.2.4.2 Grounded theory

Developed by Glaser and Strauss for constructing theory grounded in data, grounded theory (GT) postulates that research concepts are not chosen prior to the research, but rather derived from the data (Corbin and Strauss, 2015) in line with IPA.

Both IPA and GT require review of literature to understand a phenomenon and use purposeful sampling as start points by identification of participants sharing the same experience (Smith and Osborn, 2003) or with the same phenomenon under study. However, GT is founded on symbolic interactionism and pragmatism, utilising theoretical sampling and the constant comparative method (Ploeg, 1999, Corbin and Strauss, 2015). It follows that sampling decisions are made throughout the entire research process whereby participants are selected based on their knowledge of the topic. Specifically with GT, participants are chosen based on emerging study findings while developing a theory that accounts for behavioural variation (Brocki and Wearden, 2006, Corbin and Strauss, 2015); while in IPA, participants are chosen prior to the

commencement of data collection in order to understand the essence of their unique experience of the phenomenon (Larkin et al., 2006). Moreover the longitudinal nature of this study contradicts with the use of GT in its theoretical underpinnings, which was yet another reason for preferential use of IPA.

Simply put, GT is useful in fields where there is paucity of research, and uses one interview to guide the next and the end result is the discovery of social-psychological processes to develop a theory about behaviour (Carla Willig and Stainton-Rogers, 2008, Bryman, 2004). In comparison, IPA is useful where the lived experience is vital to understanding a phenomenon, utilising a homogenous sample to find similarity and difference (Brocki and Wearden, 2006). Accordingly, IPA treats each interview as unique while contributing to understanding of the whole phenomenon.

In addition, GT helps to understand behaviour from social interaction by highlighting change within social groups while understanding the processes central to that change regardless of cultural background (Morse and Richards, 2002). This is in contrast to IPA that purposes to intensively interpret the various stories of people's lived experience with contextualisation (Brocki and Wearden, 2006).

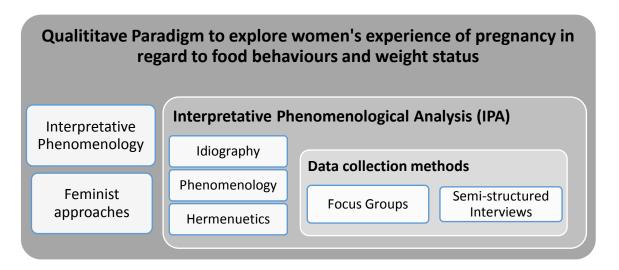
Even though GT procedures can be used to uncover beliefs and meanings underlying behaviour just like IPA, it's the GT approach to integrate categories and concepts to form a structural theoretical explanation about a phenomenon (Corbin and Strauss, 2015) that makes it fall short in answering the research question. In comparison, IPA, by looking at divergence and convergence of participants' sense making of their experience (Brocki and Wearden, 2006) is then best suited to explore women's experience of pregnancy. Moreover IPA is particularly suitable for understanding personal experiences such as pregnancy, while GT is more suited to exploring social processes such as motherhood discourses (Willig, 2001). IPA explores the more microlevel analysis of experience and how it is applied to the macro-level that is conceptualised under GT (Corbin and Strauss, 2015).

In summary, DA, GT and IPA all tell us how meanings are made and used, but also how participants describe their experience in their own words (Ploeg, 1999). This helps to examine the social lifeworld that is often taken for granted by quantitative research. Particularly, IPA was primed over DA and GT because of its integration of two ontological approaches of symbolic interactionism and social constructionism (Brocki and Wearden, 2006) to explore the essence of a lived experience. This places IPA somewhat in the middle between GT and DA and was therefore better placed to explore how women negotiate pregnancy in the context of food and weight status.

Triangulation is crucial in exploring the content and complexity of motherhood, while highlighting divergence and convergence on thematic and theoretical connections of behaviour within and across cases (Nigel, 2001, Bryman, 2004) as will be further explained.

## 3.2.5 Nested summary of Methodology:

*Figure 3.1: Summary of the Methodology* 



To achieve the study aims required a robust study design that would ensure rigorous data collection procedures using multiple forms of data and presentation of multiple realities focussed on participant views (Smith and Osborn, 2008, Creswell, 2009, Flick,

2006). This was achieved through a feminist approach to IPA tradition of inquiry to include:

- a. Focus groups as a source of deeper probing and as an educative encounter for the researcher prior to the individual interviews.
- b. Sequential individual interviews which were interactive involving self-disclosure to enhance sense of collaboration.
- c. Self-reflexivity about my experiences before and during the research process. A narrative account of my role, position and how I may have impacted on the research process and interpretation of the women's accounts.

## 3.3 Study design

## 3.3.1 Target Population:

The targeted participant population was women of child bearing age living in a Northern city in the UK. Women in the North were the focus of the study due to the diversity in socio-economic positions and easy access for enrolment. Moreover, being highly deprived on one hand with a working middle to upper class group on the other (Office for National Statistics, 2011) provided a potentially diverse population for the study, with participants in different socio-economic backgrounds.

Women of reproductive age (20-40 years), excluding teenage pregnancies (<20years) were recruited. The reproductive age of women is said to be 15-49 years (WHO, 2010), however, females aged 19 years and below are classified as adolescents, in a phase of rapid growth, requiring higher energy needs and increased food intakes than those above 20 years old. Also pregnancies to women below the age of 20 years are classified as teenage pregnancies and have been shown to exhibit complications resulting from the baseline high demands of the adolescence growth spurt complicated by the demands of the pregnancy (WHO, 2004). As a result of these needs, women below 20 years were excluded because of higher growth needs which cannot be compared with those of adult females.

The optimum period for childbearing is between 20 – 35 years of age (Bewley S et al., 2009). After this, it is increasingly difficult to fall pregnant, and the chance of miscarriage and adverse pregnancy outcomes increases with women over 40 years considered to be at a higher risk of pregnancy complications (RCOG, 2009, Lisonkova et al., 2010). Further, some women may start early menopause in their 40s characterised by body changes; primarily an increase in weight (SOGC, 2011). Menopausal hormonal changes also affect appetite and food intake which means the dietary needs and practices of older women (>40years) may not just be attributed to pregnancy or motherhood, but to age and other factors hence their exclusion from the study. As a result of the precarious dietary and medical care needs of women over 40 years old, they are excluded from the study so as to have a similar age group across the different phases of the study that included never pregnant, pregnant, and postnatal women.

Only women who were 20-40 years old were recruited as this age range would provide a fairly homogenous target group of women across the three study arms.

### **3.3.2 Sample**

This study utilised purposive sampling in line with IPA. Women were purposively recruited into three groups: the never pregnant, the currently pregnant and postnatal women. The latter two groups were also subdivided into multiparous and primiparous women. It was proposed that a maximum of three interviews was sufficient for a novice to IPA research (Smith, 2008), so as to enable in-depth exploration and engagement with the data while detecting any convergence and divergence across the sampling groups (Smith and Osborn, 2003). However, the use of a longitudinal approach using serial interviews meant factoring in attrition. To this end, extra participants were recruited to avoid too little data from fewer participants in case of attrition at subsequent interviews. Therefore a total of 20 women were recruited: 5 pregnant women and 5 postnatal women and 10 never pregnant women.

The study was subdivided into two phases because of time constraints of otherwise following up women from before they are pregnant through pregnancy and into postpartum. It has previously been suggested that women's experiences and influences about body image and weight are congruent if basic characteristics such as ethnicity, social economic status, age, and residence are the same (Miller, 2005, Hartley and Todres, 2001, Bailey, 1999, Brunton et al., 2011). Therefore, women of the same ethnicity (white British), living in the same city for at least the past five years and within the age range of 20-40years were recruited. In order to capture the changing influences and pressures of women through this transition, the views and their lived experiences were explored at key time points as follows:

- Phase 1: Women were recruited if they had never been pregnant, and were not planning to get pregnant within one year.
- <u>Phase 2a:</u> Women recruited if they were currently pregnant, before six months gestation.
- Phase 2b: Women recruited in late pregnancy (>36weeks) or immediate postpartum; but first interviewed within six weeks postpartum.

•

*Table 3.1: Sample characteristics and recruitment points* 

Women of Reproductive Age; 20 to 40 years, (n=20)		
Phase 1:	Phase 2a:	Phase 2b:
Never pregnant (10)	Pregnant women (5)	Women in postpartum (5)
Currently not	<ul> <li>Primigravida</li> </ul>	Primiparous
pregnant (10)	<ul> <li>Multigravida</li> </ul>	<ul> <li>Multiparous</li> </ul>
Recruited through hand	Recruited from the Midwife	Recruited in late pregnancy
distributed flyers at local	clinics, inclusion of flyers/	(after 36weeks) through
cafés, bus stops,	adverts into pregnancy	antenatal clinics, community
shopping malls, colleges	information packs, through	midwife contacts, sonography
and university. Also bulk	community midwife	clinics and word of mouth.
student emails and	contacts and social media	
snowball.	adverts.	

### 3.3.3 Recruitment and Participant identification

### Phase 1: Women who have never been pregnant

Women who had never been pregnant, and were not currently pregnant or even planning a pregnancy were accessed within the wider population. To ensure a diverse group of participants, flyers, and study adverts (**Appendix 4**) were distributed by hand at busy shopping centres, bus stations and within colleges and universities. Similar but larger adverts were strategically pinned at notice boards around the community noticeboards, University and College after authorisation.

Due to low response rates, alternative recruitment through email to female students and staff at local universities and colleges were used. The disadvantage with this option could be in the socio-economic categorisation of the participants. Level of education attainment and social economic class are confirmed determinants in healthy eating behaviours with the more educated and high social economic position more likely to exhibit healthier lifestyles as compared to low education attainment and low social economic position as discussed in the literature review (Crowell, 1995, Siega-Riz and Laraia, 2006, Kac et al., 2004a, Siega-Riz et al., 2010). However, inclusion of recruitment at Colleges would counteract this skewing of participants by education and social class while increasing chances for local participants. This is because attendance at college is diverse in offering a variety of courses from A Levels to NVQs, Foundation degrees and degrees, as well as various short courses for getting the local population into work (Hull College, 2012) irrespective of social class. All these sites were chosen for their ease of accessibility by the researcher.

#### Phase 2: Antenatal women and women in early postpartum

Access to socio-culturally diverse groups of pregnant and postnatal women was possible through the NHS. This is because pregnant women in the UK receive routine antenatal and postnatal care in line with NICE guidelines (NICE, 2012), meaning they have regular contact with maternity services, particularly midwives (see ANC pathway

**Appendix 16**). Therefore recruitment was through NHS gate keeping points, specifically through use of community midwives, antenatal clinics and hospital screening clinics to identify women for the study. The research ethics considerations for recruiting in the NHS are described in Section 3.4. Snowball sampling was also used to recruit more women from initial contacts. It was envisaged that health visitors would be utilised in identifying participants in immediate postpartum, however this was not required due to sufficient recruitment.

In line with medicalised maternity services, recruitment was tagged to health services and divided into the pregnant and postnatal group recruitment phases. The use of health services and health professionals was also crucial to ensure appropriate and ongoing access to participants as well as increasing response rates (Neale, 2009). As suggested by Murray et al. (2009), the timing of initial recruitment of participants in serial interviews is crucial and should be driven by an understanding of the course of the event (in this case food behaviours and weight in motherhood) and the main issues to be explored (Murray et al., 2009). Therefore, recruitment was done at the earliest possible time in pregnancy (<24weeks), and late pregnancy (>36weeks) or immediately after birth for the pregnant and postnatal women respectively.

It was desirable that recruitment of women be done early in pregnancy or postpartum in order to capture women's experiences from this crucial time onwards and how it changed as they got accustomed to the pregnancy or baby care and any changes in influential external factors (Murray et al., 2009).

#### For the antenatal group

Initial recruitment was planned to be at 'booking in interview' before women's first contact with a midwife in early pregnancy. The NHS operates a direct-access-to-midwife telephone system which all women are encouraged to call as soon as they find out they are pregnant. Once women call, they are sent information packs and booked for a Midwife appointment targeted to occur within the first 12 weeks or soon after for those past 12 weeks of pregnancy. It was these information packs that were

targeted to carry the study leaflet. Accordingly, study leaflets (Appendix 7) were distributed to booking units through the community midwife teams. To maximise response rates, a second recruitment point was utilised using the antenatal clinic targeting women attending their first midwife appointment. The midwives were requested to give out the study leaflet to pregnant women below 20 weeks pregnancy. However due to the slow response rate, even after over 300 leaflets had been delivered to the hospitals and clinics, other methods were utilised to include handing out the leaflets at ANC clinics, Children's Centres and antenatal classes.

#### For the postpartum group

Identification was planned in late pregnancy (36 weeks or later) preferably the last midwife appointment before childbirth. This would give the women time to consider whether they wanted to be interviewed about two weeks after the birth. All women were recruited through the midwife clinics, Children's Centres, antenatal workshops, snowballing and local social media groups. This was through distribution of the study leaflet (Appendix 7) both in hard copies and online adverts. Some participants contacted the researcher after learning about the study from the Faculty Blog and a local newspaper running the study advert.

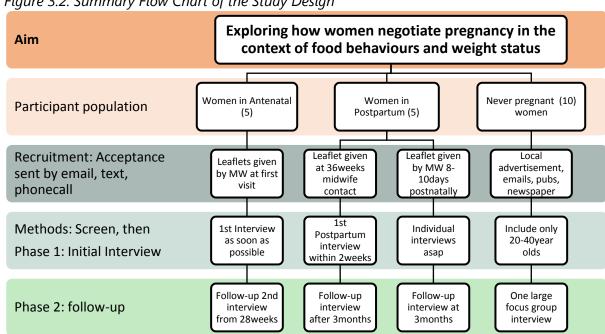


Figure 3.2: Summary Flow Chart of the Study Design

#### 3.3.4 Data collection:

Due to the nature of the research question, the study utilised focus groups and serial semi-structured interviews as tools of data collection. First, the rationale for using these methods is given before a description of the procedures is explored.

#### 3.3.4.1 Rationale of the methods:

For the never pregnant women, focus group discussions were held in order to generate themes surrounding motherhood and food behaviours. This was crucial in eliciting data in regards to society expectations and how these women view food, and weight in the process of motherhood. Focus groups were used principally to encourage people to voice their views on a subject while enabling the researcher to understand where their knowledge comes from and what resources they use to inform their various stand points (Nigel, 2001). These then fed into the individual one-to-one interviews with the pregnant and postnatal women to get an understanding of how they negotiated pregnancy in regard to food and weight status.

The focus group was used among the never pregnant women (Phase 1) to explore the complexity of motherhood pressures and expectations, capture a diverse range of positions on ideologies and discourses women face to compare with women's experiences of pregnancy in the individual interviews (Phase 2).

#### Phase 1: Focus Groups (FGs)

There is a diverse range of ideologies and discourses regarding women's eating, weight and body image. In order to capture the diversity and complexity of these issues and the pressures women face every day in regard to eating and general lifestyles, focus groups were carried out among the never pregnant women.

Focus groups offer advantages in eliciting multiple views and emotional processes drawing upon respondent's attitudes, feelings, beliefs, experiences and reactions only revealed in a social interaction and gathering (Barbour and Kitzinger, 1999, Foster-

Turner, 2009). The everyday use of language and culture elicited by FGs was particularly important for this study in understanding the social construction of women's experience of motherhood and the body. FGs were also instrumental in bringing to light salient issues about women's experiences through the multiple explanations of meanings, attitudes and behaviours from the participants.

Focus groups were chosen for their advantage in reflecting participants overall experience (Nigel, 2001). Further, because of their ability to bring out multiple views as well as consensus on a given topic, FGs were useful at the preliminary explorative stages of the study generating avenues for in-depth research (Kitzinger, 1995, Barbour and Kitzinger, 1999). This was particularly important for this study as FG data provided a baseline which guided the individual interviews.

Also, the FG interaction enables participants to re-evaluate and reconsider their own understanding of their experiences and beliefs through the opportunity to ask questions of each other and clarify standpoints (Kitzinger, 1995, Foster-Turner, 2009). This benefit of FGs has been found to be empowering for most participants. Specifically, the group dynamics of FGs were important for agreement on themes, explanations on divergence and highlighting conflicting positions (Foster-Turner, 2009) while allowing the validation of dialogue. Expectations and influences emerging from the focus group with the never pregnant group were checked with the pregnant and postnatal women to capture any changes in expectations, influences and discourses motherhood brings.

### **Phase 2: Serial interviews**

Information from the FG was utilised to feed into devising an interview protocol for the individual interviews with pregnant and postnatal women. For this part of the study, individual interviews were selected over focus groups, and other methods because of the need for attention on the individual experiences of the women as they transit into motherhood using IPA.

Semi-structured in-depth interviews were used with the pregnant and women in postnatal period to allow capturing of changes in their experience and behaviours during pregnancy and postpartum.

Due to the nature of the research question and IPA methodology, in-depth interviews were selected as the method of choice as opposed to other methods, due to their ability to maximise response rates, giving opportunity of participants to tell their own story (Creswell, 2009) while enabling the interviewer to seek clarification during interviewing (Morse and Richards, 2002). The opportunity to probe during the interview gave participants maximum opportunity to tell their story while at the same time making it flexible to allow an understanding, friendly relationship and produce rich in-depth data (Nigel, 2001).

Interviews were scheduled to occur at two time points; in early pregnancy or early postnatal and in late pregnancy or mid-late postnatal for the antenatal and postnatal women respectively. Women were interviewed about their experience of pregnancy and motherhood in early pregnancy and early postpartum respectively (Interview 1). After at least three months, they were re-interviewed to capture any changes in influences, expectations, adaptations and social pressures occurring as pregnancy and motherhood progressed (Interview 2).

The use of in-depth interviews among the pregnant and women in the postnatal period allowed capturing of changes in their experience and behaviours during pregnancy or after childbirth. The individual interviews were longitudinal in nature (serial qualitative interviewing) in order to explore the evolving and complex experiences of food behaviours in motherhood. The longitudinal nature has considerable advantages over snapshot techniques as it gives a clearer picture than would be possible with one time methods (Murray et al., 2009).

Also, the use of serial interviews was advantageous for capturing fluctuating emotions, problems, anxiety, needs or existential opinions (Murray et al., 2009), providing rich insight into various complex roles of participants within their families and communities

and the way in which external factors like influence of health services and context, affected their experiences (Murray et al., 2009, Kendall et al., 2009). Moreover serial interviews have been found to generate a large volume of rich and contextualised accounts of people's experiences, particularly allowing narratives to unfold, revealing the complexity of individual situations (Murray et al., 2009, Hoddinott et al., 2012).

Serial interviews also allow trust to develop between the researcher and the participant while allowing early themes to be explored in-depth later (Hoddinott et al., 2012). The aim of serial data collection was to interview women at key points during motherhood at: early pregnancy, preferably before contact with health professionals; later when pregnancy was visible; early postpartum immediately after childbirth and mid-late postnatal. The timeframe between each of these points was three to seven months apart to capture any changes in the women's lived experience as they adjusted to the new role of motherhood. The early pregnancy and postnatal interviews were used to explore women's adjustment to the pregnancy and child caring respectively. This also enabled the exploration of decisions, practices and behaviours while highlighting any external influences and roles of significant others. Late pregnancy and mid-late postpartum interviews on the other hand explored difference in expectations, behaviours and influences as pregnancy and motherhood were established respectively. The interviews at these latter two time points also collected information about the role of health workers in women's decision making process and practices.

The potential pitfall of serial interviews is intrusion, and distortion of participants' account of their life experience (DiCicco - Bloom and Crabtree, 2006, Johnston, 2010). As a non-medical researcher however, this should not be a significant problem because extensive research with this method has found that participants find it easier to talk and voice fears and concerns to a researcher, family and friends about sensitive personal issues rather than a clinician or health professional (Murray et al., 2009).

The semi-structured interviews were informed by the interview schedule designed with input from the literature review, research questions, and ideas from the focus group

discussion with the never-pregnant women. At subsequent interviews with the women, the interview schedule was slightly modified to focus the interviews on the research question, probe in more depth about meanings, as well as data validation (Hoddinott et al., 2012). The use of an interview schedule helped to focus the research while enabling flexibility in sequencing of the interview (Kendall et al., 2009), allowing the participants to tell their story (Smith, 2008). This also makes interviewing flexible and facilitates rapport between researcher and participants, necessary for collection of indepth rich data (Nigel, 2001, Murray et al., 2009, Lindsey et al., 2009).

Mindful of the emotional and physical impact the arrival of a new baby can have on a family, interview times were negotiated to suit the participants (Kvale, 1996). The interviews were held at the women's convenience, either from their homes, at a convenient cafe or child centre. Telephone interviewing was offered as an alternative for women who due to personal, time or commitment constraints could not attend face to face interviews.

#### 3.3.4.2 Procedures

The following data collection procedures were planned and followed, highlighting differences where they arose from what was proposed to what happened. Women who were interested to take part in the study initiated contact with the researcher by replying to the advert either by text, email, or telephone call. Women were immediately contacted by the researcher and called to screen for their eligibility through a series of questions. Their personal information details were written down and a detailed information leaflet (Appendix 5 and 8) was sent out. They were contacted at weekly intervals or earlier, if specified, to arrange the interview.

#### **Screening:**

Potential participants were given a telephone call and when convenient asked some screening questions to confirm their eligibility for the study Table 3.2. The following were the inclusion and exclusion criteria:

- **Inclusion criteria:** For the focus group, adult women, aged 20-40 years who had never been pregnant, were not currently pregnant and not planning to be pregnant within 1 year. For the antenatal and postnatal participants, criteria was; adult women aged 20-40 years who were either pregnant or had recently given birth within 4weeks respectively.
- Exclusion criteria: Women with underlying eating disorders and long-term illnesses were excluded in line with the study objective to explore contemporary influences in food behaviours among women. This is because women who have long-term illnesses and those with eating disorders would already exhibit different food behaviours (compared to the general population) either prescribed by their health professional or as a result of their disorder or illness. Their inclusion could mask the societal influences on eating behaviours in pregnancy as a result of these conditions. Women were asked the following questions in a non-recorded telephone call to confirm eligibility.

Table 3.2: Participant Screening Guide

Fo	cus Group Screening Questions	Accept
1.	How old are you? Date/Year of Birth	20+
2.	What is your nationality and ethnicity?	WB
3.	How long have you lived in locally? Prompt if less than 3 years.	2y
4.	Have you ever been pregnant (prompt for even if not carried to full term)?	No
5.	Have you thought about having children? (prompt for trying to conceive)	No
6.	Have you ever been on a strict diet (more than 2months), or had an eating	
	disorder?	No
Pregnant and postnatal screening questions		
1.	How old are you? Date/Year of Birth	20+
2.	What is your nationality and ethnicity?	WB
3.	How long have you lived locally? Prompt for where if less than 3 years.	2y
4.	Have you been pregnant before (prompt for even if not carried to full term)?	Y/N
5.	How far pregnant are you?	<20w
6.	Have you ever been on a strict diet (more than 2months), or had an eating	
	disorder?	No
7.	Do you have any long-term illness that may affect your pregnancy? (exclude	
	weight, prompt for gestational diabetes, pregnancy complications)	No

All potential participants were required to meet all the eligibility to be recruited for the study. They were informed on spot if they qualified and recruited for the study or apologised to and thanked for their interest if they did not meet the criteria.

#### **Participants**

Participants aged 20-40 years old, are white British, living locally, never been pregnant with no biological children, and had no previous eating disorders or been on strict diets were recruited for the focus groups with never pregnant women.

For the individual interviews, participants were recruited if they were 20-40 years old; white British, and living locally. Specifically for the antenatal group, women had to be in early pregnancy before 24 weeks, with no chronic medical conditions or previous eating disorders. For the postnatal interviews, women were recruited, if in addition, were over 36 weeks of gestation, or early postpartum less than four weeks, and also with no chronic medical conditions or eating disorders.

# **Confirmation and scheduling**

Recruited participants were sent further study information including a detailed information leaflet and consent forms either electronically or by post. The women were encouraged to ask questions about the study and given up to one week from receipt of the information packs to voluntarily confirm their participation in the study. Those who wished to participate completed the consent form (**Appendix 6/9**) and their schedule preferences noted.

• **Focus Group:** The never pregnant women were requested to complete a scheduling tool via "doodle poll" or provide their preferred dates and location to attend the group discussion. Any availability constraints were discussed after the screening interview and taken into consideration while group scheduling. To maximise turn out for the group discussion, there was over recruitment from 10 to 16 participants who were sent text messages and email reminders of potential two dates to confirm their attendance. The date was confirmed if at least five

participants confirmed attendance and this was communicated to the entire group in case others could make the date. There was low turn up on the first date due to heavy snowfall and an extra session was immediately scheduled and communicated to the remainder of the participants. All participants completed a consent form and voluntary participation was verbally re-confirmed before the start of each focus group.

- Antenatal group: These women were requested to schedule their interview as soon as possible after 12 weeks but before 24 weeks gestation. It was important that this group be interviewed as early as possible in their pregnancy so as to capture the early pregnancy experiences and track progress over the time in the transition to motherhood. All women completed and signed the consent form (Appendix 9) before the interview, which took place either in their home or place of work. Follow-up interviews were either telephone or a brief meeting in their home.
- **Postnatal women:** The aim was to interview these women immediately after childbirth as ethically possible. Therefore, women were given information leaflets in late pregnancy and their preferences for routine contact noted. Contact was maintained until a confirmed birth that determined the interview date to within four weeks. There were no adverse pregnancy outcomes and all recruited women were interviewed in their homes within four weeks after childbirth. The women signed the consent form (**Appendix 9**) on the day of the interview.

#### 3.3.4.3 Pilot and the interview guide

**Pilot:** the developed interview guide was piloted informally on friends to check relevance of questions and the general flow of discussion. The focus group interview protocol was amended as appropriate and this was a learning step for the researcher in qualitative interviewing.

**Data Collection:** Participants were given an opportunity to ask questions or clarifications before the interviews. All interviews and focus groups were audio taped and transcribed verbatim to keep an account of the participants' words in line with IPA.

**Focus groups:** were held in Faculty meeting rooms where refreshments were provided, while individual interviews were held either at home or at place of work. Using the interview protocol to direct the discussion, the discussion was started by asking participants to share their experience in regard to food. Probes were used to encourage all participants to contribute. The interview ended when all aspects of the protocol were exhausted and further probes were yielding little or no new information. The two FGs each lasted between 60-90 minutes.

#### **Antenatal and Postnatal:**

<u>1st interview:</u> An initial interview was held as soon as the participant was recruited in early pregnancy or as soon as possible in early postnatal. These interviews were semi-structured with an interview guide used to remind the researcher of parts to prompt about. The interviews each lasted from 25minutes to 65minutes. After the interview, the participants were reminded of the follow-up interview at least three months after the first one. Pregnant women were specifically requested to communicate pregnancy progression or if they wanted to withdraw from the study. No women withdrew from the study and all pregnancies progressed well.

2<sup>nd</sup> interview: All the 10 women who participated in the first interview had a follow up 2<sup>nd</sup> interview, four to seven months apart. The preferred date was agreed upon at the end of the first interview. The researcher maintained contact with the participants in the days leading to the 2<sup>nd</sup> interview to re-confirm consent, availability and document any adverse outcomes that may have occurred which would automatically withdraw the participants from the interview. No adverse outcomes were recorded and all women reconfirmed participation in the follow up. Majority of the women preferred a quick catch up by phone and a few were met in their homes for a short interview. These were all audio recorded and participant consent reconfirmed.

# 3.4 Research Ethics procedures and considerations:

In keeping with the research code of practice to protect research participants and promote their integrity (Creswell, 2009, Neale, 2009), this section discusses the process and procedures followed to protect and promote the health of the public while undertaking the research.

The ethics of healthcare research posit that research does not cause harm to the subjects and should be of value to them and society as a whole (WMA, 1964). The major ethical issues were the use of human subjects and the following safeguards were employed:

## 3.4.1 Institutional and individual safeguards:

In order to ensure that this study met the ethical standards of healthcare research, I sought approval from the National Health Service (NHS) Research Ethics Committee (now NHS Health Research Authority) and from the Faculty of Health and Social Care at the University of Hull, which oversees the standards of research within the Faculty (UoH, 2007, WMA, 1964).

Due to the nature of the research question, requiring use of NHS sites as identification sites only, a proportionate ethics review process was requested for. Approval was granted by the University of Hull, Faculty of Health and Social Care (Ref091), NHS Ethics Committee (12/NW/0819-PR) and the NHS Research and Development (R14040001). The University of Hull provided indemnity to the researcher (RS19) in case of any claims resulting from the risks and conduct of the study. The approval letters and certificates are appended (**Appendices 1-3b**).

Potential participants were given an information leaflet (**Appendix 5/8**) written in simple layman language. The leaflet provided a summary of the research aims and purpose, who was called to participate, risks and benefits as well as study contact and

procedures while highlighting participants' liberty to exit at any time during the study if they wished to.

Participants initiated contact, responding to this call (**Appendix 4/7**) by text, email, telephone call or post. The researcher then replied with detailed information regarding the study, and requested their consent for study progression. At every stage, participants were reminded of their liberty to withdraw from the study without giving reason if they wished to. This was routinely checked before any scheduled interviews.

Importantly, individual participant informed consent was sought. Defined as voluntary basis of a decision by a participant made with an understanding of all the information likely to be relevant to their decision (Neale, 2009), informed consent was systemically sought from each participant before recruitment and before each interview. Participants completed and individually signed consent form (**Appendix 6/9**), as well as verbal consent after explaining in detail about the aims of the research and how it would benefit them. Also women were informed that they were free to withdraw from the research at any time should they wish to. This is in line with the Helsinki Declaration's basic principle of the right of participants to make informed decisions about their participation in any research study (WMA, 1964).

## 3.4.2 Data protection and confidentiality:

To safeguard the rights and liberties of the participants, every step was taken to observe their privacy and maintain confidentiality of their information. The data collected was treated in accordance with the Data Protection Act, 1998 (The National Archives, 2011) with the following safeguards in place:

Personal data included names, age, telephone number, and address for follow-up of participants to completion of the interviews. This information was entered onto an Excel sheet to make a participant list which was encrypted and password protected, kept on a personal computer for use by only the researcher.

- Signed informed consent forms were kept in a secure filing cabinet accessible by key and also only available to the researcher.
- The interviews were carried out in non-cohesive environments mutually agreed upon by the respondent and the researcher. For the focus groups, a faculty meeting room was identified as best accessible for participants and used for both focus groups. At analysis stage, respondent's identities were replaced with pseudonyms.
- Audio taped data were fully transcribed, anonymised and only two copies of the original encrypted audio files kept as backup. The anonymised transcripts were stored for access by the researcher and supervisors.
- Personal information data will be destroyed after one year from production of
  the study report to enable dissemination of summary findings to participants
  who expressed further contact with the findings. All audio interviews will be
  destroyed five years after completion of the PhD report, or five years after
  publication of study findings whichever is the longest.

# 3.4.3 Potential benefit to participants:

Some participants may enjoy discussing influential issues (people, society, and media) in the day-to-day life of being a woman. For women who participated in the focus groups, sharing gave them an idea of how people interpret different discourses and how their experiences differed or was in line with others. Also this provided a learning moment about behaviours, weight and food to some women. Many women are concerned with their weight and this discussion provided information in setting their concerns within a wider context.

Further, sharing with a non-health professional may have been therapeutic in as far as having somebody to listen to them. It has been reported that pregnant women like to talk about their pregnancy (Johnson et al., 2004, Fox and Yamaguchi, 1997) and therefore asking in detail about their experience may have been beneficial to those women to voice their challenges, concerns and joyous experiences while telling their story of the journey to motherhood.

The findings of this study will be communicated to participants both via layman summaries for those who requested them, but also through mainstream dissemination channels such as conference publications, seminars and publishing in peer reviewed journals.

### 3.4.4 Risks and burdens to participants and how they were minimised

#### 3.4.4.1 Inconvenience to participants:

Participating in the group discussion may have been an inconvenience to FG participants as they had to give time for the group discussion. Participants agreed to be regularly contacted in planning the group discussion which was inconvenient for some. Also because of having to bring everyone together, some participants incurred transport expenses to meet up for the discussion at a central point within the university.

For phase 2, the main inconvenience to participants was time spent for the 2 interviews (maximum of 1.5 hours). To limit this, interviews were held in a location and time convenient to the participant, mostly in their homes. Also intrusion especially for new mothers soon after the birth was noted. To minimise these, participants were asked their preferred mode and time of contact to suit their needs. Also reasonable public transport (bus day ticket) expenses reimbursement was offered for those who needed to travel for the interview. Otherwise, alternatives were explored, notably a telephone interview for one participant.

There were unique but minimal disruptions for postnatal women taking care of their infants during the interviews. This was mitigated by encouraging participants to take care breaks while the interview was paused as needed. However, majority women scheduled the interview at times when either the baby was sleeping or being cared for by their partner.

There was one report of upset resulting from email advertising calling for women who were currently pregnant or those who had recently given birth. A complaint was lodged at the faculty reception by a woman who was upset about receiving the advert

email due to having recently undergone a miscarriage. I immediately removed her from the email list and personally responded with an email apology reassuring her that she would not be contacted again.

## 3.4.4.2 Risk to participants:

This was a relatively low risk study being qualitative in nature. However, pregnancy, childbirth and issues on weight can be sensitive for women. Discussing these may have brought significant stress to some participants. Accordingly, the risks encountered and precautions used to mitigate them are discussed hereunder:

**Focus Group:** Risk to participants from their engagement into the group discussion which may be distressful to some members especially where there were dominant participants who may not give a chance to others to speak and voice their opinions. No women were upset while participating in the FGs but the following precautions were in place.

- Participants were made aware that they could request the FG recording to be stopped or even withdraw from the research at any point.
- All participants were given a leaflet with sources of support (Appendix 10) and informed at the start of the interview of procedures should they be upset during the discussion.
- Ice breakers were used before the discussions for participants to get acquainted.
   This also enabled the researcher to identify potential dominant participants to look out for so that they did not overshadow other participants during the discussion.
- Ground rules were set at the beginning to include: mutual respect, courtesy, and confidentiality. Seating arrangements were in a circular form to minimise researcher-participants power relationship.
- Refreshments were provided during the focus groups and participants were reminded to take breaks if they desired.

These precautions, coupled with a sensitive, firm, yet friendly and open direction of the discussion resulted in successful focus group discussions.

**Pregnant and postpartum group:** potential risks to participants were from discussing sensitive topics regarding the women's experience. Specifically, two women were upset by their experience with health professionals regarding their weight status and also the birth. These women were signposted to counselling services and further help as outlined in the sources of support (**Appendix 10**). In addition, the following safeguards were in place:

- As a precaution, potential participants with serious obstetric or medical problems including previous eating disorders were excluded from the study. All participants were given a leaflet with sources of support (Appendix 10).
- Also participants were made fully aware that their participation was voluntary and that they could request the interview to be stopped or even withdraw from the research at any point. Those who were distressed during the interview, the researcher showed empathy and re-confirmed with them whether they wanted to proceed with the interview or needed any support. They were signposted to their midwife in the first instance and sources of support listed in Appendix 10. Participants were happy to share their discomfort and continue with the interviews. Some viewed this as an opportunity to voice their concerns and feelings regarding their experience.
- To avoid distress resulting from the researcher-participant power relationship,
   I disclosed my non-health professional background to the participants so as to
   enable free talking without expecting a judgemental response that could inhibit
   conversation.
- Confidentiality was re-echoed to all participants to foster discussion.

#### 3.4.5 Risks to the researcher

The main issue for the researcher was lone working during the conduct of the focus groups and in-depth interviews which mainly occurred in the participants' homes. Also

problems were anticipated in the case of dominant participants who may turn aggressive if say told to give other people a chance to talk. However, because of the small group of women, the chances of this happening were very small, but attempts were made to mitigate any such a risk as already described.

To limit danger from lone-working, the researcher liaised with the faculty postgraduate secretary as an emergency contact whom she informed of travel plans to all interviews. It was not necessary to have a research assistant for the focus groups due to the small numbers of participants but also due to financial and logistical constraints. This worked positively to re-assure participants of confidentiality.

As a pre-requisite for lone-working, the University of Hull- Faculty of Health and Social Care sponsored the research specifically providing indemnity cover for any harm from the participants to the researcher and vice versa. This indemnity was in place as a safeguard and was no circumstances required use of this cover.

## 3.4.6 Contingencies

Due to the intricate methods chosen, requiring prolonged contact with participants, there was a contingency plan for unforeseen circumstances described at four levels:

- Participant- not turning up: Participants were sent an email and text one week before the scheduled interview, followed by a text message reminder the day before the FG or interview. In the eventuality of last minute cancellations, the interview would have been re-scheduled to a maximum of three times after which the participant would be withdrawn from the study. For the FG however, as long as at least four participants showed up, then the discussion was allowed to continue. Accordingly a second focus group was rescheduled with those who missed and the reserve recruits. This provision came in handy due to severe weather and cancellations that necessitated a second focus group.
- Researcher: Extreme circumstances such as contagious illness. Even though this situation did not arise, provisions were made in the unexpected event that the

- researcher were taken ill, then the Faculty secretary would be informed to handle cancellation and notify the participants accordingly.
- Venue: Cancellations or access problems: The venue for the FG was mutually agreed and booked at least a week in advance. The FGs were conducted in the faculty meeting room. I was at the venue at least 30 minutes before the expected start for preparation and signposting. Individual interviews, were arranged to the comfort of the participants necessitating the researcher to travel. This was arranged in advance and confirmed at least one hour before start time with the participant and confirmed to the lone working contact person. No cancellations occurred and access problems were quickly attended to by the faculty help desk staff.
- Digital recording equipment failure: I practiced using the digital recorder and carried a mobile phone as back-up. Only in one instance did the digital recorder fail, due to batteries running out half way through the interview. This was noticed at the end of the interview. The researcher notes were used to immediately write up a transcript of what had been discussed as far as I could remember to populate the later part of this interview.

# 3.5 Data Analysis

Using the IPA framework (Smith and Osborn, 2003), interviews were transcribed verbatim and thematically analysed for first phase analysis. Data transcription and analysis progressed iteratively, with the researcher listening to interview recordings together with the verbatim transcript, to identify initial themes (Hoddinott et al., 2012). Some audio files were sent via secure data transfer to an independent transcriber for full verbatim transcription into word files detailing all the words spoken including pauses, laughter and any events such as background noises, interruptions, or inaudible words. The researcher then listened to the audio recording while reading through the transcripts to ensure all content was captured. Each interview was listened to several times to immerse the researcher into the data while correcting mis-transcriptions.

Data analysis followed the phenomenological analysis strategy which aims to discover the underlying structure or essence of women's lived experience through intensive study of the individual stories (Thorne, 2000). Firstly, in a narrative inquiry, IPA thematic analysis was undertaken, followed by an interpretative analysis and grouping of themes using participants' own words to describe their experience (Brocki and Wearden, 2006). Drawing on feminist positions, the interpretive analysis involved exploring the influence of gender on women's experiences in the broader context of society and cultural expectations and influences (Wetherell et al., 2001, Thorne, 2000).

The next stage of analysis included a critique of the researcher's own interpretations in a reflexive way to give opportunity for the audience to understand the results and study interpretations as one way of looking at women's experience of pregnancy in relation to food and weight. The abstraction of data is provided in Chapter 7 where the findings are integrated and linked to the literature.

In summary, data analysis was done separately by data collection groups; the focus groups, then the antenatal interviews and finally the postnatal interviews separately. Analysis was in line with the IPA guidelines illustrated by Smith and Osborn (2008) as in Table 3.3:

Table 3.3: Summary data analysis procedure

Steps	Description	
1	Reading and derivation of initial significant statements and descriptive themes	
	(events, objects, experience)	
2	Abstraction from initial impressions: discovering and aggregation of emergent	
	themes from a cluster of meanings in each individual transcript.	
3	Categorisation and connecting the themes within and then across participants- this	
	involved highlighting similarities, patterns and differences	
4	Abstraction and or subsumption of the themes into super-ordinate themes,	
	including validation from the initial texts: moving between the parts and the whole	
	using the hermeneutic circle of interpretation	
5	Development of a narrative and interpretive account from the themes supported	
	by exemplar verbatim quotes	
6	Reflection on process, findings and their implications on practice and further	
	research	
7	Discussion of the findings, comparing with the literature and presentation of an	
	integrated story of women's lived experience	

#### 3.5.1 Procedures

The transcripts were prepared for analysis by line numbering the text and inserting a wide margin to write first impressions. The scripts were then read and annotations made in the margins this included initial thoughts, preliminary interpretations, summary texts, or interesting phrases, contradictions or notes on the use of language as freely allowed in IPA (Smith and Osborn, 2008).

Each script was then re-read to comprehend the context and the woman's story. This led to writing of emerging descriptive themes from the first impressions and context of the script in what Smith and Osborn (2008) call abstraction. This involved moving between what the participant said and the initial descriptions to make higher level interpretations and connections (Extracts in **Appendices 12-15**).

The abstraction of initial notes into themes was done for the entire transcripts and where similar, the same theme title was used. The emergent themes were then tabulated to make connections at a more analytical and theoretical ordering. This was through aggregating of similar concepts to create super-ordinal themes (Hoddinott et al., 2012, Murray et al., 2009). As suggested by Smith and Osborn (2008), the clustering of themes was helped by accompanying the descriptive themes with extracts of the texts (See **Appendices 12-15**). This was followed by tabulating the clusters, given collective names as superordinate themes through an iterative process between the script, and the initial stages. Accordingly, some themes were dropped and others added based not on their frequency, but on their ability to illuminate the experience (Smith and Osborn, 2008)

The same process was then applied separately to all the transcripts in the group before merging them to bring out repeating patterns while highlighting emerging ones (Hoddinott et al., 2012, Kendall et al., 2009) because of the small participant numbers (Smith and Osborn, 2008). These were validated by rereading the original transcripts to note any omissions and for coherence with the original context (Creswell, 1998). The emerging themes were tabulated into super- and sub-ordinate themes and individual

quotes (Extract 3) prioritised based not on their prevalence, but on the richness of the data and how it clarifies the aspect of the women's experience.

These were then written up to give a narrative account of the women's stories which explained the themes. The narrative was interspersed with exemplar verbatim extracts from the transcripts to support the case and sometimes resulted in a reorganisation of the themes and even emergence of other superordinate themes. As cautioned by Smith et al. (2009), care was taken to distinguish between what the women said and my interpretations of their experience as explicitly shown.

Validation was done by re-interviewing the participants, specifically the antenatal and postnatal women about their experience of pregnancy. The data from the second interviews was also treated to the same analytic framework but used to show divergence and convergence in women's stories (Morse and Richards, 2002). Concurrent with data collection and analysis, I kept a reflexive research diary capturing my experience, personal interpretations and preconceptions about the research process. This has been integrated into the interviews but also to provide a reflexive account of novice use of IPA.

The findings are presented separately into narrative results chapters (focus group, antenatal and postnatal) each showing the emergent thematic analysis; and a combined discussion chapter that links the women's narrative to the literature while also laying out the integration of the stories as a continuum of women's lived experience of pregnancy.

# 3.5.2 Quality control

Typical of qualitative research approaches, data validity is increasingly achieved through triangulation, which is reported to occur at four (4) levels. The data level-which uses multiple data sources to investigate one phenomenon; the investigator level by using more than one investigator in same study; the theoretical level in which

multiple perspectives are included, and the methodological level in which several data tools are used (Noble and Smith, 2015).

Also in a review of published theoretical interpretive phenomenological nursing literature, de Witt and Ploeg (2006) propose five expressions for judging the rigour of interpretive phenomenological research. These are: balanced integration<sup>2</sup>, openness<sup>3</sup>, concreteness<sup>4</sup>, resonance<sup>5</sup> and actualisation<sup>6</sup>. These expressions have been integrated in the data analysis steps to ensure a rigorous study design. Following these markers of rigour, although with limitations, can be said to provide a better marker of legitimacy of IPA in health research (de Witt and Ploeg, 2006).

In keeping with IPA, the validity and quality of the study was measured on four criteria as suggested by Yardley (2000): Sensitivity to context, commitment and rigor, transparency and coherence and impact and importance. A summary of these approaches and how they were met and integrated is hereby described in line with Smith et al. (2009) guidelines.

At data level, different sources of data were used in order to understand food behaviours during pregnancy from the perspectives of women at three different time points during the child bearing years of a woman. Perspectives from the never pregnant women, currently pregnant and postnatal women were used to highlight the pressures, expectations and choices women are faced with in regard to food and weight concerns during the reproductive years.

While I solely carried out the interviews, for quality assurance, the interview guide was pretested at an informal pilot session to ensure the right questions were asked to

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<sup>&</sup>lt;sup>2</sup> the intertwining of philosophical concepts in the study methods and findings and a balance between the voices of study participants and the philosophical explanation

<sup>&</sup>lt;sup>3</sup> a systematic, explicit process of accounting for the multiple decisions made throughout the study process

<sup>&</sup>lt;sup>4</sup> study findings usefulness for practice

<sup>&</sup>lt;sup>5</sup> experiential or felt effect of reading study findings upon the reader

<sup>&</sup>lt;sup>6</sup> the future realisation of the resonance of study findings

answer the research objectives. This was important in refocusing of the interview schedule to ensure it was clear, and unambiguous.

Quality at theoretical level was ensured through the already described design stipulating the theoretical underpinnings of the study centred on feminism and interpretative phenomenology. Triangulation in methods was through use of a feminist approach to IPA to enable an in-depth understating of contextualised women's experiences. These complemented each other to enable an in-depth exploration and understanding of women's experience during motherhood while understanding any underlying gender influences to women's lived experiences (Fulcher, 2012).

To address sensitivity to context, the gaps identified from the critical review of the literature regarding maternal obesity, merited the use of IPA as a methodology, to theoretically orient the exploration of women's unique lived experience. The application of IPA in this study is a recognition of sensitivity to context to enable exploration of sociocultural perspectives of women's experience (Yardley, 2000). Moreover, the use of verbatim quotes gives the participants a voice while enabling the reader to check interpretations made (Larkin et al., 2006, Eatough and Smith, 2008).

According to Yardley (2000), commitment to rigour is exemplified in thoroughness of the study, and this was achieved by recruiting an appropriate sample to answer the research question, ensuring interviews were semi-structured, guided but not determined, by the researcher, and being methodical in analysis (de Witt and Ploeg, 2006). The IPA tenets of immersing and engaging with the data, making the interpretations idiographic (Smith, 2011) were followed. The analysis chapters 4-6 show an interpretation of women's narratives, highlighting not only dominant issues but also divergence for an even representation of the whole account as illustrated in the themes.

To enhance transparency of the process leading to this thesis, I have explicitly described the background and steps in study design, analysis and interpretation of the

data. The stages in analysis were presented in Chapter 3, showing exemplar extracts of processes leading to the development of the themes (**Appendices 12-15**). In the interpretation of the results and write-up, ambiguities and contradictions are highlighted, and themes were re-drafted until a clear, logical account was reached as recommended by Smith et al. (2009).

The impact and importance of this study has been described in the Literature review chapter which identified research gaps that merited this study. The following analysis chapters explore the importance while the Discussion chapter highlights potential impact and application of study findings.

# 3.6 Summary

This chapter has described the theoretical underpinnings of qualitative approach using IPA and how these were used in exploring the research question. Highlighting the use of a feminist approach to explore women's lived experience, IPA was primed over other methods like discourse analysis and grounded theory principally for its ability to explore the complexity of the essence of a lived experience.

Focus groups and serial semi-structured interviews were used as data collection methods to capture the stories of never-pregnant women, and the pregnant and postnatal women respectively. The audio recordings were transcribed verbatim and in full with an IPA iterative process of analysis using the hermeneutic circle used to describe and interpret the data.

Findings are presented into three one-point narrative chapters using exemplar quotes to support each case. The women's experience of food behaviours is presented throughout the motherhood continuum with stories of the never pregnant first, followed by currently pregnant women and finally the account of women in the postpartum period.

# CHAPTER 4: FOOD BEHAVIOURS BEFORE PREGNANCY: EXPERIENCE OF NEVER PREGNANT WOMEN

#### 4.1 Introduction

Chapter 4, the first of the three findings chapters in this thesis, presents an analysis of the data generated in the two focus groups conducted with ten never-pregnant women. In answering the research aim "How do women negotiate pregnancy in regards to food behaviours and weight?" this chapter, organised into three sections lays the ground for answering the study objectives 1-4. First is a description of the participants in short biographies to give the reader an insight into their unique characteristics. Second is the interpretation of the women's stories supported by exemplar verbatim quotations from the women's own narratives. And finally a summary of the themes emergent from the women's lived experience.

# 4.1.1 Participant's biographies:

The women range in age from 20-36 years, and were either in education or working as in the biographies hereunder:

Table 4.1: Biographies of never-pregnant women

**Sue** is a 24 year old University student, in a stable relationship for 3years. She is a smoker and afraid to quit due to fear of weight gain. Sue reported erratic eating habits, with occasional binges and cravings.

**Carol** is 36 years old, working full time and in a stable relationship and cohabiting with her partner. She describes herself as overweight, loves eating and cooking, but hates exercise. Carol constantly compares her weight with friends.

**Lynne:** 26year old, recently returned to University from full time work, is single and living at parents' home. Lynne, self-described as skinny tries to show increased eating when with friends, keeps a spare bar of chocolate for cravings.

**Grace** is 28 years old, working full time. She describes herself as always being small and therefore can eat whatever she likes. Likes food and exercises social circumstances.

**Amy is** 26 years old, in a relationship and living with boyfriend. She is a vegetarian and usually adds weight over the winter months. Recently returned to full time education.

**Debbie:** 21 year old student, single, loves food, but staying in student accommodation so not eating well most of the time.

**Marie** is a 20 year old student, in a relationship, is vegetarian. Prefers unhealthy food and exercises in social situations mainly closer to the summer months.

**Joan** is a 23 years old, in part time work and in a relationship. Has erratic eating habits, yet maintains a slim figure. She disclosed previous weight fluctuations and eats more in social situations.

**Louise:** 24 year old student, single, eats on the go and lives alone. She describes herself as large (overweight) and loves gym, exercise as her time to switch off.

**Steph:** 23 year old working full time, in a relationship. Loves eating and reportedly maintains her normal weight by having a fast metabolism.

# 4.1.2 Superordinate themes emergent from the data

The following is a construction of interpreted findings of 10 never-pregnant women who participated in two focus group discussions. Exemplar quote extracts are used to support the interpretation, highlighting agreements, disagreements and ambiguity in women's stories. The presented quotations are either chunks of a conversation among participants or isolated participant quotes that reinforce a particular position. As suggested in IPA, these were chosen not because of their prevalence but purely because they are powerful and bring diversity within the theme. In exploring never pregnant women's lived experience of their food behaviours and weight status, three superordinate themes emerged as follows:

1. Personal control, social contexts and socialisation

- 2. Social pressures and gender constructs
- 3. Prevalent Discourses

# 4.2 Personal control, Social contexts and Socialisation

The women's stories reveal that the ability to control oneself determined their food choices and eating behaviours. Personal control was mediated by individual factors, social pressures and the influence of family on women's eating behaviours. Diminished sense of control was especially prevalent in discussions involving cravings, issues of indulgence and was mediated by either individual factors like living alone, the normal monthly financial situation, smoking or negative group influences like work patterns, office snacking culture and social events. On the other hand, increased personal control was mediated by expectation of public 'body display' specifically in preparation for summer, body comparison with friends as well as when women received support.

The women who participated in the focus groups describe being generally self-aware in regard to their eating preferences, highlighting any strict routines, promoters and hindrances to better eating (healthy) behaviours. Women also discussed knowing precise weight fluctuation periods and what contributed to concerns around weight status as illustrated in the themes below.

#### 4.2.1 Knowing individual eating preferences

The experience of never pregnant women was diverse in regard to individual food behaviours ranging from some women expressing erratic eating habits such as no breakfast and not feeling hungry until later in the afternoon, to other women who constantly ate throughout the day. For example;

**Sue:** ...my habits are horrendous, I don't have breakfast! I can't eat in the morning, and sometimes I will go way through to tea without even eating [chorus disagreement], then have dinner!

**Lynne:** Yeah, I go up to 3 o'clock in the afternoon and then have my first meal! **Steph:** I am really lucky I have a fast metabolism so I just seem to eat and eat and eat! ...uhm, a lot of my friends are on diets and things, while I just eat what I want, when I want...

Carol: I love breakfast, I eat lots and frequently [laughs] I wake up absolutely starving every day, as soon as I wake up [am] starving! So this morning I have had breakfast, gone into work, had some more breakfast! Had some porridge when I got into work, I had some toast when at home! So I love breakfast, breakfast is my most favourite meal! ....and I will have all my meals on time!

The focus groups show that women fell into two groups as either erratic eaters or carefree eaters. The reasons given for these eating behaviours hinged on having a "fast metabolism" or a love of food for regular eaters compared to erratic eaters who cited time and social surroundings as enablers to their eating patterns. **Sue** and **Lynne**, viewed as erratic eaters describe forgetting to eat as the reason for skipping meals, especially breakfast. **Steph** and **Grace**, self-described as skinny, attributed their eating patterns of 'whatever they want' on a fast metabolism which explained why they never put on weight irrespective of their constant eating. In contrast, **Carol** and **Louise**, both self-proclaimed food lovers, have had weight insecurities and "watch" what they eat, but never skip any meals.

The extracts show that women are aware of their eating preferences but also acknowledge how these were not optimal, diverging from traditional three meals a day. Specifically, the lack of defined social contexts to eat in the normative way promoted these eating behaviours among the women which were only moderated by the need to socially conform.

**Sue:** I think when I am out, as in if I am out with friends, generally when I am out with friends like shopping, you know we have shopping days with the girls, and things, and I think when it's about 12 o'clock I automatically go, oh, should we get some lunch? Now I would never usually do that at home! But I think because I am in social situation where I believe that 12-1 o'clock is dinner time and all of them will think I am weird if I go that I am not sort of hungry! So I will sit and eat! And I get, soon as I start eating I realise am actually hungry and I can eat!

Women who did not follow the traditional meal routine of breakfast, lunch, a snack and dinner, cited specific hindrances to normative eating patterns as absence of their family or living alone and being on the go. For these women, a change in their social settings, for example at weekends, or when attending university lectures, always regulated their eating routine.

**Sue:** But again, when I stay over at friend's house, you know they get up at 8 o'clock

I've made you breakfast **Carol:** Yep, brilliant!

**Lynne:** Yeah

**Sue:** No! Because I don't, I just can't physically stomach it in the morning, but because when I am put in that kind of social environment where everyone else is doing it, I feel like I should, because I feel it's probably normal like when I was a child uhm, you know, it was drilled into me, you know, you have your breakfast, you have dinner you have tea or lunch, whatever everybody calls it! And you kind of have it like at 8, 12, and 5!

**Sue:** And that's what you do! You know!

**Lynne:** Yeah, I think, I kind of have a similar experience to you in that if I leave the house then my eating habits do become more regular. Today for example, I sort of didn't have time for breakfast this morning, so I got up late, brushing [rushing] uhm but then as soon as I got to uni, I was like I am hungry and I have got 20 minutes spare, I will go and get a sandwich, so that was my kind of breakfast at half past 10! **Carol:** Breakfast! (**FG1, 185-207**)

It appears that, social context and settings directly affect food behaviours, specifically eating preferences, frequency and timing irrespective of individual routines and preferences. This ranged from a reduction in food when friends were around (for food lovers) to increased regular meals for the erratic and fussy eaters.

In addition, women report knowing what is good or bad in their everyday diets and describe their decisions on whether to change or not. When prompted about what was healthy, women describe healthy food in reference to foods mainly marketed as such, but did not mention food behaviours as a balanced diet using for example the UK Department of Health (DH) eat well plate.

**Joan**: I rely heavily on em, labels on packaging at supermarkets and stuff, like I love these little guidelines they've got now which is like a pie chart of like orange and green and red like if something is good or bad for you, em, I think if like a food has got loads of red marks, I will be like err, no! no no, you are not eating that, I don't want to be a fatty!... But yeah, more or less from the packaging on the food and then from advice from family and friends!

**Marie:** I think I don't really know much about what is healthy, like I see fruits and vegetables and natural stuff like being healthy but if it has lots of weird ingredients that I cannot pronounce then I see that as being unhealthy.

**Steph**: I just like really natural foods like fruit and veg and seeds and nuts and spices and I always like to cook a lot of things from scratch and I think if am not cooking things from scratch I kind of class that as being unhealthy and if am not making something up completely. I like to cook quite a lot, so yeah! **(FG2, 242-257) Debbie:** Stuff that has lots of vegetables and stuff like that. Because I try to get like my five-a-day.

Amy: I think high in fibre and less fat, lots of fresh things or...

Externally defined labelling may be relevant in either aiding the understanding of food content if correctly and simply used (as in Joan's case) or curtailing efforts to discern healthy options (as in Marie or Steph). The women describe being able to identify items in their everyday diet choices they thought were unhealthy and how they made decisions about healthy food options or not. For example;

**Marie:** I tend to like very unhealthy food, but I am aware that it's not good so I try to avoid it! I definitely prefer cake over salad!

**Sue:** I love cheese! Even though I know it's bad, I can eat a whole block in 2 days...so I have resorted to low fat cheese as it makes me feel better [about the bad food choice]!

Moreover, there was disregard in labelling particular foods women enjoy as being unhealthy but rather as "an acceptable indulgence". This forgiving relationship with preferred foods was specifically noted for references regarding chocolate where there was seemingly no reservations when eating it or need to caveat "although I know it's bad" that characteristically followed mention of other foods like pizza, crisps, takeaway- Steph, Sue, Carol, Grace; cheese- Sue, Debbie; biscuits- Amy; cake- Lynne, Joan; McDonalds- Louise, Marie.

From these narratives, it can be seen that the women's engagement with food leads to a daily struggle of choices between what is termed as 'healthy' and what they prefer or enjoy. Accordingly, some women respond to this by either, ignoring the 'unhealthy' label, or attempting to get healthier versions, or in some cases resigning to post-eating weight management.

But I think people know what they should be doing. If you asked most people they'd know what they should be eating or shouldn't be eating and a lot of it just common sense -quite a varied diet and I'm not really worried - yes I do have bit of a binge every now and then but everybody does and like I said I go to the gym so I think I'm probably not burning off nowhere near those calories what I need to in regards to ...quite a lot of fat. But I think that makes me quite happy inside and then I don't nag myself to say you've had burger king twice this week but I've been to the gym 4 times. I've done 4 hours workout, it kinda evens itself out. - **Sue** ...uhm, I tend to like very unhealthy foods, but am more aware that it's not good to be eating that stuff all the time so I try [to] force myself to eat healthy food- **Marie** 

## 4.2.2 Eating as a social event modified by social contexts

Women reported eating as more of a social event which was directly influenced by their surroundings. For those who went to work, office snacking culture and work patterns took hold while students were often snacking during lecture breaks to fit in with the flow of their daily routines. The individual factors that promoted this poor eating were living alone and living on a budget at certain times of the month.

## 4.2.2.1 Living alone

Participants discussed the dilemmas of living alone and having to cook for one as hindrances to healthy food choices. The eating behaviours were whether the women ate more frequently, ate healthier or made efforts to cook their own meals at home as opposed to takeaways, microwave meals and the purchase or not of fruits and vegetables. Although the habits were not directly associated with any weight fluctuations or body image dissatisfaction, living alone was the main explanation for women's poor eating.

**Carol**: ...if [my partner] is there, I think we kind of plan, it's more of an event having dinner, so it's like we will plan something, which is bigger and better, whereas on my own and I get from work late, I will just think, I will just [have] just a bit of soup or something!

**Lynne**: See I find the opposite to be true when I was living on my own! Uhm and it was just me to cook for myself, I would often not bother cooking and just grab a wrap, something out of the fridge or just snack on something or biscuits!

**Sue**: Yeah, I lived on soup, noodles, when I lived on my own!

**Lynne**: Because you think there is no point cooking a big meal because there is only me to eat it, and it's gonna take me 20minutees to cook it, am gonna have to wash up all the pots and its already 9 o'clock in the evening because I was working quite late then as well. Uhm, whereas when there are more people, it's kind of we'll eat, cook a meal with vegetables in it, and things! [Also] if you are buying vegetables it's like well I don't want a whole cauliflower just for me! Because I am not going to sit and go through a whole cauliflower, you'd like a bit of, a little bit of various vegetables but it's hard to buy them!

**Sue**: Yeah I was quite the same

**Louise**: I also never really sit down to eat either I always seem to be eating while on the go, which I think is not very good.

All women agree about the lack of motivation inherent in cooking elaborate meals for one. Associated with living alone was the convenience and the means to make meals or eat healthier. Women acknowledged the availability of options, time and company as good enablers to eating a varied healthier diet. It follows that the women tended to eat more regular and 'better' meals when with family or friends, because they either didn't have to cook the meal (family member always cooks) or they jointly cooked with their friends. Importantly, women report eating larger portions of food when with family and friends than when by themselves due to food availability but also socialisation.

**Grace**: I find that when I go home in holidays I tend to eat more, I feel like my mum has more food in the cupboard all the time, there is more variety (all talk in agreement) and lots available and I seem to just eat it all.

**Debbie**: I think that a main thing for me, like when I go home, everything's on the table I will just help myself to everything whereas when I am cooking for myself, I've only made enough for me, so I don't have extra, if there is extra, I am not gonna eat (keep it for another time) but when I am at home, I just go oh yeah, I'll help myself-laughs.

**Amy**: hmmm, Yeah, I live in a house with some friends at uni, so we like cook.... Well, me and my friend often cook together so there is always someone cooking in the house! [we cook] like things I would normally eat at home!

Whereas living alone reportedly explained women's poor eating habits in regard to quality and choice of food, women ate larger portions when with family or friends possibly due to being a social event and not necessarily routine. This has indications on women's eating in situations where women usually do not live alone such as pregnancy and motherhood.

#### 4.2.2.2 Monthly finances

The impact of income on food choices was also voiced; with women more likely to go for fruits and vegetables when they could afford to and going for microwave meals and more snacking on sugary foods when money was more limited.

**Joan**: [lives alone]... I am eating really terrible diet, I am not getting my five a day am not eating anything that is good for me at all, it's all like sugar, and fast food and processed food

**Amy:** Things I cook for myself when it's less, when I can afford to, because lots of the time I will just have like pasta because it's cheap, if I can afford to cook that, like last night I made a sweet potato and chickpea and spinach curry and it was really nice! But it just costs so much to do that all the time!

Grace: and time as well

**Amy:** Made a lot of tagines with my sister and mom at Christmas you just pack everything in the oven and leave it and it comes out really tasty! But again that is

quite expensive!

**Debbie:** but its fresh stuff (**FG2, 438-445**).

Women acknowledge that cheap ready meals are often laden with extra fat and additives and may not be a healthy option if not teamed up with fruit and vegetables.

**Louise:** The wages, err, like salaries around here aren't very good and low income families, it's easier to buy cheap foods, but cheap foods obviously is not gonna be as good for you because its full of additives and it's not as fresh or natural and then you do find that a lot of people are bigger.

Louise, reasons that it's the reliance on cheap foods for people of low incomes that explains their bigger weight status. However, resorting to unhealthy foods may be a form of emotional eating during time of financial stress. Emotional eating, although not a major discussion point maybe a routine coping mechanism for most people on tight budgets, whereby they tend to comfort eat when under financial stress, hence poor food choices.

Amy: Also financially, it's about what you can afford

RT: How do you mean?

**Amy**: Well, just like fruit and vegetables are really really expensive and then it's difficult to sort of manage to eat healthily if you are on a budget, you have to... (trails off-?save)

Joan: money is a big factor! Like at the start of the term when my loan's just come, I eat like a queen, and at the end of the term, I am like living on beans just out of the can literally! (laughs)... When I've got no money, I live on chocolate, crisps, beans, bread, (laughs) ... Erm, and microwave meals, microwave anything like macaroni cheese, like chicken and egg pasta bake and stuff like that...at the start of the term I eat loads of veg, loads of, really like nice nutritious meals, mostly because I've got time to cook because there is no exams and because I've got the money whereas at the end of the term no time, no money equals terrible diet! Laughs!

The argument of increasing snacking on sugary or other unhealthy items like crisps, biscuits and sweets even though described as due to lack of money, was contextually, in fact due to emotional, treat, and comfort eating. This is because, like in Joan's extract, opting for chocolate, crisps and microwave meals does not necessarily mean they cost much less. But the stresses of having no money, exams, and lack of time may promote opting for quicker and more comfort foods that women prefer.

This implies people of low income may resort to unhealthy foods most of the time due to stress related eating habits and potential addiction to low value foods. Moreover, the eating culture of soft drink and crisps accompanying most meals is likely to put pressure on certain populations to buy these items instead of investing in healthier options. Such social eating culture coupled with low income when mediated by the emotionality of eating where women tend to comfort eat, "to feel happy" during stressful times such as being short on money, exams or during menstruation can prescribe women to unhealthy eating habits.

**Sue:** ...yes I do have bit of a binge every now and then but everybody does and like I said I go to the gym so I think am probably not burning off nowhere near those calories what I need to in regards to- quite a lot of fat. But I think that makes me quite happy inside.

# 4.2.3 Annual social food calendar changes

Women describe contexts allowing food variations notably the social food calendar that changes with the UK weather. In general annual food calendar changes were defined around body image expectations and women's need to conform. Two main diets or food trends happen annually, the winter diet and the summer diet during which everyone is expected to eat and increase particular food intakes. The weather calendar influences food behaviours and weight status in these themes: food habits and weight changes by season, and fashion, social trends and expectations.

## 4.2.3.1 Food habits and weight change by season:

The winter diet or food trend is characterised by big hot stews and generally hot foods as well as frequent eating to keep warm and 'build winter fat reserves'. The summer diet on the other hand was described as Mediterranean in nature, with fruits and vegetables a particular favourite and some indulgence on ice-creams and milkshakes as in the following discussion:

**Joan:** I think the weather. If it's really sunny and nice outside I tend to think about eating healthier, and maybe doing some exercise, but when it's really dark and raining and miserable, I don't want to do anything healthy.

**Marie:** Yeah. But in the winter you want to eat loads like potatoes and big stews and really warm foods and soups and things like that, whereas in the summer like, before I was like, oh I've only eaten only 2 ice creams today and nothing else like I forget to eat when its sunny, whereas in the winter you just I just have to eat constantly to keep yourself warm.

**Steph:** Yeah, I totally agree with that

**Joan:** I think fruit is more of a sunny weather choice

Marie: Yeah, it's too cold to eat in the winter

Joan: then in the summer it's like normal to sort of go and be eating ice-cream and drink a lot of juice and that sort of sweet foods, maybe it's the social context as well!

Steph: I think in the winter, like my mom always says, ooh [Steph], of course you are cold, you are too skinny and need to put some weight on and like so many people always say like, yeah you, like when you complain about being cold, they are always like yeah you haven't put your winter fat on [laughter]! So like in my head in the winter, am always like, yeah I need to eat a lot more!

These texts highlight social acceptance of eating behaviours to change with the context such as weather or time of the year. It appears there are events that permit indulgence or allow women to relax their views on eating and inhibition such as Christmas and chocolate, summer and ice-cream and big portions of hot food and winter as described above. Over time, such habits may underpin how women negotiate life events like pregnancy.

**Lynne:** like at the minute there is so much chocolate in the house from Christmas it's all in the advent calendar, because during Christmas you get to a point where it's just chocolate overload ...and there is just chocolate everywhere.

As expected of the winter period allowing high food intakes to keep warm, women narrated gaining weight over the winter months. This is followed by a frantic need to get a beach body for the summer and also an overhaul of winter diet.

**Sue:** I know that I have kind of gained weight over the winter, which I think it's what a lot of women do because it's freezing! We like to fill our faces every Christmas! **Amy:** I've [also] put on quite a bit of weight quite recently just (all laugh)

**Grace:** ooh, we all do after Christmas! (All continue laughing)

In addition, there is a social expectation to revert to a slim body such that when it gets warmer, women start to lose weight in preparation for summer. This is in expectation of the 'body going on show' whereby women wear much less clothing during summer.

**Debbie:** It's more like in the summer, isn't it really, because in the winter you can wear a really big coat! (All laugh) Like in the summer, you have to go, like wear, well

you don't have to, but like wear short tops and like shorts and stuff like that. So then you are more likely to think oh gosh, I should probably start [exercise and watching food], because I know like lots of people like my housemates they are going to start and do things like running for the summer, so yeah, you end up like saying you know I have to do something to look like that!

**Marie:** Errm, I don't think I am very aware of it, but I do think that after winter then I might have to lose a bit of weight to fit back into my nice clothes when the warm weather comes around again.

Importantly the description of weight gain during winter is suggestive of being able to hide weight gain under 'big winter coats' but as the summer season starts, having nowhere to hide the weight gain, women start to think about weight management options including starting exercise. The temporal acceptability of weight gain can influence how women experience the transition to motherhood when prolonged events like pregnancy allow 'hiding of weight' from a pregnancy bump.

# 4.2.3.2 Fashion trends and expectations

The seasonal fashion allows for women to get away with increased weight during winter where they can hide in layers of clothing. Specifically the UK winter months are often started off with Christmas celebrations, when most people are 'free' to eat whatever they like and a time characterised by plenty of food, sweets and chocolate treats. The following colder months also necessitate higher food intakes to keep warm. Fashion changes in warmer months where layers of clothing are slowly shed, mean a rush towards weight management efforts in preparation for the summer. With the 'body on show' during summer, weight insecurities abound and women describe trying to conform to the slim body through less food intake, dieting and increased body awareness.

**Steph:** ...in the summer, like when you are in little tiny dresses and things like or go on holiday in a bikini, you kind of seem to think differently, everybody seems to diet in the summer and then put on weight on in the winter.

Joan: Yeah, I care more about my weight in the summer than in the winter (Marie: Yeah). In the winter it's socially acceptable to be a big mum [large size], (laughter) but in the summer, it's like no! If am, like Steph just said, if I am gonna go swimming or if I go on holiday, it's gonna be all on display and yeah, I don't wanna look like that, I don't wanna look minging!

The use of "being a big mum" in reference to large size by **Joan** introduces a perspective of large female bodies being associated with motherhood. "It's gonna be on display" and "everyone seems to diet" are important drivers of behaviour. The need to socially conform to what others are doing, mediated by season fashion trends and expectation directly influences women's eating behaviours and view of weight.

**Debbie:** I think if I go to the beach, I normally put on a jumper or something so they don't show, because I don't like the sun so much, so I will always put on like a big kind of jumper so that I don't get burned!

**Amy:** You do though like have to get your beach body and little black Christmas party dresses, so there is always some reason why you have to suddenly turn into the stick the boobs and the bum! (All laugh).

**Grace:** I think there are pressures to conform, (pause) I don't know.

Amy: It's definitely there!

**Debbie:** I think if you go like on holiday like, I went with my friends on holiday and we were going to go to the beach and I was like there's going to be lots of thin people there, so I've got to go on a diet! But I never did! (All laugh) It's just like the thought was there! You say like if other people will actually do something about it like oh wow, I quite like to do some swimming so I will do something like that rather than do it by myself! (**FG1, 381-394**)

The women describe social pressures heightening body insecurities all year and negotiate this by either conforming, or not by 'hiding the body'. These social expectations impact on women's relationship with food and weight. Although it is expected that there are higher food intakes in the winter months compared to the summer months, women's experiences highlighted the forgiving nature of society expectations where women were 'permitted' to be fat mostly in the cold months, but immediately return to ideal slender woman once the weather perked up. Indeed food stores and supermarkets act as a social control in overhauling food aisles with different foods depending on weather predictions. For example, summer months tend to have more varieties of fruit and vegetables while winter months have more biscuits and chocolate treats displayed in supermarkets. This is due to availability of fruit and vegetables as seasonal products, but also social construction of Christmas and Easter predominantly winter events highlighted by excess sweets and treats.

# 4.3 Social pressures and gender constructs

Women's eating and weight experience was to a large extent reported to be modified by socialisation, social pressures and the gender constructs women subscribe to. A combination of these pressures often led to conflict in terms of how women viewed their bodies and the resulting eating behaviours as described in the themes which follow.

# 4.3.1 Weight consciousness and body image concerns a reality

The focus groups all highlight women as constantly thinking about their weight. Women recalled their previous weight fluctuations, pinpointing exactly when they lost or gained weight and its impact on their body image. In addition, women described any lifestyle changes that occurred around their weight fluctuation cycles to include contraceptive use, smoking, and eating on the go, among others.

**Louise**: I am actually quite conscious about my weight and it always seems to be going up and down, up and down. Erm, I don't know, I just try to eat more healthier because in the past 5 years, I've eaten quite a lot junk food, but now I do eat generally healthier- salads erm, try not to eat McDonalds and takeaways, I don't eat things like that anymore!

Joan: I think my contraception plays a massive role in my weight, ehm, I've never been a big girl anyway, I've always been quite slender. Erm, but then I found that, because I have always had a bit of a speedy metabolism- I found that when I started on contraception... and that speeded up even more- and now I have to eat quite a lot to stay the way I am. If I ate the way I did before when I was 16-now, I would be underweight without a doubt, so yeah I think it plays a huge role in the way I am.

Louise: Well, when I, I have been on various pills, because sometimes they just don't agree with you so they put you on another pill. And every time I change pill, I do put weight on. I put about 6 – 7 pounds on per pill.

Interestingly, participants also referred to the cigarette campaign legacy of marketing smoking as good in the maintenance of women's weight.

**Sue:** I have been smoking for quite a while, uhm ...am not sure, but it's my fear! I think it's just in the back of my mind am like well, if I stop smoking am going to kind of balloon

In response to Sue, Carol reports the impact of smoking cessation on weight:

**Carol**: We have joked about it [with friends]! Laughter. Perhaps we should start smoking! Because my partner has gained a lot of weight! Since he stopped smoking. I don't think the two things are necessarily related, but for a while...

**Lynne:** No I kind of think it's more of a myth really than anything else!

**Carol:** And I think it is in the back of your mind you keep thinking about it and think I will put on weight anyway since am not smoking anymore.

Sue: Yeah, and I have stopped smoking, because I know that it's one of the unhealthiest things to do in life and all, but I don't drink anything at all- am not a normal student apparently! But I suppose it's one vice and it's like not keeping me slim, but (long pause), laughter, but it kind of maintains my weight and I kind of think if I take it out of the equation, then I am just gonna build up like... and I don't want to! I want to stay the same! I don't want to lose weight, I am more than happy with how now, I just want to stay [the same]!

For Sue, smoking was a mechanism to keep her weight off, which then meant she could eat whatever she liked. Indeed the women describe the expectation of smoking cessation influencing eating behaviours such that once they stop smoking, some people may opt for excess food intake due to thinking "I will put on weight anyway". This fear of weight gain suppressed by smoking has been previously described as an inhibitor and highly marketed by tobacco companies at the peak of cigarette sales. Some women like Sue, still appear to believe this to affect their weight status.

Women's stories reveal how weight is something that women are socially constructed to be conscious of, on an ongoing basis overtly focussing on being overweight. Moreover weight fluctuations, only reported by the women in terms of weight gains, negatively impact on women's body image.

**Sue:** I feel unattractive now after being with my partner because I've gained weight...[so] I hide my body into pyjamas or get into the bedroom in the dark **Carol:** Yeah, there is no woman who can say they are 100% percent happy with how they look, so you keep worrying about any weight changes and things like that.

Further, women generally acknowledged exercise as a way to manage weight and for those going to the gym, like Lynne and Joan in the extract below, they report it as "me time".

**Lynne**: Coz I enjoy it, it is the time of my own away from anybody else. I don't go with anybody, I go on my own. I can tune out. And like say, it is kind of a justification. That If I didn't go to the gym, and I had what I wanted, I would be bigger than I am now... I kind of do it to keep me how I am now.

Carol: I don't quite understand how people can enjoy the gym and all

**Lynne:** ...but, I go because I enjoy it, it's my hour or so to switch off, have a bit of peace, and you know I don't do it, you don't, am not like one of these maniacs on a running machine where you see them and you go a slow attitude... (**FG1, 568-579**)

Whereas Carol doesn't like going to the gym or do any exercise for that matter, Lynne views this as a time to switch off. In contrast, Debbie and Grace appear to exercise in social situations or group activities:

**Debbie:** It's like my friend likes to go to the gym and stuff like that so I will sometimes go with her but then on the way from the gym, there is a takeaway place (all laugh loudly). So we always go to the takeaway after. So now I've just stopped going to the gym because I thought it was pointless because we'd just get takeaway and I keep on saying I will do running but I haven't yet!

**Grace:** I do like quite love like sports and things and I've always been doing physical activities, like run, I run with the running club so, I've been there a couple of times. Errm, I do half marathons, that's the only one I've done so far (all laugh). Because, like, I also do pole dancing and stuff ...like I have to strengthen my body so I have to stretch my body like pull myself up, actually makes me do some work after, that's why I don't normally go to the gym because I find that a bit boring sometimes.

It is interesting therefore that women describe consciously watching their weight while not keen on exercise which is seen as boring or impossible. This suggests behaviour mediated through friends, society or even passed down from parents.

#### 4.3.2 Media portray of women

The narratives describe the media portray of the female body to potentially affect women's view of their bodies, weight consciousness and food behaviours. Although clearly acknowledging a focus in the media on slimness as attractive, women reveal being less influenced by media portray of women's weight status itself. The women report the media portrayal of celebrities as unrealistic and hence not something they could relate to.

**Marie:** I think it's expected that to be attractive as a woman you have to be thin. Like just watching TV and even the extras in the background they only ever pick thin women and if there is a large woman on TV it's usually as prop point that she is a larger woman rather than she just happens to be larger.

Louise: I reckon it's true, they make it like that.

**Grace:** It's like the media try to make you think like you should be really thin!

Amy: except for boobs and a bum- all laugh!

The women narrate media portrayal of large bodies as 'prop points' implying association of overweight status with negative characteristics and often used for amusement in the media.

**Louise:** Errm, generally like going back to what errm, about like larger women being like portrayed in the media, they are like focussed on in the media because they are bigger ladies and I just don't understand, but I don't understand why, just because like they are not naturally slender, why they have to be like a focal point! Like it's a bad thing that they are not err, I don't know like 6ft tall and weigh eight stone!

The pressure to look a certain way promoted by the media display of slender 'airbrushed' celebrities and models may heighten body image insecurities in some women. This is because women could see this as a standard against which to measure themselves.

**Grace**: I don't always read magazines and stuff like that. If I do I take it with a pinch of salt

**Debbie:** I read magazines but I don't think it's really affected me, but I say oh that looks nice!

**Amy:** Yeah, this affected me though in the media (TV presenter), I saw a clip- she had with her and no makeup or anything at all. And they did all the makeup and photo editing and they were like swapping stuff around so easily to make her this beautiful finished product and I was just like... Yeah, you really can't compete with that, I do feel like I don't really care but you do feel that pressure and thinking that people will judge you if you are not (looking that good?)

Acknowledging that "people will judge you" reveals how the media portrays of slender ideals can still indirectly impact on women's body awareness even when these women describe the media portrays and descriptions as unrealistic for ordinary women and potentially harmful, as in these narratives:

**Debbie:** I think because you know that there's airbrushing going on, that hasn't affected me that much! Because they did this programme on (radio) like ages ago saying about airbrushing and how it's used to edit people and change to make them look better ...she came in and did all the stuff and I was like oh wow, if they can do that, what else can they do, so I was like, I don't really care!

**Joan:** I think it varies across personal opinion and culture definitely that I think. Like in Britain there's a general overview that thinner women are more attractive than larger women..., but you have to sort of find a balance between like not being like under toned and dulcified and not being so skinny that you lose all your good features as well. There is a balance and I don't think a lot of people find it.

It should be noted that all women who participated in the focus groups were educated to college level or higher. Their interpretation of social media display of celebrities may downplay the effect on women's weight perception and behaviours in the general population. For example, Debbie describes a related portray of food and recipes in the media:

**Debbie:** ...in the magazine that I read, there's this like health section and so they have like what you should eat and all that and I am betting you there's people who follow all this and kind of cook all this stuff, but I don't have the time or money to do that, but stuff like, say like a quick salad or something, then that will be fine. So I think it does kind of influence me, I will see a recipe and go, oh that's really nice but I think that's their marketing stuff!

This group of women acknowledge mainstream advertising and media as having an impact on how some women may view their bodies, but also on food choices. Although they agree to not being bothered by the slender ideal display in the media, the reference to larger women as prop points may heighten body image insecurities making women continuously conscious of their weight. The comparison with airbrushed slender pregnant celebrities may heighten and influence women's behaviour during and after pregnancy.

#### 4.3.3 Social pressures and influences

#### 4.3.3.1 Weight perception and reassurance

Women's perception of their weight was varied and inconsistent with professional BMI measurements. This inconsistency stems from women's view of weight status in comparison to others around them and not by actual body weight. The definition of being either large, fat, normal or underweight was only described in relation to what significant others thought of them and this resulted in either denial in the case of larger women or acceptance for the smaller women.

The women all described viewing their bodies in constant comparison to their friends and immediate family which played a role in their eating and food choices.

**Carol:** ...when you go on a night out with the girls...then you see the picture and say, oh gosh, that's a bit scary! I look so big there! And you start to try to do something.

**Lynne:** Yeah, every time I go out with my friends, they are always comparing- oh, look at how skinny you are...so I tend to eat a lot to show them that I actually eat [and not starve myself]... so yeah, every time we go shopping or go out, I want to be seen as the one who eats a lot.

Comparisons with family appeared directly from the mother influence or comparison with female siblings in regard to weight status. For example Marie continues the conversation:

**Marie:** My mother sees herself as being overweight. I think she is probably a bit more average than she expresses herself as being and so she is always worried about me being overweight. She's never sort of encouraged me to eat healthily or exercise, she's just always told me that I shouldn't get fat!

For Marie, comparing weight and body description as overweight with her mother has potential for intergenerational transfer of body consciousness and insecurities. Moreover social comparisons mean that women are reactive to comments and interpretations of their weight. This could lead to unhealthy change in behaviours among women which may be amplified during the transition to motherhood due to big body changes.

Women expressed contradiction in their own construction of their weight status and any formal measurement of weight, such as BMI, via health professionals.

**Sue**: Ah, I've had not a massive issue with weight, but my weight fluctuates quite a lot. When I was younger, I was between a size 6 and a size 8. Am now like about 10 and 12 and it kind of fluctuates between those two. But I think, the most hypocritical thing is when I went to the doctors, I was astounded how everything was checked. And they actually said to me that you are above average for your BMI. You need to lose weight! I was like, I am only size 10.

**All:** Laughter!

**Grace**: No you're not that [fat/big]! Believe me!

**Sue**: Yeah, I was annoyed, and then I got quite ill! I had lost nearly about 2 stones down to something like 7 stones. And they were like, Oh yeah yeah, your BMI is perfect now. I looked anorexic, I looked quite ill, when they said this! You cannot win, you cannot win! And I think that the big pressure women have, is especially when they go to doctors or they see the nurse and they say you're overweight! Its like am I?

For these women, weight and size references were not used in reference to standard BMI measurements but commonly in comparative reference to friends or dress size/fit.

**Debbie:** I found that I gained weight [recently]...my jeans and tops were getting tighter

**Grace**: Errm the only time I feel like I should do something or lose weight is if like some of my clothes like don't fit (laughs) and the jeans are a bit tight, but otherwise, am alright!

**Sue:** And I think when I know that I've got size 10 and go onto a size 12 so then I know as soon as size 10s get tighter then it's time to swap over to size 12s, and I kind of hide myself

Women's gauging of weight in regard to dress sizes can be a misleading measure due to industry differences in designs, measurements by store or region.

**Louise**: Yeah, as a size 12 I feel I am too big, I can't shop there [high street fashion shop], everything is made for like a skinnier you know like a skinnier frame! Like you need to have breasts, like a flat chest, you need to be really skinny, a bit ribby like to look good in these fashions and I don't think that its right!

**Marie:** Yeah, there are a lot of fashions that are only created for one body type, you don't get the shops that do like the whole range of different body types.

The impact of this is women falsely thinking they are in normal weight ranges and therefore not taking any action in regard to healthier lifestyles, or exacerbating body image insecurities in otherwise normal sized women.

From these excerpts, it also appears that being a size 10 or smaller is the ideal requiring no input in terms of exercise or even having any worries about body image. For example:

**Sue:** I have got a few friends which are bigger, you know I got a few friends which, they've varying sizes you know I've some that are 14, some 18-20s. And one thing that I have kind of found with them is that they do kind of vocalise to me, they are like, it's alright for you because you are a size 10 you know, yo alright you've got this figure...and I am like, well, I actually don't feel, sometimes I don't feel that great about my body. I have a few days when I think I can hide from my partner because I am just like it's that time of the month and I feel bloated and disgusting and they'll go like no no no you are very slim. And they make me feel very bad by saying that!

Conversely that family and friends influence women's weight perception, women acknowledge the significance of health professional weight assessments. However, they do not consider this advice due to limited or no support on how to achieve the health professional prescribed weight loss.

Carol: I was told I am nearly obese when I was size 14. I could lose a bit of weight, but because I am not a cosy kind of person, I have had the same sort of thing when I just went for a check-up. And they said, oh, you could be willing to lose between 2 to 3 stones. I just think, I am not just sure how to go about it! ... as you say it was being thinking you know, Oh God! [inhales deeply] Gosh am really fat, and you know!

Lynne: It is quite daunting. All: Yeah!

As a result, women report trying to justify their weight perception in the form of self-reassurance by 'feeling happy' with their weight or reassurance from significant people in their lives.

**Sue**: How disheartened would you be as a woman to be told by your doctor, or by a nurse, by a health professional that you are basically fat? It is like..., I was quite unhappy myself when he said that. So, I just had to weigh myself, because I did, and I thought, No!, I weigh what I weigh, and I think it is how I look.

**Lynne**: And how you feel

**Sue**: And how I feel. If I am still sticking to my size 10, that is fine. If it goes to a size 12 as long as I am happy, then I don't care.

**Lynne**: My experience when I was younger, I think was kind of the opposite, because I was quite small! I was just naturally small. I was really really skinny, but that is just how I was, I mean, I ate normally, I ate everything... but, I was always quite naturally, thin and that would always get picked up on quite a bit, but, I did not really see health officials. But family members would often say, look at her, she is so skinny, and I don't know if it were just concern on their part, but, that kind of impacted a little bit on me, because I was thinking ooh [pause].

**Sue**: Kind of gives you a complex too! Yeah?

**Lynne**: A little bit, but I never took it to any extremes to where I really got stressed about it or anything, but, it did sort of have an impact and I thought, maybe I should be eating more, maybe I should be eating this and that. It changed me kind of I was kind of challenging myself, now I kind of like I have to eat everything (**FG1, 41-92**).

The absence of advice and weight management support plans from health professionals therefore makes women default to "accepting" of the status quo which is reinforced by family and friends. Moreover, women report a contradiction when receiving advice from health professionals who they perceived as overweight themselves. The expectation that people giving weight advice specifically health professionals, be of normal weight was cited as a contributor to taking weight advice seriously or not. The women argued that HPs are looked upon as role models and therefore should practice the advice they give.

**Sue**: I think it is just a bit hypocritical because the nurse you speak to is all about a rounder larger lady! All: Laughter! Yeah

**Carol**: I think they know that in a way, coz you were saying you know, the nurse that talked to you was quite so chubby, I have the same experience with this kind of [pause] so largely sitting there and saying that oh ah I think you are, so you are almost obese, da da da hah! And I had already had sort of a couple of friends who've had this same sort of experience so it was kind of a joke!

**Grace**: Well, it kind of makes you take it with a pinch of salt, because if everyone at the health practice was clearly... going for a run every day, eating really healthily, then you might take it more seriously! But as it is you think, well.

**Lynne**: It's kind of do what I say not do what I [do].... All: Yeah! I know! (**FG1, 120-132**).

Reassurances from friends and family seemed to allow women to over-ride both diagnoses of being overweight and underweight. When health professional involvement is absent or only ends at assessment, women can be frustrated on what course to take when they are worried about their increasing size, potentially exacerbating the overweight status through comfort eating.

Carol: They don't offer you any [Lynne: Practical advice] support! They don't say here is a diet sheet, have you thought about doing this and they don't seem to take it seriously [pause]. It's kind of you're nearly obese, so anyway, end of this...NEXT (gesturing meaning next patient)! So they are saying this because they have to, because it is on the index [checklist].

Moreover, the women express a strong negative reaction to being told they were overweight. It appears socially unacceptable, a taboo, to refer to a woman as fat. Also women's construction of their weight status largely falls within confines of their construction of their body image or perception even when they acknowledge BMI as a standard measure. The women's position is often reinforced by re-assurances from immediate family and friends.

#### 4.3.3.2 Social comparison and influence of significant persons

Never pregnant women report being influenced by the 'significant others' in their lives with respect to their eating behaviours and their perception of their weight status. The women describe constant social comparison and competition with friends or peers in relation to body image. Accordingly, this social influence resulted in heightened pressures to conform by adapting their eating habits in the presence of friends. This

varied from wanting to show that they eat a lot, and more often for small sized women, to restricting food intake for those who viewed themselves as large sized. For example:

**Lynne:** I trained myself to eat a lot actually...there was a point where I was eating a lot just to sort of prove a point! And they [my friends] see that I eat a lot...if am out in a public place [with my friends] am like, oh yes, let's get something to eat, let's have this lets have that... so that they see am not missing meals or whatever. Grace: I had a friend, a tiny girl who just because she is tiny, every time made me guilty because I was much bigger! ...Just because she was tiny I really made an effort to just say, no way! I will at least try not to look as big in comparison! She was my friend, we weren't competing at all for anything, but just that proximity with someone who is really tiny made me kind of think, oh no am very big! I probably wouldn't have worried you know with a normal weight person like now! Carol: Yeah I guess most of my friends are smaller than me, are slimmer than me, out of my friend group in [city], I will probably be the largest of them! And sometimes on photos you do think oh Lord that is a bit scary! I look so completely different than I [physically] look. I think it's kind of, I don't know if it's in my head but I often think I am not so that much different! And then you look at say photos of a night out or something and think! Oh crikey, I actually look a lot bigger than people [in the photo] oh well, I have to do something about it!

There was agreement, among small-sized women, of being generally encouraged to increase their food intake so as to put some weight on as they were being seen as skinny by their family. For these women, this support from family was seen as positive and welcomed as it markedly improved their eating habits to more regular, varied meals. Positive healthy eating influences tended to be only from immediate family when they were worried about low weight status of the woman.

**Lynne:** ...family members would often say, look at her, she is so skinny, and I don't know if it were just concern on their part, but, that kind of impacted a little bit on me, because I was thinking ooh... maybe I should be eating more, maybe I should be eating this and that.

**Steph:** ... my mum always says, ooh ..., you are too skinny and need to put some weight on! ...so I make big stews and eat anything I like because I am too skinny. **Sue:** ...I was quite slim because I wasn't really eating anything almost all day. And I did see that because I lived quite close to my grandparents. And what they decided to do was because they always make more than enough for the 2 of them, they left a meal every night because they were that concerned that I wasn't eating to give me a meal and they were like, when you get in, eat it or eat it at dinner time before you go to work! So they kind of got me into a social habit of eating and as soon as I got with my partner he started kind of building my meals up to a normal kind of size. ...I'd definitely say it was more of my grandparents that kind of structured home meals for me!

In contrast, for women either assessed by a health professional or self-acknowledged as overweight, no positive group influences were experienced as encouragement to lose weight or eat more healthily. Instead, the women report friends and partners as hindering efforts to healthier eating.

Louise: ... [my friend usually says] I cooked this today, and cooked this today and I say, that sounds really nice, I should have been there. And when I go around, she says, well, I will get a Chinese, and I am like, coz, I'm here, are you not cooking anymore? Oh, we'll get a pizza! And you say, I am not eating bread [because] I want to eat healthily. Then she says come on go on, then you get pushed in. Coz, if you don't eat the Chinese, then you are not eating any tea!

**Carol:** My partner so loves to eat out! I would be happy to eat at home more [but] he loves eating out! So we do eat out more than I would probably want to... I kind of think I eat a lot more healthily than if he is not there? So I might just make myself just a salad, or a vegetarian thing...whereas if he's there, it's kind of more of an event, we will make something nice, we'll put this in the oven, and so I think I eat more healthier than if he's not there!

Negotiating social contexts and relationship dynamics can be difficult in maintaining healthy eating. Moreover social comparisons and trying to adapt eating habits in the presence of friends may exacerbate poor choices like binge eating when women were alone.

**Louise:** I went out for tea a couple of weeks ago, and while I was eating, I realized that I had not had any meat all day, and then I really wanted meat! I'd had a salad, and then I had ordered a vegetable burrito [but everyone was having meat]. And my body was saying to me, come on you need some meat. And then I think I did something a little daft (when I returned to my house). There were some sausages in the fridge, so I had to make some sausages, just to make up for the fact that I hadn't eaten meat.

Louise, with weight insecurities, appears to choose foods that portray her attempts at weight management when out with friends, but later describes binging on sausages once alone in her home. Publicly appearing to conform to eating expectations, but privately indulging in foods and patterns of eating the women might usually avoid in public can have lasting effects on exacerbating not only women's body image but also development of obesity.

It appears that women who have weight concerns especially when overweight are often left by themselves without direct support and encouragement from friends and family to make healthy changes. Indeed for all women who said they were larger or had previously been larger, there was no mention of advice or 'pressure' from family and friends to reduce weight. Also, some participants mentioned how they viewed their larger friends as beautiful and always encouraging them to love their bodies as they are.

**Lynne:** I think I find it quite difficult to reassure friends if they sort of say you know I feel a bit rubbish about myself! Because they will just say what do you know? Because it's kind of like you've never [been fat/big], you don't know what am going through, but then I can see that it's not an issue, you are fine as you are, you are beautiful as you are a loving person.

**Sue:** Then they feel like you are lying to them!

Therefore, the impact of the women's construction of weight status in reference to social comparisons highlights the unique social role friends and significant others play on weight consciousness and subsequently eating behaviours in women.

# 4.4 Gendered discourses prevalent pre-pregnancy

## 4.4.1 Cravings a significant aspect of women's eating

Women described regular habits of wanting a given food so badly 'until you have had it', as common occurrences in their everyday lives. Most of these occurrences were referred to as a craving and the women unanimously agreed to cravings being a "normal part of being a woman". The experience of women's cravings was either as routine monthly cravings or random indulgences. The reasons and circumstances reported in reference to cravings included: 'comfort eating'- *Marie, Carol*; 'to reduce stress'- *Carol*; 'makes me feel better'- *Louise, Steph*; 'body response to nutrient deficiencies'- *Sue*, or no reason- *Debbie, Carol*; 'time of the month', *Grace, Debbie* as hereby discussed:

### 4.4.1.1 Biological conditioning and body deficiency

In line with hormonal fluctuations occurring around menstruation, most women cited their cravings to be an indicator of 'that time of the month'. It is not clear whether it was a coping mechanism from the menstrual discomfort or a biological need that triggered their cravings. Monthly cravings tagged to menstruation mainly revolved around chocolate, and other 'treat-wise' foods (*Carol, Debbie, Amy, Steph, Grace, Joan, Louise, Lynne*).

**Debbie**: I think when it's time of the month I am more likely to get more chocolate (all laugh and 2 in agreement) Yeah, yeah, it's like comfort foods [its standard, everyone does! - **Amy**]

**Grace**: I do have a friend who said that, errm, cos I said at the time of the month I need more chocolate, she said it puts her off chocolate and I was like, that's weird (all in agreement) how can you not want chocolate?

**Steph:** When I am due to start, I just want chocolate constantly-I can eat a bar just like that!

**Debbie**: Oh yeah, it's standard to like chocolate this time of the month (laughs)

Although the majority of the women attributed their cravings to 'the time of the month', it is clear that the uniqueness of monthly menstruation provides a time of 'acceptable indulgence' without social restriction to what women may eat.

**Sue**: I know when it's the time of the month I kind of go to my partner and we drive into McDonalds filling myself and buy multipack crisps and stuff and I kind of comfy eat for a week because it makes me feel better! Laughter! It just makes me feel better because I am already bloated so I can go around in my sloggies for a week with crisps or whatever.

Indeed all accounts of monthly cravings involved "unhealthy food items" which women described as acceptable during that time of the month. This mind-set hints at the expectation that one has to crave some "unusual or treat foods" during this time as affirmed by Joan who does not have regular menses due to contraception method.

**Joan:** I haven't had a period in three years, and I am quite content with that. Coz I don't get cramps, I don't get weird cravings at certain times of the months, and I haven't had them since.

However, some cravings were regarded as being the body's biological alert. For example, Sue recalls her experience that made her believe cravings are the body's way of notifying you of a nutrient deficiency:

**Sue:** ... I kind of wanted to eat a lot of meat! So much so that half that meat I used to eat I don't eat anymore because it makes me feel a bit ill now because of the amount I used to eat! Then it turns out I found out through the doctor that I have a blood disorder and my Iron was very low and they said it's your body craving for the nutrients in the meat and I was kind of eating more and more of it and that made sense!

The experience of cravings as a monthly indulgence when coupled with the belief that cravings are a sign of body deficiency can become an established eating habit in women's everyday lives. These expectations are likely to have inferences to women in pregnancy.

### 4.4.1.2 Random indulgence and the emotionality of eating:

Women also reported cravings that were "out of the blue" and may not occur for several months. Unlike the biologically related cravings, this was seen as a random indulgence in food one hasn't eaten for a long time or as a treat. Women reported non-menstrual related cravings to be underpinned by reasons either as a treat or as emotional eating.

Joan: My cravings are random. I have never binged, I have never been someone who eats like loads of food in one sitting. I get full like quite quickly. But yeah, occasionally, I'll like be doing something completely [unrelated], like doing my university work or I will be just walking on the street or something or the other [and then I'll be like]. Do you know we'll go out for tea tonight and, I am gonna have a tuna pasta bake (laughs)! It comes out of nowhere! And it don't happen very often but yeah. And if I don't eat it, then I won't eat until I have, yeah, like, I'll crave it like every day until I have it, yeah and I do not get another craving for ages like weeks.

Marie: I only seem to crave things that I don't actually normally eat. My softest spot is top chocolates I don't normally eat but I will crave them sometimes and veggie burgers (emphasis)! Which I am a big meat eater, but sometimes I just crave a veggie burger, not very often.

#### RT: And what happens when you do crave?

**Joan:** Ahm, well, sometimes, I will just go and buy myself some, and sometimes I will just have to leave it.

Louise: I crave quite random things as well. Like the other day I was at home, and I said, or I quite fancy some you know, Granola yoghurt! And then, I went to (shops), just to buy something, non-food related. And then it just popped into my head and I was like. Oh yeah, I really want a Granola yoghurt, and then I bought one, ate one. And now, I don't want another one for a few months. It just stays in your head, until you have had it, and then, you just forget about it.

**Joan:** Oh yeah, it just really pops out of the blue because you can be doing anything and then you suddenly just fancy a certain type of food and its usually really not specific! Like hers was a Granola yoghurt, whereas mine would be something like a certain bar of chocolate, or a certain thing for tea... So, yeah. They just pop off in there and just come off anytime. But, it just happens like once every few weeks, it's not a constantly occurring thing.

**Debbie:** Mainly when I am bored, I do crave cheese and a bit of brie sometimes!

Women's intense craving experiences did not revolve around any particular foods but on food one doesn't normally eat due to 'non-healthiness', 'guilt', access to, type and cost of the food. These cravings would hold until that food was eaten.

**Sue:** I think if you restrict yourself of the pleasures that your body craves. Like sometimes you think oh I fancy loads of cheese on that. If you cut out what your body actually craves I feel you proper stop craving it after a while. Because you've deprived yourself of that much you might as well be in like dust really. **Lynne:** I go through kind of phases with chocolate. Sometimes I don't fancy, like at the minute there is so much chocolate in the house from Christmas... So at the minute am just not really in a mood where I wanna eat lots of chocolate but sometimes I really do like I've got a spare chocolate bar hidden somewhere for when I need it!

From Sue's perspective, cravings could potentially be cut out of women's eating behaviours with efforts towards restraint. Having a "spare hidden bar of chocolate" as in Lynne's story reveals social prescription of certain foods as contraband. Carol narrates in agreement:

Carol: I used to really crave chocolate (Lynne: everyone does! all laugh, Sue: No!) well I think it's really gone off because I am eating more kind of low GI things, am trying to make an effort to do that. It kind has gone off, but having said that, I walked into the house from work the other day, and I was like I really want something! Really want something! Just opened the fridge and just ate 2 big chocolate biscuits one after the other and I was like ooh, it's not really hitting the spot and I had another one! And I haven't done for a long time but I used to do that quite a lot when I was still in university, we are talking quite a while ago, but I would just be like uhm.

RT: why the cravings do you think?

**Carol:** I think it's kind of stress and stuff... [pause] ... but also just kind of comfy eating I guess a little bit really, not about anything in particular but just a bit of ah

ooh I feel a bit anxious so I will just go and do this! But I don't do it so much

anymore!

For Carol, the reasons for her cravings were perceived stress and emotional eating to

'feel good' while unwinding from stressful situations. Interestingly though, the

women's experiences of satisfying the craving happened in solitary suggesting the

'forbidden' nature or feeling when consuming these foods openly. It appears that

women did not want to openly be seen eating these foods outside the normative times

of, for example, 'time of the month', Christmas or Easter, where chocolate is socially

allowed.

It is therefore interpreted that cravings, significant in women's eating, are rather a

'social acceptance or allowance' for women to indulge without hindrance. This may be

because of social inhibition and women's constant worry about their body image and

weight status which dictates what they can eat, or be seen not to eat, in defence of

body image concerns.

4.4.2 **Digital discourse for information** 

All the women in the group discussions expressed being proactive information seekers,

harnessing digital information daily to search and share information and experiences.

Technology trends and marketing were highlighted to influence how women

negotiated pressures and made decisions hereby described.

Women describe checking on the internet for any information they wanted primarily

by a 'quick Google'. They acknowledge the increasing ease of access to information at

your fingertips as a result of mobile phone and handheld device connectivity to

internet. The information sought was mainly recipes, specific dieting information and

anything they were worried about regarding their health.

**Steph**: oh yes, the internet

Louise: Yeah, the internet

RT: The internet?

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**Debbie**: eh, I go on line! Laughs- I Google like healthy recipes and stuff like that. I've got a little app on my phone for healthy recipes too (laughs)! So then, if I can't think of anything, like we don't have anything in the house I can think of, so I'll just go online and type "healthy student recipes" and they are reduced as well! [but] Sometimes you get chips coming up and stuff like that!

Amy: Also to watch what you are eating as well.

RT: How often do you consult the internet?

Steph: I don't know... [pause]

Louise: It is when it crosses your mind.

Marie: And you think oh yeah, like I should probably have a look at that!

**Amy**: Yeah, but I also use cookbooks as well. And most of the stuff I know how to

cook is quite healthy (FG2, 159-165).

From the conversation, the women were dependent on the internet for information. From 'Googling' to quick fact sites and then exploring peer forums to check what others have experienced or what they had to say on a particular topic.

However, even when confirming the use of internet as a quickly accessible source of information, women acknowledged its limitations as not authoritative knowledge.

**Carol**: Well, I think I was kind of concerned about the whole hungry but full thing ... so reading around on the internet really... it's just thinking about what you eat and being informed about it... I know that all the health stuff you have to take it with a pinch of salt because obviously a lot of it is on forums or people's opinion which isn't fact.

**Lynne**: Yeah, I would, I think if I was concerned about something I would just have a quick Google and see what other people say, see what other people say the other side! Laughter

Grace: Errm, yeah, probably online... (to check it out)

**Sue**: Yeah, I kind of do that as well, if there is any kind of health issues or anything like that, I'll have a look to see what... Because if it's something I need to worry about or something I need to take to the doctor, coz I don't think I always feel comfortable about going to the doctor at all, probably it could be nothing, so I will check (**FG1**, **601-622**).

Women only mentioned consulting health professionals if their query was "serious" causing them enough concern. Some consulted with knowledgeable friends and family as sources of information especially when they needed re-assurances. Some women report feeling confused if they found conflicting information when using the internet to corroborate information as Louise affirms:

**Louise:** But then if you find that your sources are conflicting, then you usually get a little bit more confused about it.

Generally, the internet was used first as reassurance on matters of concern, but also to siphon out what might be important. It appears from these narratives that digital discourse is marketed and expected to be a point of reference on everyday information needs which may have unique implications in the experience of motherhood.

## 4.4.3 Pregnancy as a lifetime discourse

Women's discussion of pregnancy was based on their observation of friends, family and strangers in everyday lives or more commonly in the media. Two themes emerged highlighting pregnancy firstly, as a lifetime socially embedded event that women go through and can determine their behaviours depending on pre-learned habits and secondly, social expectations of pregnancy.

### 4.4.3.1 Pregnancy as a choice mediated by social expectations

Women describe viewing pregnancy as a choice motivated by personal reasons including desire for a baby (brooding), socioeconomic reasons (like benefits, council houses) or just a lack of ambition, especially for young age pregnancy. The women's narratives reveal the need to conform and being part of a club as reasons for getting pregnant. Specifically, pregnancy was described as a fashionable trend women have to adhere to.

**Joan:** You find as well like it's more fashionable to get pregnant now at a later age which is actually worse in terms of having kids.

**Louise:** Yeah, you are meant to be about your mid 20s for optimum ....

**Marie:** Yes, there is like an 80% chance of miscarriages and genetic problems [with very late pregnancy]

**Joan**: Yeah and it seems more fashionable now getting pregnant in your like early 30s to mid-30s which is not really the best age to be having kids! Like you should be, by the time they are sort of like our age, like in University, or like old, you have no energy left! (Laughs) You know, you've got....

**Louise:** Sometimes I think, I don't know but then again, like you see a baby and you go.... Oh (squeals)! I want one. And some people actually do do that. But I am like oh! I've got to have one, but am not going to now! And you get really broody but some people can't suppress that maternal instinct, they can't stop until they have had the baby!

Moreover, women also described peer pressure to have children. This was from media reports of pregnant celebrities and how this trend was taking on amongst friends and family. Accordingly, women felt the need to conform and even being encouraged to become pregnant when their friends fell pregnant.

**Steph**: People get pregnant sometimes like these days because it is fashionable. I find that a lot! Like I have had a few friends who have had babies because it is the inthing to do, and because all their friends are having a baby and they really don't like take into account that they are bringing a new life into this world.

**Marie:** It is a friends' sort of thing. Because it is like, if you got a group of friends, and one of them is doing it, then a lot of the time, they all kind of influence each other. **Joan:** Back at my place, it is what all mates have done! They all seem to be jumping

on this baby bandwagon!

However, the need to conform appears to be mediated by expectations such as gaining independence through obtaining own accommodation or feeling wanted. It was believed that especially among low socioeconomic status women, pregnancy was being used as a source of income through the social support payment scheme (benefits) and for some single women, the potential to own their own accommodation, as in these narratives:

**Marie**: It makes them feel wanted because then they have someone that needs them completely.

**Louise**: I think that is a different perspective of it there, you hear it, especially in Hull you hear that some people are thinking to get like Council houses. [**Steph and Joan**: laughter, yeah]. It is true, it actually does happen. I know people that have done it and it is just disgusting and they just take it all for granted!

Joan: ...(my friends) they're quite settled having kids, and getting a flat, and...

Louise: Thinking that is what their life should be like (Joan: yeah!) because everybody else seems to be doing it. Well, I can only say from Hull, because I am from Hull and I only can say all my friends they are from here and they have done it! I think I am probably one of the last one of like of my groups of friends as we've grown up to still be at university and not be having babies! (FG2, 580-629).

It was especially for these women that pregnancy was described as being less ambitious and opting for early pregnancy over career. The focus group participants' narratives describe a preference to put themselves first before thinking about pregnancy and to have children later, when they have established their career.

**Joan:** ...am like, am one of the academic, and I do want kids someday, am not really un-maternal and unloving but I do want a family but I want it, later on in life, I want my life first.

Generally, women expect pregnancy to be a normative part of their life progression influenced by social circumstances and constructs in forms of rules that prescribe behaviour.

#### 4.4.3.2 Motherhood rules to adhere to

The participants describe pregnancy as a period filled with a lot of 'dos and don'ts' to which women must be receptive and adhere to, ranging from medical cautions, to public opinions about what women should or should not eat. In addition, women highlight the conundrum of how an otherwise private event pregnancy is supposed to be, is instead treated as a public affair characterised by people offering unsolicited advice and constant touching and feeling of the bump.

**Amy:** But you know, I really feel for anyone who is pregnant! There is just so much pressure on you to do this and don't do that and you just think it's not like your body anymore really!

RT: Where does the pressure from?

**Grace:** Well, everywhere, and people can like grab you (pause- emphasis) and touch you! And they have a right to touch you!

**Amy:** Even people you don't see at all or don't know and they can put their hand on your stomach and like (gestures patting and listening)

**Debbie:** Really? Do they do that? **Grace:** Laughs

**Amy:** Yeah, and you are like, you don't know what to do, just shove them, its all up to the end and its all like freaky! Its errm, yeah I, I don't know but its not, its really unpleasant!

The women's narratives described pregnancy as a restrictive hard course dilemma for women as they are liable social pressures strongly emphasised in the mainstream media and by family and friends.

**Sue:** Its kinda hard course I've got a lot of friends who've got children I've got a lot who are older than me as well. Some of them do blame having children for being the way they are.

**Joan**...I think there is a lot of pressure of certain things to women when they are pregnant, to have enough exercise and that you shouldn't do this and you shouldn't do that.

RT: Where does this pressure come from?

**Steph**: The media.

**Joan**: People like me [Laughter]

**Steph:** It comes from the media, and it comes from like our government as well where they like have an opinion on everything, don't they? The public in general, like people talk, don't they? (**FG1 559-566**).

These pressures were mainly in the form of pregnancy rules of food restrictions and weight acceptance during this time. Regarding food restriction;

**Debbie:** Yeah. I think it's because we have had err like people come around and they are pregnant and saying err, you can't eat this or that, can't eat this. And you are like oh gosh! I can't be doing this pregnancy stuff, because it's just so restrictive! (**Amy**: all the good stuff). Yeah, you can't eat anything nice. I think it was the fizzy drinks which really bugged me about her. That's what she was told, not allowed to drink fizzy drinks! **Grace:** fizzy drinks?

**Amy:** Yeah, because in a drink like coke (cola) it has caffeine and that's not good stuff.

**Debbie:** ...I think they give you like, I don't know if this is true or not, do they give you a leaflet of what you can and can't eat?

**Grace** and **Amy**: Yeah

Grace: Yeah, I think also cheese or pâté

**Amy:** Yeah, I felt sorry for my sister when she was pregnant because she was craving like a runny egg or a fried egg and if she can have it, it only had to be really really really cooked through and that's all she wanted. And I was like, sorry! (laugh). She just kept having to eat really cooked through eggs and feeling disappointed I suppose! **Grace:** aww!- Laughs

**Debbie:** Then she can have a small celebration once she has given birth (**FG2, 299-322**)

In addition, women describe rules accepting of weight gain during pregnancy while expecting women to bounce back to previous habits and body size after the birth.

Joan: I feel sorry for pregnant women as soon as they're about to have kids. Coz there is all noise, all this pressure apparently, for them to lose all this weight soon after they have had a birth. So am like, give the poor woman a break, she's just pushed like a melon out of her lady garden [laughter]. She's had like 9months of sickness! 9months of like migraines and this and that, and being kicked in the ribs every day for the last at least 3months! You know, why not be happy, you know and just loose it [this weight] gradually. You know, I don't understand why there is this immense pressure apparently to be like a fit mummy or whatever and which I think ridiculous, and like loose loads of weight so quickly! So, I do feel sorry for pregnant women in this sort of pressure they have to stay through, even though they are

carrying a child and they should put weight on!- They should be healthy for their baby!

**Lynne:** And with a lot of them that's kind of a competition thing I know people in the office are saying I brought my baby and I was back in my size 12 jeans. Celebrities on TV as well.

Carol: Yes I think it is.

**Sue:** Is that the most important thing you can think of when you bring your baby to work for the first time? I was thinking is the size of your jeans you're wearing the most important thing? Cos I can't imagine it being (**FG1**, **516-542**).

Even though women mention no weight consciousness during pregnancy there was a cultural expectation of disinhibition during pregnancy while followed by a fierce expectation to lose weight postpartum and restrict food intake. Indeed, women report lack of sympathy towards friends who over-ate during pregnancy when they struggled to lose the weight postpartum.

**Sue:** ...(my friend) says she doesn't do that much exercise, she doesn't eat particularly healthy and it was a factor that she was like I'm eating for two. I think that is gonna be the most annoying thing I've ever heard. It's like put the phone down, you're not eating for two you're eating for four! One of them is not a rugby player one of them is a tiny baby! It's the old expression a woman shouldn't eat more the the equivalent of than an extra 2 slices of bread a day so whatever calories and carbs are contained in 2 slices of bread. Apparently that's what doctors used to say that was required on top of pregnancy. Yes you're drained, I've seen my friends go through it and I'll never understand till I have children. But I just don't get how some of them seriously had that bad cravings – just shovelling it in. And you're wondering why you've put on weight. Of course you're gonna put on excess weight.

Carol on the other hand shares the experience mothers are faced with regarding food wastage where they tend to eat from their kids plates instead of putting it to waste as she narrates:

Carol: I know a friend, I think it's the eating habits of a lifetime, coz I have stepchildren and when they were small, there was a real like. I don't like to waste food. I would ask, that alright, are you eating now. And I will just. That is just a bit of a temptation. But I know people with small children that is like a real thing. Just check the chips that are left on the plate, so I put them in the bin. And I don't want to see the waste, like an extra piece of pizza. So I think it is some kind of myth, ... because I know so many people who have it (eat the food) and they are saying I am going to walk everywhere with push chairs.

The discussions reveal motherhood to be riddled with changes in eating habits and expectations. The never pregnant women view pregnancy as an excuse to indulge

without feeling guilty, but caution on its impact on weight status postpartum. Therefore pregnancy was seen as a transient period, allowing of some behaviours but only during this time. Behaviours developed during this time were recognised as being hard to restrain from after childbirth and this has got implications on overweight development following pregnancy.

## 4.5 Summary

This chapter has explored women's views on weight status and food behaviours. Although these women have never been pregnant, their view of weight and food behaviours sets the stage on which women entering motherhood start their journey. The women acknowledge important practices in their everyday lives which are of significance to the experience of pregnancy.

Women report being aware of their unhealthy eating habits, acknowledged as often suboptimal influenced by individual factors. Social context mediated eating behaviours such that women tend to increase food intake when socialising and during certain contexts like the annual food calendar. In addition, women reveal a continuous struggle between healthy food choice and unhealthy foods they preferred hence opting for inhibition. Social situations impact on women's eating and weight assessment.

Moreover, women are cognisant of overweight status, revealing social constructs that require weight consciousness on an on-going basis. This is in the form of comments and interpretations of weight status often self-assessed in comparison to family and friends. The dilemma appears to be in the transient expectation of weight changes that women are faced with. As a result women are constructed to constantly watch their weight, with reminders evident in the media but also fashion trends and expectations. Women's view of the body and food choices is socially mediated and this can have

implications on how women experience their body during the transition to motherhood.

Women reveal constant struggles of choosing between healthy foods or not in their daily lives, exhibiting diminished personal control in eating behaviours understood as cravings, treats or to 'feel happy' and 'relieve stress'. Importantly, the women could easily highlight weaknesses when it came to unhealthy food choices but no strengths for eating healthier. This could be explained by established behaviour of women more likely to look at their negative side rather than positive side due to constant weight worries.

Furthermore, women disliked being referred to as fat, indeed disputing formal weight assessments through self-reassurances or even seeking re-assurances from significant others. There is a protective nature of family and friends being positive towards overweight women through re-assurances rendering larger size as insignificant. This directly impacts on how large women view themselves and may contribute to discouragement towards healthier lifestyles. Besides, women reveal a contradiction in their construction of their weight status such that absence of HCPs support results in acceptance of the status quo and the women resorting to emotional eating "to feel happy". The women's recognition of HCPs as assessing weight status yet not offering practical interventions for overweight women especially presents a missed opportunity of addressing overweight status before pregnancy. It would be suitable for HCPs to discuss and offer support, advice and encouragement when meeting overweight women at routine appointments.

Women's lives are governed by a range of social discourses dictating food restriction, body displays, and the expectation of motherhood as part of the life trajectory. Accordingly, women report ways of adapting to these controlling social rules to include emotional eating, cravings and late age start of motherhood as behaviours that have become coping mechanisms and widely accepted. Additionally, women expect and somewhat are expected to become mothers in their lifetime, which not only emphasises social expectations but also reinforces gender rules women have to

adhere to. This serves to heighten body image insecurities, kick-start eating habits while priming women towards motherhood.

The digital discourse is trendy, allowing women to corroborate information, while trusting health professionals' opinion. This to some extent has empowered women in their decision-making but also their acceptability and view of their bodies through shared experiences and search for healthy food and weight management options.

Overall, it seems women negotiate a diverse range of discourses some of which define their relationship with food and weight consciousness. They acknowledge situations and events that proliferate bad and good eating, specifically enjoying events that permit indulgence or relax weight ideals. Acknowledging the expectation to become mothers primes women for parenthood such that behaviours and influences women already subscribe to during this time can be transferred once they become pregnant. The women reveal pre-pregnancy to be a time where the self is most important; and focus on "their life", career and how they look or are perceived in public. This focus on the self and expectations at this life point influence women's food and weight management behaviours. The role of health professionals and significant others is important in how women experience these discourses and expectations.

With the never pregnancy women's stories giving a backdrop, the next chapter will explore how pregnant women experience and negotiate the event of pregnancy hinged on the already existing expectations and discourses discussed here.

#### CHAPTER 5: FOOD BEHAVIOURS DURING PREGNANCY

#### 5.1 Introduction

This chapter discusses the lived experience of five women interviewed during early pregnancy <24weeks and in late pregnancy after 32 weeks. The women's ages ranged from 27 years to 34 years, with three of the women in their first pregnancy, while the other two were in their second pregnancy. The women had a mixed level of education and work status as summarised in their biographies.

## **5.1.1** Background information on Antenatal respondents:

Table 5.1: Biographies of antenatal participants

**Amber:** Is a 30 year old graduate, married, and working full time. She has a 15 month old toddler and was interviewed at 20 weeks of her second pregnancy. Pregnancy was not planned, happened too soon and had feelings of guilt.

**Angela:** Is a 28 year old graduate, working full time. She is engaged and living with her partner and was interviewed at 15 weeks in her first pregnancy. Pregnancy happened too quickly, and is worried about too much weight gain in pregnancy.

**Nicole:** At 34 years, is in her second pregnancy. She completed a degree, works part time and was interviewed at 24 weeks of pregnancy. She is overweight, married with toddler at 26 months and the pregnancy was planned. Worried about weight gain and is a 'quilty eater'.

**Rachel:** Is married at 27 years, completed her GCSEs and in full time shift work. She was interviewed at 20weeks in her first pregnancy. Planned pregnancy and very high BMI of 40.3 at start. Had bad morning sickness, and worried about weight worries due to being informed she was high risk.

**Jessica:** Is in her first pregnancy at 31 years of age, never completed formal education/ college. She was interviewed at 22 weeks, in a relationship but living alone. She is not in employment or education. Not worried about weight gain and looking forward to seeing her 'pregnant body'.

### 5.1.2 Emergent themes from pregnant women's narratives

This is an interpretive narrative of the lived experience of five currently pregnant women at their first interview which took place between 15 weeks and 24 weeks of gestation. Interpretation of these in-depth interviews is in keeping with IPA which stipulates centrality of meanings, with the aim to "try to understand the context and complexity of those meanings rather than measure their frequency".

Using exemplar quotes to support interpretations of women's experiences, the following themes emerged from the women's stories. Firstly, the start of motherhood as a journey with expectations, where women undergo physical, emotional, behavioural and social status changes. Secondly, cultural constructs defining pregnancy as a public affair with expectations prescribing women's behaviours. Thirdly, there are strong and diverse social discourses ranging from harnessing of contemporary digital age, to women's emotional eating but also the treatment of pregnancy as an illness. These three overarching themes define women's experience of pregnancy as will be discussed.

## 5.2 Pregnancy as a gendered, expected life event

The start of motherhood reportedly stemmed from women's desires to have children. Pregnancy was seen as a gendered expectation, life's natural progression and women expected to experience a set of feelings and show certain behaviours. Accordingly there was a shift in focus determining food behaviours while women negotiated these pregnancy expectations. Further, women describe weight consciousness and body image concerns all their adult lives and how this evolves during pregnancy as narrated in the following four sub-themes.

#### 5.2.1 Natural life progression

The women report desires to have children ranging from natural progression of the relationship, to an expectation of starting a family once in a stable relationship and to

increasing family size after the first child. The increase in family size was, however, expected to take place after a reasonable amount of time from the previous birth.

#### 5.2.1.1 Gendered expectation of committed relationships

For first time mothers, experience of pregnancy was described to be a natural progression of the relationship. The women describe how being married or living with their partner, and their age, determined desire to have a baby. For most, it was the right time to have a baby.

We, we got married last December. We'd been trying a little bit before that but then we decided that we'd wait a bit longer because we wanted to make sure that we had more money and stuff. And then, um, we were trying for a while after we got married but then we kind of just (pause) nothing was happening so we just. I still wasn't taking the pill but we weren't really trying (Rachel, 67-71).

For **Rachel**, her desire to have children appears to have come naturally as a result of being in a stable relationship and then having married.

Women pregnant for the second time expressed their desire to have more children as a natural progression and an expectation to increase family size.

If I wasn't married and I didn't already have a child and I didn't want this pregnancy, I would have considered not having it because I was so ill (**Nicole, 304-306**). I think I started it (folic acid) about a year ago or something like that. Well, we kind of thought around last, you know, last Christmas after (toddler) was two that we would be starting at some point um and then I think (pause). So I just started taking it (folic acid) and I think we didn't really start properly trying until about the March or something (**Nicole, 574-582**).

For **Nicole**, expectations contributed to her desire to have another baby linked to being in a stable relationship (married), and also that the older child was at right age making it the right time to become pregnant again. Indeed, the desire to increase family size was expected to occur at a reasonable interval from the last child; short of which was taken with apparent embarrassment as **Amber** narrates:

I always stumble I don't know because I say em is it possible to have em planned but still a shock pregnancy? It was, it was, it was (pause), we thought about it and it happened! So, I know that's not physically possible but you know what I mean yeah

and so uh em and so. So it was still quite a shock and so em it was a bit. I understand we were very lucky but we kind of found out that we were pregnant and just kind of like oh well we didn't think we would be at this point for kind of like six months! (Amber, 300-306)

From the excerpts, having children was the next step when women were in a stable relationship. The women report preparatory behaviours in expectation of conception to include discontinuing contraceptives, exercise for weight loss, and beginning to take vitamins and supplements.

I stopped (pause) actually I stopped calorie counting because I was about, for about three, was it about two weeks before I found out I had been trying to do like 1,500 calories a day because um I wanted to because I did that the year before and I lost. Did I lose nearly (pause)? I think I lost about a stone (6.4kg)! (Nicole, 51-54)

### 5.2.1.2 Body readiness and biological clock

The women's stories further describe desire to have children in terms of body readiness. For example, *Jessica*, pregnant for the first time, while narrating about her early pregnancy signs and how it felt when she found out that she was pregnant says:

...I was ready to have a baby, I felt that I was at the right age, I felt well, I was happy, all was much better, mentally, physically, so yeah I wanted a baby, my body was ready. We weren't trying, it just happened, but I felt ready so yeah, it was a nice surprise. I've known (boyfriend) for over 8 years we've been friends, but about last year we decided you know, to be more than friends, so yeah, I couldn't be happier. It was a nice surprise and so I am looking to become a mum, (Jessica, 22-29).

Although in a relationship but not living with her partner, Jessica describes her readiness to have a baby in terms of her age, and also having someone to make it happen. For her, the pregnancy is not only a natural progression to the relationship but also her view of her body readiness as a sign of the right time to become a mother. Indeed, when women were in committed relationships the realisation of their age gave precedence to having children over other social events as **Angela** expresses below.

I live with my partner but we're not married at the moment, we're engaged. We've been engaged for a long time, it was it was getting to the point where he is a bit older than me so it was either we got married or. He wanted children and also he is 36 this year so if we'd have waited until we got married or could afford to get married he'd have been nearly 40 before we probably actually got round to children

so we took the (?difficult option- RT). Right we'll have kids first and then we'll get married afterwards (**Angela, 33-44**).

These accounts reveal that women approach pregnancy and motherhood as a calling, an expectation from stable relationships, a biological timing by age and a planned, gendered life event. They viewed their bodies as vessels for childbearing necessitating conception at the right time for optimum foetal health. Accordingly, women focus on preparing their bodies for either conception, in case of a planned pregnancy and, or, for the baby, immediately after pregnancy confirmation. This preparation of the body included focusing on the 'right foods', taking supplements (especially folic acid) and adoption of some behaviours as will be explored further.

### 5.2.2 Expected feelings and behaviours during pregnancy

Irrespective of the underlying reasons to have children, the women's feelings revolved around achievement of conception, negotiating relaying news, followed by an expectation of illness. The narratives of the women reveal how pregnancy is an emotional, tiring journey, filled with diverse feelings which settle as the pregnancy progresses and the women embrace the pregnant body. The emotional journey starts from when they confirm the pregnancy and is characterised by discussions to bring their partner on board in regard to the pregnancy, positively negotiating the extremes of morning sickness and conveying the pregnancy news to family and friends.

### 5.2.2.1 Achievement of conception

Women's narrative reveal shock and delight at quickly achieving conception, in a way showing an expectation of delayed conception.

I suppose in a way it was planned because I stopped taking my contraceptive pill in April em but it happened a lot quicker than we expected. Yeah, it was still a bit of a shock at first to be so soon, I was expecting to have like another six months at least yeah, but no erm it was quite quick so yeah it was a bit of a shock for us both at first to get used to and then after a couple of days we were ok. (Angela, 23-30)

The early days after confirmation are characterised by shock, panic and planning on how to inform family and friends. For example Angela continues to narrate:

### RT: What did you do when you found out you were pregnant?

Panicked. Um (laughter) yeah panic and then not a lot really nothing really changes does it? You can't tell everyone. Oh well you can if you want to but we didn't for a while em we were having a big barbeque the week after the bank holiday so I couldn't drink em [or] disguise not drinking cos we usually do have a drink so. We were faced with either skipping the BBQ or telling our friends, which we did not want to do. Um, in the end, we went but it was difficult. (Angela, 125-132).

Angela reveals a start of changing behaviour as soon as she found out she was pregnant, geared towards what is understood as healthy in respect to alcohol drinking. Even when the pregnancy was not planned, the confirmation of pregnancy meant that women had to negotiate feelings of guilt, personal health ambitions and relationships.

...it still felt like kind of a lot to digest at time.... I think so yeah I think it took a long while to sink in! I think it took a lot I remember going to the 12 weeks scan and thinking it will seem real then it didn't still. I think it probably was more the 20 week scan that it became the excitement. Yeah, whereas I think at 12 weeks you're always still worried whether everything is ok at 12 weeks aren't you? And then I think I probably felt a bit guilty as to kind of like what we'd done and then I thought don't think like that cos you don't want to ruin it. It's amazing and we're so lucky but yeah it took a lot to sink in (Amber, 308-319).

For *Amber*, her early pregnancy feelings of guilt were in the context of having a one year old toddler at the time of pregnancy confirmation and the second pregnancy not expected so soon. In contrast, where the pregnancy was planned, even though women expressed surprise at "it happened quicker than expected", their early feelings are centred on joyous disbelief, elation and a desire to tell family and friends.

Um, well I was just sat watching telly and then, uh, I'd been having some like strange crampy pains in my stomach. Um, and I was like oh, this is really weird that I've had this crampy pain in my stomach. I can't really remember, but I think there were a couple of other things. And I was like just jokingly, because we've had quite a few scares — well not scares but thought that I was and then I wasn't — um, I was like, oh, maybe I'm pregnant! And then my husband was like, "Oh you won't be; you never are". And then, um, I looked in my diary and I was like actually my period's a week late. And then we were like ooh, maybe I am. But we still didn't believe it so we did like three tests at home and, and they were all positive. We were like no, this can't be right. We, we just couldn't believe it! (Laughs) (Rachel, 92-100).

In the same light,

I found out I was pregnant like 2 months, I was feeling funny...So I went and bought the tests, I tested, and bought again- I think it was like 4 times and all said positive, then I knew. It was very nice really, it was a nice surprise to be honest (Jessica, 6-12).

Once the women get used to the idea of being pregnant, the initial feelings of excitement, disbelief and guilt are replaced by physical experiences of morning sickness, tiredness, food aversions, cravings and mood swings. Most of these were expected as described hereunder.

### 5.2.2.2 Expectation of illness, constant fatigue and mood changes

The women's stories also show pregnancy centred on the experience of somatic symptoms like morning sickness, cravings and aversions. Pregnancy started off with morning sickness for most women which in the case of first time mothers, only appeared once the pregnancy was confirmed, as Rachel reveals:

Um, but then it just kind of eased off a bit. It was only maybe for about a week, maybe two weeks that it was really bad. And then, um, it was sometimes if I woke up early. But now it seems to have completely stopped ...Before I found out I was pregnant I didn't feel sick. So, I wonder if it, if it was because I knew that I was like bringing it on myself (laughs) (Rachel, 53-59).

In agreement, Nicole and Jessica voiced their experiences of morning sickness:

Um so the first about 18 weeks was awful. I was really sick and um I'd well I think probably from about seven weeks really until about 18 weeks and I ended up taking this anti-sickness medication... and it did sort of help, but for that whole period I couldn't talk about food, I couldn't think about food. I'd just go in the kitchen and it would make me sick. I'd open the fridge and smell something and it would make me sick. I didn't want to eat meat and I was just you know, it really changed what I was eating and I had sickness with (toddler), but nothing like it wasn't like that. I mean I was only being sick about three times a day so it's not like. With the medication then it was usually once a day or every other day. Um so I know other people get a lot iller, but it just completely dominated everything, you know (Nicole, 16-28). But now I don't have appetite so I eat just like one meal a day. I take loads of tea though, am a proper tea lover. So I will have my cups of tea with 2 sugars throughout the day. Also like I try to eat like 2 biscuits with my tea in the morning, because I used to have and still do, have morning sickness any time. But I can't stand food. So I try to eat 2 biscuits and a cup of tea every morning which is good (Jessica, 39-43).

For Jessica, the "need to eat" even at the height of morning sickness and wanting sugar for energy "which is good" implies efforts to ensure an optimum environment for the baby.

Interestingly, women describe the expectation of a difficult early pregnancy with debilitating morning sickness. This was in comparison with either previous pregnancy or with family and friend's experiences.

It's just that I know a lot of people, friends have had a lot of really bad sickness and had to take time off work that type of thing or bleeding or anything like that (**Angela, 435-437**).

Indeed women who did not have bad morning sickness describe their experience as being lucky as in these excerpts:

Um, like I said I've been lucky cos I've had little in terms of morning sickness. I've not had, not been sick um other than well one occasion... there are occasions when I still feel a bit sort of queasy and certain smells or foods make me feel a bit sickly but nothing that puts me off eating (**Angela, 4-5, 15-17**).

Em I've been sick once this pregnancy and I never was last time but that was because I'd not eaten and I think I'd got a bit like my hormones were raging and I hadn't eaten and I felt just, felt a bit queasy em but other than that everything, touch wood, em has been going fine. Em I'm really lucky during pregnancy em think only just starting to get a hint of the emotions (Amber, 15-19).

These narratives reveal women expecting morning sickness and linking this to food and hormones. Eating behaviours at the start of motherhood were mediated by the expectation and experience of morning sickness, pregnancy hormones and emotions. The need to eat while negotiating morning sickness suggests women's behaviour to be more concerned with the baby during this time.

The early pregnancy experiences of women also reveal expectation and experiences of tiredness, fatigue and mood changes.

Em mentally ok I think I've not had many ups and downs you know like say about crying and things and mood swings. I don't think I've had that many more than usual em occasionally some like PMS type symptoms come through em where I'm like feeling irritable and lose my temper but not very often to be honest once or twice if that. Physically first like up to twelve weeks I was really tired like afternoons really tired would fall asleep get home from work and I could have fallen asleep straight

away. Em but now I don't feel as tired at the moment. I feel ok at the moment (**Angela, 324-330**).

Em it's been fine really em the first few weeks em really tiring so just feeling tired all the time em and that probably eased at about 18 weeks em which was exactly the same with my first pregnancy (**Amber, 8-10**).

As a result women report staying at home more or even stopping social events suggesting nuanced social mediation behaviours continuing from pre-pregnancy.

Uh, um, at the start, um, it got quite bad and I had a bit of time off work because I just couldn't stomach working in an open plan office with like kitchens and things. I couldn't stand the smell of anything so I was missing quite a bit of work and seeing people (Rachel, 111-113).

## 5.2.3 A shift in focus away from the self, to the baby

The accounts of women reveal a changing focus during pregnancy. During the period of actively trying to conceive, women's focus regarding food behaviours and view of the body was centred on preserving the body as a vessel to nurture the baby. Accordingly, women prepared their bodies for conception as previously described. Once pregnant however, the women's focus shifted from the self, their body, instead to the foetus/baby.

After pregnancy confirmation, women reveal a shift in focus geared towards the health of the baby and this defined their behaviours. Accordingly, women narrate overhauling their food behaviours towards healthy food intake for the growing baby, even while negotiating somatic symptoms of early pregnancy.

Coupled with hormonal changes, the women describe experiences of fussy eating, striving for healthy food as well as increased food intake.

## 5.2.3.1 Negotiating somatic symptoms towards good mothering

The confirmation of pregnancy brings not only a focus on the baby but also classic expectations of aversions and nausea in nearly all the women. All women report being

nauseous and some as earlier identified experienced bad morning sickness, coupled with a change of palate during the pregnancy.

I've gone off quite a few of the foods that I normally like. The whole pregnancy, I've been very finicky about what I've been eating really. One minute I'll fancy something and I'll have it every day of the week; and then the next minute I don't like that anymore and it's something else (laughs) (Rachel, 126-131).

As a result, they report feeling low, being fussy eaters, as well as difficult to live with, especially during the first months of their pregnancy.

I went, like I say, I went off the-I went off meat for a long time, but that's-that's okay again now. Um I've been eating more kiwis because I've been trying to for like the vitamin C. Um when I was sick I found it just really hard to drink anything. I went off tea as well, but that's all..., it made me, yeah probably quite difficult to live with because I didn't want to talk about food and I am still fussy (**Nicole, 451-453**).

The women reveal this to be a challenging experience but persist in trying to do the 'right thing'. Notably, they negotiated the period of fussiness while attempting to eat well at the same time. Women discuss changing their behaviours based on what they felt was best for the baby and the pregnancy. For example, Jessica pregnant for the first time explains:

I reduced eating crap foods and I have also been trying to reduce on how much I smoke. I have been happy, my sister cooks a lot of the time so I go to her place, also we have been trying to be together more with (boyfriend). He's been buying food as well, so yeah, trying to eat healthier because there is someone else to take care of (pats her tummy) (Jessica, 92-97).

These women show good mothering discourses evidenced by behaviour adaptation. Put differently, even with difficulties of morning sickness, women negotiated pregnancy while emphasising better food intake for the baby. Women continued to force themselves to eat and include healthy foods for the benefit of the baby irrespective of any aversions or morning sickness as Nicole describes:

I didn't really start showing for quite a long time and I didn't put any weight on because I lost so much with being sick and, you know, like not eating and I was sort of conscious that I was trying to eat- trying to eat enough (for the baby- RT emphasis)! But it was just so strange because normally I have to try to not eat too much, but I didn't, I just didn't want to eat. I just didn't want to eat and then, you know, after I ate something, like a proper dinner, like I went out and I had like roast

pork and vegetables, I really didn't want to eat the meat and I thought, "I should eat it. I need to have protein." An hour later I was just really violently sick and it's almost like my body just didn't- didn't want it, yeah, but I tried to eat more healthy stuff (**Nicole, 58-64**).

## 5.2.3.2 Strive for healthier food as the "right thing"

The experience of the pregnant women was that they strived for healthier food choices. Women report putting more effort into the quality of foods, including more vegetables, fruit and engaging in healthier food practices like adding oily fish and restricting takeaways in their diets. Accordingly, women reveal increased healthier food intake, striving for more fruit and priority of vegetables over other foods even at the height of morning sickness. For example, Jessica describes her eating habits as follows:

I guess my eating habits have always been normal, I always eat 3 big meals every day, but obviously this has changed. Also now I try to eat more veggies every meal. Previously I was not so keen on veggies and stuff like that.

## RT: What kind of veggies and why are you making this effort?

It's good for the baby (pats tummy) and yeah I feel good about it, so I eat like broccoli, carrots, peas, cauliflower, at least with every meal. Also I now eat more red meat, because like your taste buds change, so I have been eating more red meat than white.

#### RT: Was this different before your pregnancy?

Oh yeah, I used to eat more chicken because it's cheaper and stuff, but now I really eat a lot of red meat, beef especially.... when I eat, I eat good food, like roast spuds, steak- while previously I was just eating anything, go to the chippy or McDonalds, or some quick microwave meals (Jessica, 39-50, 98-100).

For **Jessica**, pregnancy was seen as a time to improve her diet in order to provide optimum nutrition for the baby. Asked why she was eating this way, Jessica narrated:

I have to look after myself now, I have to eat good food for the baby- I want her to have the best (Jessica, 171-172).

This positive change in her diet as Jessica asserts would also make her feel better, knowing that she has provided good foods for the growing baby. In agreement, Rachel describes her increased healthy eating since becoming pregnant specifying the changes as:

A lot of vegetables and fruit actually. (Laughs) I weren't that healthy before; but I'm like I'm always snacking on carrot sticks in particular. **RT: why?** (Laughs) I don't

know. Well, obviously I want to eat more healthily because I know I'm pregnant. But, um, I've just been really fancying that food as well. (Rachel, 136-144).

In "I've been fancying that food as well", Rachel implicitly reveals that sometimes food choices were probably not 'controlled' as the body wanted different things.

...for some reason we seem to have stopped really eating the takeaways as much. Um, I think we've been out for like a few pub meals; but that's been more like veering towards my... the meal that I like as a Sunday dinner, like carvery pub meals where it's vegetables and potatoes; which obviously I think is a bit better than a takeaway (laughs) (Rachel, 265-269).

For Rachel therefore, pregnancy meant a shift in the way of eating, either intentionally as an expectation to "do the right thing" for the foetus, or unintentionally as a result of food aversions and what the 'body' wanted.

## 5.2.4 Weight consciousness and body image concerns a reality

The findings show that women were constantly aware of their bodies with differing levels of concern in regard to weight. Weight worries centred on unfamiliar pregnancy changes and body image insecurities. Also a history of no exercise meant that women were more worried about the postpartum body as hereby described:

#### 5.2.4.1 History of no exercise

For most women, there was no exercise pre-pregnancy even when they noticed increasing weight but only intentions to start exercise.

I think if I hadn't got pregnant I would already have started to join the gym a couple of months before because I knew my weight was slowly sort of creeping up so I was looking. It won't have gone any further than where it was at the time but obviously when got pregnant and so nothing really! Em I didn't feel worried I was starting to feel not as comfortable in myself. I couldn't get into my clothes if I couldn't fit into the clothes yeah that's when I could say that's enough now em. I could still fit into my clothes before so it wasn't a worry for me it was just that I could I knew that things were creeping I knew that I wasn't as active as I was in my last job so I needed to do some exercise cos there was nothing wrong really with what I was eating (Angela, 351-364).

Women who had previously tried exercise attributed it to social events such as attending a wedding or getting married where they would be "judged":

...going back to trying to eat a bit better I did then try and do some exercise to kind of boost it (weight loss), in about March time em but that was but then my sister got married in April so that was more like a focus (**Amber, 485-487**).

Rachel also describes social events of "body display" as exercise motivation;

Um, I think just before we got married we did join a gym but, um, it's about 20 miles away so it was quite a drive to go. Um, especially like when I'm working these shifts, it's kind of like where do you fit the time in? Um, we've got a dog as well, which my husband walks the dog every day; but since I've been pregnant I've been too lazy to... I'm so tired after the work that I'm not really doing as much enough exercise as I should be. Um, and then in terms of the eating obviously I, if I try and calorie count now or like not eat much.

### RT: Why did you join the gym?

Um, just because I think we both knew we was quite chunky and we wanted to look nice for our wedding. Um, I think we'd both lost about a stone. But then after the wedding it just kind of stopped and we just ended up giving up with it (Laughs) (Rachel, 291-306).

Women relate exercise with expectations to look good on social events where the body goes "on show". In pregnancy, women's narratives reveal that any previous weight management regimens and intentions appear to stop, replaced by concerns about the health of the baby. These women generally do not like exercise and food restriction appears to be the only preferred way to maintain ideal weight especially in pregnancy. Moreover the women reported no regular exercise before and during pregnancy except intentions to exercise later.

Um, so I'm trying to count my calories and I'm definitely eating a lot more fruit and veg and stuff. But in terms of exercise I'm just way too tired. I'm just hoping that my energy is going to peak soon and I'm going to be able to do some exercise (**Rachel**, **317-319**).

In preference, women found it easier to "watch" what they are including food restriction or even constantly taking their weight measurements in order to keep an eye on their weight.

That's why I think I weigh myself because I think it can creep up and, you know, it can sort of like creep up without you realising that it's happening um so... yeah just to-

just to cut back (on food intake) because I have... I've really struggled with getting any exercise in. I've never been brilliant because I don't really enjoy it! ... I struggle to get any kind of exercise (**Nicole, 174-183**).

These excerpts demonstrate women's relationship with exercise as largely socially motivated when circumstances called for women to look good and in shape. Accordingly, the women report preference of 'watching' what they are to exercise in their everyday lives.

#### 5.2.4.2 Lingering pregnancy weight worries

Women reported worries around weight gain during the pregnancy that may persist after the birth evidenced by hopes to start some exercise postpartum.

I do think that a year after this next one's born then I will be panicking about looking a bit better, about getting my body back. Yeah well if I wasn't pregnant now I'd kind of be at the stage when I feel that I could focus on it (weight loss) whereas before it was well I need to be focusing on the baby em whereas now I feel that I could do a bit more be a bit more focused but I can't (Amber, 503-509).

Weight concerns stemmed from either previous experience of difficulty with postpartum weight loss for second time mothers or from need to preserve body image for women pregnant the first time. For instance Nicole, pregnant for the second time, describes her weight management efforts:

I think I put weight. A bit of weight on after the birth and I didn't- I didn't lose it, you know, they keep saying, "Oh, you know, you'll lose it" and some people said, "Oh when you stop breastfeeding then you'll lose it." But I didn't stop feeding her until she was two. So when she was about 18 months I thought, "I really need to just do something." Um so I just did um [using an app] count the calories and I found it, you know, quite useful and then I only did it for a short time, but I lost a stone and I felt a lot better, um but then after I thought, right! You know, because I looked at the BMI and I thought, "Oh I should've really lost a little bit more." Um but then when I got pregnant I was like, "I'm not doing it now." But it's just made me a lot more aware of how, many things like I tend to now weigh my rice and pasta, whereas before I just used to... (Nicole, 89-99).

In contrast, motivations for weight concern and watching weight in women pregnant for the first time, expose body image insecurities. The women view pregnancy weight changes as unfamiliar and out of their control, and try to avoid excess weight gains while focussed on foetal health.

I'm obviously concerned that I don't want to put too much weight on (laughs) which I don't want to do so I am kind of keeping an eye on my weight

#### RT: How are you doing that?

Using the scales (laughs). Once a week at the moment. The reason I do that is because I weigh people once a week [part of my job] so I have to check myself. It is quite regular, I won't usually weigh myself once a week prior to this I would weigh myself once every two or three months if that. So I am sort of keeping an eye on it.

#### RT: So have you gained any weight

I have I've probably gained 1.8 – 2 kg about 5.5lbs so but yeah my clothes are starting to feel tighter now. Things are starting to feel about well I don't feel that I have got a bump like bigger than normal. Em So I am concerned that I don't want to put too much weight on (Angela, 142-161)

As a result, food behaviours were influenced by women's worries regarding their body image and weight status as a result of pregnancy. For example, Jessica, narrates how her sister's pregnancy weight gain motivated her to be watchful so she doesn't gain too much weight:

Although I feel tired sometimes, but I feel good in myself. I don't think I will put on a lot of weight like my sister- she has gained weight every time. So I try to eat well, eat at least one good meal a day instead of a lot of rubbish. But my body, I don't think I am worried about putting on a lot of weight. I also walk everywhere, especially now, with all the appointments, signing on, looking for houses, looking at girly stuff in shops (Jessica, 126-132).

Further, women report experiencing weight concerns specifically if they started the pregnancy overweight or obese. Interestingly these women report the risk resulting from their overweight status perceived only for the baby and not for the mother. This is because the baby's wellbeing was priority and determined health behaviour.

So, I'm kind of like do I just wait till afterwards now or? It's very difficult to know whether I, I try and lose a bit of weight while I am pregnant or just wait till after. Obviously the baby's more important than whether I'm thin or fat really at the end of the day (Rachel, 400-403).

It appears that all the women were conscious of their body weight changes during pregnancy. Women reveal being faced with the unfamiliar weight changes brought by pregnancy and having to weigh up the constructs accepting of weight gain in pregnancy with the usual gendered body image concerns. The huge focus on the baby in pregnancy diverges the focus on the self hence describing how women negotiate

pregnancy in regard to weight. Also social constructs are clearly influential in women's experiences as hereby explored.

# **5.3** Social cultural constructs of pregnancy

Women's voices reveal strong social cultural aspects that influence and determine their journey to motherhood. These include relaxed pre-learned behaviours and social expectations which determine and influence women's behaviours in pregnancy. The view of pregnancy as a public affair meant women were subject to expectations, advice, and practices to take into consideration and hence impacted on their food behaviours.

### 5.3.1 Pregnancy as a public affair

Women describe the way in which an otherwise private matter is suddenly in the public such that once the pregnancy shows, there appears to be more concern towards the women even from strangers. This is seen in women's stories where they negotiated relaying pregnancy news as already described. Additionally, some women received comments and unsolicited advice from strangers in regard to food and weight. For example, Nicole recalls unexpected comments about her eating during pregnancy as: ...someone else was like, "Oh make sure you're getting enough calories" (Nicole, 85-86).

To concur, Amber describes an encounter with a work colleague:

In fact recently (a colleague) asked me to stop eating, no actually to stop drinking Pepsi and offered me orange juice! I really wanted fizzy pop, and I just said I just wanted that. But we rarely talk so I found it quite nice of her to offer I guess. You know, take water at least (laughs) (Amber, 90-93)!

For Amber, this was in early pregnancy when her bump was not yet very visible, but work colleagues knew about the pregnancy. Receiving comments and advice from strangers shows how pregnancy becomes a public affair and no longer a personal event. In the same light, Jessica narrates being approached by a stranger in this excerpt:

Something funny, a few days ago someone asked me to stop smoking if I love the baby. I was from seeing my midwife at the bus stop and was smoking then this lad walked to me and said, you want to stop that (...) if you love your baby! I just laughed about it and told him I had reduced my smoking. He said, yeah keep at it. So yeah, made me think people still care (Jessica, 152-158).

For Jessica, a stranger giving her advice and encouragement to reduce smoking for the good health of the baby shows public interest and recognition of pregnancy, with an expectation that everyone cares for the health of the baby.

These occurrences although described casually by these women and their insistence that they weren't offended, highlight the social description of pregnancy allowing public monitoring of behaviour. This was experienced in the form of people wanting to "feel the baby", to offering unsolicited advice, and recognition of pregnant women in public spaces as well as feelings of being judged.

### 5.3.2 Pregnancy expectations and practices

The public nature of the pregnancy prescribes expectations on behaviour to which women must conform or be alienated. Specifically, the women reported expectations of increased food intake and an accepted large pregnant body.

#### 5.3.2.1 Acceptance of increased food intake

Women's experience of pregnancy food behaviours was described in reference to social expectations around morning sickness, cravings and aversions. The expectation to experience somatic symptoms predetermined women's response and they reported being more attuned to these symptoms. Early in pregnancy, women describe expecting illness, which reduced their food intakes as already described. In later pregnancy however, women reveal an expectation of cravings and therefore increased food intake.

...the first few weeks, I just felt a bit nauseous but I was pretty much normal. Maybe about, hmm, five, six... about eight weeks it started to get more that I was fancying certain things and stuff like that (**Rachel, 87-89**).

The expectation of cravings and increased food intake was in reference to the experience of family and friends or from previous pregnancy experience. For second time mothers, this expectation of somatic symptoms was reinforced by their previous pregnancy experience as illustrated by **Amber** in this narrative:

I've not had any sickness I've not really had any significant cravings although I have noticed with my first pregnancy I drank loads of milk and milk shakes I'd never drank milk shakes until I was pregnant last time. And I really wanted milk shakes, flavoured milk, any milk and I just thought that I was obviously needing the calcium em but then I've not done it this time so I realised that it probably was a craving and not just or I think it's good for me so I'll have a glass of milk. Em so I've not noticed erm me wanting any more milk than usual so far so my calcium levels must be better this time don't know but err but now I've started noticing that I'm fancying orange juice a lot more this time em and it's just been the last sort of three weeks em but apart from that I don't know when you get cravings if it's more later on (Amber, 34-45).

In comparison, women pregnant for the first time report expectation of somatic symptoms related to the experiences of family and friends.

Yeah, do you know, I don't take biscuits and a lot of sweet things. My sister always eats a lot of biscuits, like craves them in pregnancy but I haven't, apart from the ginger biscuits I was told to have whenever I feel queasy, but I didn't like them. Yeah maybe things will change, I don't know. I know at least I am eating more vegetables which I never used to eat- every meal, and that's good, also I am enjoying eating more meat, but I haven't started eating fish- you know the good type like salmon. I don't know, maybe I crave red meats, because I've been eating a lot of it, but don't want to look at chicken or white meats (Jessica, 161-168).

For Amber and Jessica, their narratives highlight the expectation of cravings, but also shows their awareness of eating habits, what they were not eating and most importantly what was healthy or not. The descriptions of behaviour like "I've started noticing that I'm fancying" and "maybe I crave more" were a rationalisation of expected cravings.

Indeed once the morning sickness had eased off, women's stories centred on their expectations such as more cravings, feeling hungrier, and needing to snack more. As a result, food portions reportedly increased and women rationalised this increased food intake as a body's need for extra calories.

...I did find myself going for crisps quite a lot with my lunches, which I usually wouldn't do em so I thought I better swop it for something like crackers instead which are lower in fat I suppose. Um yeah but other than that my appetite has not changed I don't think but I do for some reason [have] like a niggling feeling that I need to eat more and I don't know if that's because I'm not as busy at work at the moment so I'm sort of sat more in my office. I don't know if it's a boredom thing or whether it's actually something that, I don't think I am feeling hungry more um but I do think I am snacking more in between the meals than I usually would do (Angela, 60-77).

...(irregular work shifts) that's just a nightmare to be honest because I'm hungry all the time (Laughs). By teatime I really, I get so hungry I either get some snacks now, like an apple and maybe some crisps or... just try and snack until I've got a chance for a break. But usually I don't get any tea till about seven (Rachel, 175-189).

Both Angela and Rachel describe how they have introduced snacks to fill gaps, described as "niggling feeling" or "always hungry" without having to 'explain' this change. Indeed when the pregnancy is well established, there appears to be an alteration in women's view of eating habits and certain foods like chocolate, crisps, from being "guilt eating" treats to a normal part of snacking. For example, Nicole explains her experience of shifting from careful eating, to freely including cake and chocolate. This was after initially being told she had a very high BMI at the start of the pregnancy.

I was quite worried and that had a really negative (emphasis) impact on me I think. Because of that I didn't eat properly because I think I was, I wasn't calorie counting, but I was thinking, "I've got to be careful" and so now I'm eating the cakes and the chocolate, but I wasn't then and I was really like being, trying to be careful. Then when I went for my booking ...my BMI was 28 and I told the midwife and she was like, "You're absolutely fine, you don't need to worry" and everything. So then that changed because I think up until that point I'd had the sickness, but I was also like trying not to over eat because I was worried about putting on too much weight because my friend had said I could only put on six kilos to have a healthy pregnancy or something (Nicole, 547-556).

Importantly, weight concerns, previously the focus of women's inhibition are replaced by the cultural legitimisation of increased food intake during pregnancy often reinforced by HCPs (as in the case of Nicole above), close family and friends.

Well, my sister keeps saying I need to eat more, she is always throwing food at me but I have been having a low appetite, but hopefully it will get better (**Jessica, 175-176**).

Moreover, disinhibition and indulgence occurs later in pregnancy emphasizing intake of previously "guilt" or "treat" foods. Even though it was not explicitly stated, the 'eating for two' adage appears well embedded in women's experience of pregnancy seen in the reports of eating more while not feeling guilty or necessarily hungry.

Err, I don't think I am feeling hungry more um but I do think I am snacking more in between the meals than I usually would do, but like I say prior to being pregnant I was quite busy so I didn't have time to snack whereas now at the moment I'm a bit quieter so I do have the time in between and I don't I think it is more boredom (Angela, 76-80).

Even when women instead attribute this increased snacking to boredom as is the case of Angela, they do not state feelings of guilt previously associated with this snacking behaviour. Reduced feelings of guilt when women added extra portions, or had more "forbidden" foods in effect, describes a period of self-indulgence without worry on its impact on their bodies or weight status. To illustrate:

I used to do (a portion of 75 grams), at the moment I'm doing 100 again because I'm really hungry and I'm pregnant and I think, You know, I don't need to (pause-?eat less-RT). So I'm not going thinking (pause). I'm really conscious of what I eat, but I'm also eating probably more biscuits and cake and fatty things than I would do if I wasn't pregnant because I'm sort of just (pause) but I'm not eating, you know, takeaway every day or things like that so (**Nicole, 100-104**).

Nicole's narrative reveals relaxed weight consciousness as a result of pregnancy, specifically accepting of increased food intake while rationalising this behaviour as 'acceptable but not too bad'. She adds,

I think like people say to you, "Oh you're pregnant, you can eat whatever you like" and I don't...and I don't agree with that and I've. I've tried to be more- more careful, but I think because I'm like so tired um and because it's cold and things you just kind of think, "Oh, you know, it's easier to do that" but I'd sort of tend to eat all the fruit and vegetables as well and then have that (treat), but, so (long pause)... but I don't think I'm gaining excessive weight so um I'm not too- I'm not too worried and because I ate for those first 18 weeks so little um I sort of thought (Nicole, 111-119).

In this narrative, even though Nicole states not subscribing to the social expectations of "eating for two", her increased food intake clearly rationalises pregnancy indulgence.

...I'm just pretty much eating- eating everything now except that I do (pause) I am having more (pause) craving more chocolate and things (**Nicole, 451-456**).

Asked why she was having more chocolate and sweet things (cakes, biscuits), Nicole argues that it is because of a faster metabolism when pregnant and seeming to get away with previous dairy intolerance as a result.

Normally I don't eat milk chocolate because I can't really have lactose and it makes me like have digestive problems, but I think because your metabolism's faster when you're pregnant I seemed to be able to get away with a little bit of it...(**Nicole, 463-466**).

However, the women make no mention of the effect these behaviours have on their weight status, suggesting accepted and increasing self-indulgence with progressing pregnancy. Therefore, pregnancy appears to prescribe increased food intake, relaxing women's behaviours from 'guilt-eating' to self-indulgence, in keeping with the 'eating for two adage'.

### 5.3.2.2 Acceptance of a bigger, pregnant body

In addition, women also acknowledge the prescription of a slender ideal triggering constant food restriction in their adult lives. However this slender ideal was temporal, allowed outside pregnancy. When women are pregnant, they describe a social acceptance and permission to be bigger due to the pregnancy. Women's stories highlight a battle of wills between learned food restriction, the ideals of the slim body, and the cultural acceptability of the large pregnant body.

I have I've probably gained 1.8kg – 2 kg about 5.5lbs so but yeah my clothes are starting to feel tighter now. Things are starting to feel about well I don't feel that I have got a bump like bigger than normal. Em So I am concerned that I don't want to put too much weight on (Angela, 156-161).

Specifically, women describe a desire to show off the pregnant body, in a way, to confirm that looking big was accepted and no need for weight worries in pregnancy.

I can't wait for the tummy to come out. Although I feel tired sometimes, but I feel good in myself. I don't think I will put on a lot of weight like my sister- she has gained weight every time. So I try to eat well, eat at least one good meal a day instead of a lot of rubbish. But my body, I don't think I am worried about putting on a lot of weight (Jessica, 126-130).

I've noticed that kind of like my body making a bigger change now and as I described my stomach is now getting in the way you know. I want it to show but ...it's kind of

that you remembering how awkward it gets yeah so the last couple of weeks have been kind of like that slight extra bit of uncomfortableness here that I'm thinking I'm remembering oh no it's not going to get any better from here (**Amber, 146-150**).

Both Jessica and Amber describe desire for the bump to show without worrying about looking 'fat'. Instead, the worry was about comfort of the larger body, but not weight. Consequently, women's food inhibitions were fewer moderated by plans to exercise postpartum but also ability to hide weight increase under 'pregnant body'.

I'm kind of thinking in my mind that when I've had this baby then I'm going to, you know, check my weight and everything and I think when you're pregnant you can't really tell. I mean I do get weighed most days, so I'm sort of seeing (**Nicole, 115-117**).

### 5.3.3 The effect of social support and relationships

The women's stories reveal strong reliance on their social networks once the pregnancy is established. Women undergo relationship affirmation starting from hierarchical plans to relay pregnancy news, to more contact with family and friends in their pregnancy journey.

### 5.3.3.1 Role of partners on pregnancy and food behaviours

The women describe the desire to have children as a way of showing that things are good with their partners. Whether married, cohabiting or in a relationship, pregnancy is seen as a confirmation of love, an affirmation of commitment in the relationship and women reveal feeling closer to their partners. Accordingly, the experience of pregnancy relied on the support from the partner. For example, Jessica describes her relationship with her partner since pregnancy confirmation:

I told my sister, she was really happy then I also told my boyfriend and he has been supportive. We've started going to shops to look at things, I think about little dresses, and go to shops quite a bit, you know (Jessica, 31-33).

For Jessica, having the pregnancy has added to her being closer to her boyfriend and even seeing more of him as she narrates.

Well, there hasn't been anything (to worry about), so nothing really, but he is supportive, he asks how I am and tries to see me every day. He picks me in his car

and we go to his place. Everyone is happy, even my boyfriend. We've been spending more time together and talking about the baby. But I cannot stay long at his place because he smokes and its not really nice (his place) (Jessica, 113-115, 145-146).

The texts show women's reference to their partners as important in their experience of the pregnancy. From being the first point of contact to relay pregnancy news and excitement or even worries, to being hailed as the number one source of support during the pregnancy, men played a primary support role in women's experience of the pregnancy.

I haven't really- I haven't really looked that much. So sometimes if my husband's worried, he goes and looks things up on the internet about one particular thing... He's very black and white and doesn't talk about feelings, which is not very helpful (laughing) (Nicole, 314-316).

Further, women's partners were said to have a direct influence on food choices and motivations for eating habits in the home. There was increased flexibility on home cooked meals and men increasingly preparing the food especially in early pregnancy. Importantly, where women struggled with intemperance, the men appeared to contribute to this struggle in that they provided these temptations in the home. For example, Nicole and Rachel both self-described as weak-willed in their eating habits, relate the impact of their partners on their intemperance with treat foods especially chocolate, biscuits, ice-cream as follows:

Um, yeah, uh, um. The takeaways were with my husband. Before I met my husband I actually weighed about four stone less (Laughs). I didn't really eat takeaways until I met my husband. (Laughter) So, yeah, I put a lot of weight on when I met him...Um, and then in terms of the eating obviously I, if I try and calorie count now or like not eat much my husband's not very good at he's got no motivation. And, um, he'll still buy the fattening foods. Like he'll buy a pack of cookies or, um, some sweets and then like I end up eating them. When I was living without him I could kind of not buying them things; but because I'm with him now he buys them and then I eat them (Laughs) Rachel, 245-257, 297-301).

Rachel describes lack of control on her part but also lack of support and understanding from her husband in regard to her desire to monitor and restrict food intake and subsequently weight management. This is a clear example of 'guilt eating' and how men play a role in amplifying behaviours.

Um, well I feel awful any time I eat anything to be honest. I'm really beating myself up at the minute about the food that I am eating. Because I'm, I'm, I'm keeping a food diary on my fitness app like how many calories I'm having a day to try and keep it a bit under control (**Rachel, 311-313**).

On the other hand, Nicole's comparison of her habits with her partner's describes men as being able to eat more of the same foods while not putting on as much weight. However, this could be a display of weak-willed behaviour suggesting preference of self-indulgence in one go while men spread out the treats.

He's always like supportive if I want to lose weight, but he's not- but he's not, he never sort of talks about it really or um but he's- he like he's quite conscious and he'll just suddenly he's quite good at, he's not greedy so I always think maybe I should just eat what he eats, but then other times if there's some chocolate, he'll eat it, but he won't eat the whole bar, but he might eat a whole bar over two days, just going back one piece at a time (Nicole, 435-439).

Interestingly, some women report increased weight gain for themselves and their partners during pregnancy. There appears to be a compassionate aspect subtly reported such that men also gained weight during the pregnancy. This is possibly due to increased food intake in the household during pregnancy. Alternatively, it could be as a result of men showing solidarity especially when women report increased body insecurities as they become bigger.

Well he puts weight on every time I'm pregnant so he can't comment and he never loses it so em so yeah, we are, errm...I think yeah I think sometimes you think you know like am I even the person he married (big chuckle and laughter) but then you know like I said he he's always said and he does put weight on when I'm pregnant so it's not like, its not as if I'm with someone who is really into his health and fitness and body because I think then I would feel more conscious (Amber, 516-523).

Indeed, no woman reported their men either discussing food and weight at any one point in pregnancy or voiced concerns regarding weight fluctuations. With women relying on their husbands as first point of contact and support in regard to information, the role of men in healthy eating and weight behaviour during motherhood cannot be underestimated.

### 5.3.3.2 Proactively seeking support from social contacts

Women's stories reveal the experience of pregnancy to be accompanied by deliberate efforts to seek support from family and friends. This support from family and friends was either due to their experience, or health professional background as 'experts' on pregnancy.

Yeah my friend's having a baby this week... yeah her or pretty much just the internet really and friends and family... I've got well my partner and the rest of my family ... again my colleague here who's pregnant she lives about five minutes down the road from me she is good. Yeah so I am hoping it will be nice to have that support em and my partners parents have both retired so they can help and my mum's going to retire this year so she'll be able to help as well so and then I've got quite a good circle of friends as well (Angela, 278-280, 296-306).

The women express seeking out support from family and friends during pregnancy but also planning for support once the baby is born. Of significance, women reached out to their mothers and female friends who had gone through pregnancy before.

...now and again, because I feel a bit on my own with it really because my husband's not very helpful; he's just, "Oh you'll be all right". And, uh, I guess ringing my mum really has been the main support that I've had because my mum obviously had children and she gives me advice and that. I feel a lot better when I ring her when I feel a bit stressful (Rachel, 478-482).

Further, women expressed more contact with friends and family who were medically trained as constant sources of support, as Nicole illustrates:

Another person who um was quite supportive in my early pregnancy, I haven't seen her much and she's a nurse, um and like she was supportive, but quite um hard. Like she would upset me because she'd go, "Honestly Nicole, the women on the gynaecological ward, they're on drips and they can't even see food. They're really ill. You're not that bad." You know, stuff like that and...but when I'd tell her what I'd eaten she's going, "Oh you're getting plenty of calories, you're getting plenty of nutrition. Don't worry." Which is kind of quite, you know, harsh but I think that was good because I think sometimes I was worrying (Nicole, 384-391).

The women talk about consulting family and friends who were either nurses or midwives, reaching out to them as their first point of consultation regarding the pregnancy as Amber and Angela narrate.

Actually now I think about it, it was probably my sister in law and then depending on what she said because a lot of it is verification of am I just panicking so I would speak to her first and then she'd say and she's a nurse although not midwife and she's had two children so I would kind of like if she's a nurse then she knows whether it's silly or not (Amber, 264-268).

(I consult) My friend's trained to be a midwife and then the NHS websites that I usually use (**Angela, 172**).

The women's stories here reveal reliance on 'expert' support from family and friends they trusted by virtue of either their experience as "having had children before", or by professional status as trained medical personnel or both.

In addition, the women referred to 'informal' health professionals and 'formal' health professionals as part of their support. The need for an authority that could be easily consulted when worried or unsure was voiced by all women more so for those in their first pregnancy. They desired support from HCP mainly in the form of reassurances regarding pregnancy worries and information gaps. Where women received formal support, their experience was positive and reassuring:

Well, my midwife has been brilliant, when I started to see them they went through everything with me... Sometimes if I want to find out something, I ask the midwives, that's why they are there and they are really lovely. They ask me how I am coping and explain things if I ask. I speak freely with them- because you see a different one most times (Jessica, 136-140).

Women who did not have easy access to midwives or HCPs as social contacts expressed desire to have a midwife as part of the support system.

Obviously I'm really happy about being pregnant, um, but I've had quite a few different things wrong with me: I've had a water infection; I've had a cold; I've had the morning sickness. It's all been quite stressful (Laughs). And the bit that's confusing is not knowing who you can talk to and whether you go to the doctors or ring the midwife. I've been quite confused with things at times. I probably end up Googling it or ringing my mum and seeing what my mum says. I'd, I'd love to be able to see the midwife if I ever could. Obviously she's got the most knowledge about pregnancy. She'd just give me a quick answer, actually you're fine; don't worry. But yeah, that don't really seem to be an option at the minute (Rachel, 451-459, 468-472).

In general women acknowledge the importance of HCPs, and desire that they be part of their support system beyond routine measurements during pregnancy. Specifically, for these women "knowledge was key", as they needed information and reassurance while transitioning through the unknown pregnancy territory. These women acknowledge the professional discourse and their understanding of pregnancy as important and reassuring, enabling the validation of behaviour during pregnancy.

#### 5.4 Social discourses

### 5.4.1 Technology trends (Digital discourse) and access to information

Women continue to report a strong reliance on the internet, having information at their fingertips, and using daily gadgets like mobile phones, tablets or computers. The digital discourse is widely popular such that all women express using Google as their first point of self-support behaviours when they were worried about something. The use of the word "google" was synonymous with making an internet search for information. The women's experience shows two trends; firstly, simply checking to see what information was available, and secondly, wanting to compare different sources of information.

# 5.4.1.1 'Google-ing'

Women report how searching the Internet for information increased during pregnancy. Often referred to as *Googling*, women describe using the internet to check on symptoms experienced, baby development, food guidance, unusual feelings in pregnancy or any queries and worries.

Googling (Laughs)! **RT: Sorry?** Googling on the internet (Laughs). I'm on a forum on the internet (name). So, if I have any questions I kind of ask them on there. Um, I've got an app on my phone as well. Um, that kind of like gives you little tips every day on what you should be doing and eating and exercise and well all stuff related to pregnancy. And then Googling, (laughing) I'm always doing it every day. Um, uh, if I've got any symptoms and things; but that's not related to the eating really. Um, but I've been looking at what problems I can get because I've got a high BMI (**Rachel**, **382-397**).

Having been informed of the risk of her weight status, Rachel narrates being aware that her high BMI might be a problem not only to her baby but herself as well and was searching the internet for more information. Also, Angela reports her experience:

I probably look weekly at the different stages that you might go through but that is pretty much it. Yes google and I check the foods you can eat... I keep forgetting which ones I can have em so I use that as a guide for things like cheeses and stuff cos that's quite there's all sorts of different cheeses (**Angela, 175-180**).

These women were generally active information seekers. The need for immediate answers and ease of access to the internet were the drivers of the vast use of the internet.

...a couple of people bought me a book and then em but then again I used to feel that if I wanted to know something then I would look on the internet (...) than reading a book that would go into stuff that I wasn't that interested in (Amber, 467-470).

Not surprising, women pregnant for the first time reported more googling behaviour and constantly checking the internet and forums. This, as Amber explains, could be due to navigating unfamiliar territory typical of first pregnancy and thereby seeking reassurances from others regarding this experience. Also the first pregnancy was seen as particularly exciting and the women wanted to know how the baby was developing and what it looked like.

Em I would say with the first pregnancy I was addicted to Googling things and so the internet was a massive part of information em and in life really generally it's if you want to know something (smartphones) you're just straight on aren't you whilst you're sat there oh how old is that person or what did they do before or twenty two weeks what would it look like now you know but I haven't done it as much this time because whether it's just that I don't have the time or it's not as new and as exciting (Amber, 204-209).

As a caution, some women acknowledge a difference in the quality of information accessed on the internet ranging from opinion forums, to research based evidence and NHS guidance sites regarding pregnancy. Some women were generally cautious of the information sourced from the internet.

(I) usually go for anything I want that's concrete evidence. Well just things like facts and things like that on food what you should eat I'd go to the NHS because its

evidence based but opinions and things it doesn't have to be NHS. There's things like forums and things you just type a question in and it comes up. The bits that I would need to trust I get from the NHS (**Angela, 282-291**).

#### Amber concurs:

A lot of it like like the (forums) things and that is peoples comments and so if I didn't agree I would just ignore them em but I suppose if I wanted something medical I would tend to go for like the NHS advice and something that wasn't opinions so if I thought should this be happening or I've got this pain or something I'd probably look at NHS guidance and then I would then maybe look at whether other mums had felt similar things and what they said and if that kind of matched then I thought well fair enough but yeah I would have I would take certain things with a pinch of salt when it's different people's opinions because it's all different isn't it (Amber, 243-250).

Whereas Amber describes being able to sieve through the vast information trusting particular sources over others, some women report not thinking about whether the information they read was factual and evidence based. For example Rachel admits when asked about trusting the internet.

I don't know. It could be wrong! (Laughing) I've never really thought about it (**Rachel line 407**).

Because some women were not aware of the polarising nature of information on the internet, if trusted sources are not used, information women read on the internet could be misleading.

#### 5.4.1.2 Corroboration of information

In addition, women report using the internet to corroborate different sources of information. This ranged from guidance they received from HCPs<sup>7</sup> and information received from family and friends. The reports reveal women using the internet in addition to other sources of information, as Jessica illustrates:

Sometimes I will google something when I come to office but I am not good (with internet) so I just ask my sister or wait and tell the midwife (**Jessica**, **141-142**).

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<sup>&</sup>lt;sup>7</sup> HCPs= Health Care Professionals

Likewise women report checking online to see if advice given was the best choice and sometimes to see if other women had been given the same guidance.

Yeah like the other night we were looking at the Food Standards Agency about um fish, about tuna, but it was actually for my daughter as well because she kept wanting to have tuna and we were worried about the mercury and I thought that-I thought that they'd said um in pregnancy you can only have one portion a week and the Food Standards Agency said you can have four cans, which is totally different. So yeah so I think we do use the internet, but try to find like a, you know, a government source or something or a university source rather than just some anecdote from another parent because that's not that helpful (**Nicole, 340-346**).

The contemporary digital behaviour (digital discourse) therefore was routine in women's seeking of information. Harnessed more when pregnant, women search the internet to learn more about their experience of pregnancy. The internet, used carefully, proved an important resource and reassurance when women had pregnancy related worries. The danger was discussed in terms of conflicting information and women's ability to determine what was factual, or anecdotal information, and treating it as such.

### 5.4.2 Emotionality of women's eating and pre-learned behaviours

Women report an intimate relationship with food all their lives ranging from "watching food intake", snacking, treat-eating, binge-eating, and "guilty eating" food habits. Most of this is socially learned and affirmed expectations centred on the slender ideal. In addition, women's food practices are influenced by early experiences of restriction and dieting, but also work environments that encourage dieting, desk eating and food as a social event. Certain foods are seen as restricted, mainly allowed during celebratory situations and events. This inhibition is what defines the intimate relationship women have with food. For example, Nicole, talks about food restraint in regard to treat eating:

I think if I've already had something I won't (stop?), you know, but um I think I had bad eating habits when I was a teenager. Um I used to just eat like a whole packet of biscuits or something because all that...when we were growing up everything was a treat and I didn't want that to be like that for my daughter. So every time I...when I got my own money then I would buy crisps and fizzy drinks and, you know, sugary things and eat a lot of it. So I worked really hard to- to change that (Nicole, 440-445).

Here Nicole defends her lack of restraint when she gets treat foods like chocolate and biscuits. This, she attributes to her early life experiences of "lacking and rationing these foods" that she does not approve of in her adulthood. Consequently, Nicole describes removing the "treat" culture instead advocating for freedom to eat these foods in the home which could explain Nicole's being weak-willed. However, relaxed social pressures of the slender ideal, accepting of increased food intake in pregnancy, when coupled with previous learned behaviours and habits gave rise to intemperance as discussed.

I think it is a mixture of I think it's my body wanting it (re: fruit and vegetables) but whether its subconsciously my mind sort of saying do it and don't fall into the same habits of last time of thinking that as soon as you are pregnant then that's it brilliant you can eat what you like em because the first time I would eat healthily but then I would eat the rubbish on top so you'd eat double (Amber, 79-83).

Amber describes a tension in conflicting discourse, one of good mothering exhibited by a switch to healthful eating, and another of pregnancy as accepting of increased food intake and weight. Previous behaviours affected and influenced women's experience of their pregnancy revealing continuation of "mood" and emotional eating. For women pregnant for the first time, their weight and food behaviours were in comparison to pre-pregnancy behaviours while the women pregnant for the second or more times, aggregated their experiences relative to their last pregnancy.

Em I think it was just that you thought you were free to do it (eat more)... but em so therefore this time I started off em its a bad day for me for doing this (points to sweets and cola drink) but I had sort of I would say that I don't know if it is just my body wanted the fruit and veg and all stuff at that time or whether it was a bit subconscious I don't want to pile loads of weight on (Amber, 85-90).

What is common for all these women is a continuation of previous behaviours and expectations topped by disinhibition as a result of the reduced social pressures to conform to the slender ideal. Specifically, women describe a history of emotional and treat eating centred on sweets, chocolate and biscuits. The emotional eating habits were pronounced under stress, exhaustion, or bad days. Following *Amber's* story;

Em I think, I'm going to be ridiculous, I think I'm actually eating more healthily this time and I don't know whether that is em a realisation that the weight doesn't fall off

when you've had the baby the first time. I mean I have my bad days it depends how tired I am like today I'm tired (so) I'm eating lots of junk em but then I went through a stage of kind of about three or four weeks where I ate really healthily (emphasis) like not my normal eating habits I really craved vegetables I really craved fruit I really craved I went completely off pop and I was only drinking flavoured water if it was something different to water and I went through about four weeks of a period of doing that and then I don't know if that was something at the time my body needed and I've now I've gone back to normal and this is going to be normal or whether I'm just having a bad week and I need the sugar. Yeah (Amber, 49-59).

Amber describes not only her emotional eating in regard to eating sugary junk foods when stressed, but also her struggles with postpartum weight loss as a motivation for healthier eating in her current pregnancy. The women's experience highlights a history of mood and treat-eating which increased food indulgences during pregnancy in line with the emotionality of the pregnancy experience.

...its a bad day for me for doing this (points to sweets and cola drink) Yeah. Em so just for me like today I've had a sandwich and crisps and now crap (points to sweets and coca cola can) and that would be usual...( **Amber, 51-52, 71-72**).

### 5.4.3 Pregnancy as a medical discourse

The lived experience of pregnant women describes pregnancy being treated like an illness by health care professionals, HCPs. Women highlighted the medicalisation of pregnancy where health care appointments/visits were centred on tests and paperwork or "box ticking".

Um yeah I guess I am a little bit disappointed with how... It seems so long, I can't... It seems so long before you saw the midwife. Was it about 12 weeks or 10 weeks? I'll just get my record and it seems like a really long time, especially when you're feeling ill and sick and you want to see somebody. It should be in here. I think it says within the first few weeks, whatever, but I think that when you need more support um and when I went for my 16 week check and I was so sick she said, "Oh I'm sorry-I'm sorry we can't- we can't do more for you" and she said, "Normally now we don't see you until 28 weeks" which is 12 weeks gap, um but she said um, "When it's your second pregnancy..." but she said, "But I'll book you in at 24 so that you..." And then you're supposed to go to your GP in between, but I just don't understand why you need a GP, a midwife, GP, midwife (Nicole, 231-240).

From the time women contact HCPs, the advice given was centred on making sure there was no treatable illness with the condition.

And then, um, she talked a bit to me about the fact that I've got a varicose vein and a BMI that was quite high, and that she was going to write to the doctor to just put me on the aspirin. Um, and then she had a listen to the baby's heartbeat. Um, they didn't weigh me actually, which I found a bit strange. She said, "Oh no, we don't weigh you now". So, I don't know why they don't do that. Um, but yeah, she didn't really mention eating at all or anything like that. She took my blood pressure and that was about it really (Rachel, 424-431).

Health care professional appointments were characterised by tests at every visit, and a 'box ticking' attitude to the extent that some women felt that asking questions was an inconvenience as Rachel continues to narrate:

Um, I think at my first appointment my BMI wasn't even mentioned, the fact that it was high or that I might need some special help or anything like that. So, I think I definitely wish that they'd have brought it up with me straightaway and said like, um, try and eat more... Well, obviously I know in my mind that I'm meant to eat more healthy and stuff; but just maybe a bit more support from somebody rather than... I only got told last week really that it was a worry or a problem. So, it would've been nice to know at the booking appointment that obviously that I was higher risk; because I wasn't even told that I was a higher risk (Rachel, 498-504).

For Rachel, delayed communication of risks of her weight status coupled with not being weighed while being told she had a high BMI was interpreted as labelling people as fat. Not offering support on how to manage the weight to minimise risk, left Rachel confused. Indeed women felt helpless at times after these visits especially when tests were not explained.

I came back with my blood result from the doctors saying I'd got low potassium and they just said, "You need to re-test it" but they didn't tell me what it was or what it meant. So I rung the midwives and they said, "Oh it's, you know, from being dehydrated and from the sickness. You need to just get..." And that made me really think I need to take care of myself and drink more and I managed to get it okay for the next week, but I didn't get that information like from the...when you're given the results. So a lot of it I think sometimes it's...you have to be quite pro-active to... (Nicole, 282-288).

For Nicole, that experience taught her to be proactive in seeking support, advice and care from HCPs regarding her pregnancy. Indeed, Jessica, self-described as proactive,

recalls satisfaction with her care from HCPs mainly centred on the development of the baby.

I see my general midwife often, she is brilliant, she feels my baby heartbeat, her development and it's lovely, she is really very good at her job. I have also seen my doctor and they have all been good. Errm, at the moment it has been more about the baby and how it's growing because my midwife feels my bump. Also it's also been mainly about my blood group and bloods (Jessica, 59-64).

In agreement that one has to be proactive, Jessica then goes on to describe how she freely asks questions and advice from her health care team. However women also expressed lack of HCPs paying attention to their needs and worries. For example Rachel discusses her frustration in this excerpt.

Uh, well I actually asked the midwife because I have had a few worries. And then I rang this number the midwife gave me to get hold of the midwives and the reception said to me, "How many weeks pregnant are you?" and at the time I think I was maybe 13 weeks; I said I was 13 weeks. She said, "Oh well, you can't talk to the midwives yet. You need to ring the Early Pregnancy Unit." And then she said, "Actually you need a referral from the doctor so you'll have to ring the doctor". So, in the end I think I didn't bother or something. (Laughs) I can't really figure out who I'm meant to see because the midwives I don't think they want to hear any problems until after 20 weeks because they're kind of like not sure if your pregnancy is going to carry on or whatever. And then Early Pregnancy Unit they need a referral from the doctors. And the doctors I don't want to be going there too often, every five minutes just about pregnancy when it's not really their (trails off-?their role-RT) (Rachel, 439-449).

Amber's experience of HCP support depicts the centrality of healthcare on box ticking while not paying attention to the needs of the woman or providing much needed advice regarding healthy behaviours in pregnancy. There was limited time and opportunity for women to ask questions during HCPs appointments;

Em not much the em basically filling out paperwork and em taking like blood pressure, blood tests that's at the beginning, I've only had two appointments so I'm trying to think em but not that I remember more with my first pregnancy being really disappointed with the lack of information that was given em and em I can't see that anything is different this time ... I just feel that with the first pregnancy in particular you kind of have maybe a lot of questions and sometimes there wasn't even the opportunity to ask. It was bang, bang, bang there you are go see your next appointment and it was very rare that they actually said did you have any questions for me and I know that then when I was kind of armed with me "I must ask this because I don't have a clue". I think it was one that at one time, one was the MatB1

form which I needed to fill in and then I really struggled to kind of butt in and say I need to ask a question where do I get my MatB1 form and it was kind of oh all right and real off the cuff kind of answer and... (Amber, 336-352).

In contrast to Amber, Angela and Jessica reported receiving advice and guidance regarding healthy behaviours from their health care teams during their appointments. For Jessica, she reported receiving advice regarding smoking cessation but no advice regarding healthy eating or weight during pregnancy. While for Angela, the advice received at her first appointment after confirmation of the pregnancy was all encompassing.

She talked to me about food, iron em and she weighed and heighted [of] me and what else did she do things like risks in terms of if you are overweight and things and what else did she talk about, my partner asked a lot of questions. Yeah he was asking her a lot of different questions yeah so she gave us quite a bit of information about foods and what to eat and what to avoid she gave us information about sickness and things like that (Angela, 216-222).

Moreover, only Angela reported receiving detailed advice regarding healthy eating and weight management during pregnancy with the rest only recounting being given "Bounty packs" filled with advertising information.

Um, I was given, at my first booking appointment I was given some information about the Sure Start. Like I think that's after, like after the baby is born I'll do them classes, antenatal classes and... Um, but other than that I wasn't given any information about healthy eating. Unless you get like a Bounty pack and you get leaflets about bits and bobs like things you can eat and can't eat, like the soft cheese and that kind of thing. But I don't think there was really anything healthy eating related (Rachel, 486-491).

No um I wouldn't say no not as much advice I was just getting sort of em information... I can't remember exactly what they gave us but no anyway a lot of it was advertising type of things (Angela, 271-272).

In the absence of guidance and advice from health care professionals regarding food and weight in pregnancy, women tend to take on the cultural descriptions geared towards increased food intake.

# 5.5 Summary

The experience of pregnant women illustrates pregnancy as a journey towards motherhood influenced by individual circumstances, cultural expectations and discourses. These accounts reveal that women approach pregnancy and motherhood as a calling, a biological timing by age and a planned life event. They viewed their bodies as vessels for childbearing, necessitating early conception for optimum foetal health. Accordingly, women focus on preparing their bodies for the baby either before, in case of a planned pregnancy, or immediately after pregnancy confirmation.

The women show delight at achieving conception which is short lived as they experience the expected somatic symptoms. The early period of pregnancy is characterised by morning sickness, tiredness, nausea and going off food. Also, women reported mood changes, fatigue and describe themselves as difficult to live with. Even while negotiating morning sickness, women's focus on the health of the baby meant that they forced themselves to eat healthily, choosing fruit and vegetables over other foods. These attempts are described as 'doing the right thing', and tenets of "good mothering" behaviour. It is clear that women link food to emotions, in a way displaying previously learned emotional eating behaviours particularly 'treat eating'.

Further, weight consciousness and body image concerns are a reality in women's experience of pregnancy. Women highlight a history of little or no exercise, revealing a general dislike for exercise. As a result, food restriction was the preferred way of keeping an eye on the increasing weight expected with pregnancy. However, social descriptions of pregnancy allowed public monitoring of pregnancy behaviours and relaxed ideals of the slender woman body. As the pregnancy progressed, women reported increased food intake and cravings which when coupled with previous food behaviours, led to intemperance and relaxed weight consciousness.

Socially, women sought out family and friends for support specifically affirming their love for their partners, consulting their mothers and friends who were either seen as 'experts' by their experience or by health professional background. In addition, social

discourses were influential in women's experiences, particularly describing the digital discourse as cornerstone to their information seeking. They also highlight the way pregnancy was medicalised, focussed on illness and risk finding. However, the women viewed risk in pregnancy towards the baby and not to themselves. Consequently, behaviours were geared towards the health of the baby. The shift in focus from the self in pre-pregnancy to the baby during pregnancy means that women's behaviours considered only what was good for the baby with little or no consideration of effect on their bodies.

In conclusion, the lived experience of pregnant women during the antenatal period reveals strong expectations in terms of behaviour geared towards 'good mothering'. Women adjust to pregnancy by adopting previous food behaviours especially treat eating to negotiate difficult periods during pregnancy. Interestingly, women's body and weight consciousness during this period is mostly positive, while accepting of increasing weight. Women also adopt self-support behaviours as a result of having no control over the pregnancy, they rely on HCPs for reassurance but were often left disappointed. All these impact on women's experiences and practices regarding weight and eating behaviours while negotiating the good mothering discourse prioritising the baby.

#### CHAPTER 6: FOOD AND WEIGHT IN POSTPARTUM

### 6.1 Introduction

This chapter presents the interpretation of findings from interviews held with women in early and late postpartum. The aim was to capture an account of their lived experience through pregnancy and the postpartum period. It continues narrative ideas from the previous chapter in describing women's influences on their food behaviour during this transition. The findings reported here are from five women interviewed in early postpartum before 21 days after childbirth, and later after at least three months.

# **6.1.1** Participant profiles:

The participants were three first time mothers and two second time mothers, one was a student and the rest were in full time work during their recent pregnancy, with an age range of 22-35years.

Table 6.1: Biographies of postnatal participants

**Janine** a 33 year old first time mum, was working full time. She was told about effects of her high BMI of 31, might have on pregnancy outcomes. She worried about weight gain during pregnancy and health of baby. In postpartum, goal to be well enough to be a proper mother (care for the baby).

**Mandy** aged 32 years, also a first time mum, worked full time and is living with boyfriend. She describes an unplanned pregnancy, considered termination. Motherhood as a sacrifice, feeling isolated and no time for herself, and worried about weight in postpartum.

**Tara,** a 22 year old, first time, student mum, normal weight, now living with boyfriend. Pregnancy was not planned, but now seen as a missing part of life's jigsaw, feeling complete. Expected to eat more and show off pregnant body.

**Hanna** is a second time mum at 31 years and is married, was working part time. Self-reported BMI of 30.4 and lacks eating routine. Her pregnancy was planned and compared experience with previous one. Support from friends and internet.

**Fay** is a 35 year old second time mum, worked part time and is married. Pregnancy was planned but happened too quickly. Busy with toddler (older) and postpartum is more tiring, but not worried about weight.

### 6.1.2 Interpretation of findings:

In interpreting the women's stories, exemplar quotes are used to reinforce the case. The findings presented are an account of women's experience, what was important for them during this time from pregnancy into postpartum. The accounts will be described in relation to the research question highlighting potential effect of their experience on food behaviours and weight status. Three superordinate themes emerged from the data to include the start of motherhood **6.2**, the women's experience of being a mother **6.3** and finally the cultural constructs dominant in pregnancy and motherhood as a whole **6.4** as hereafter described.

## 6.2 Motherhood journey lived in pregnancy experience

Women describe their experience of pregnancy as a gradual process to motherhood. Expressed as a natural progression, the desire to become pregnant was posited on social expectations and eventually a marker of committed relationships. Women view their bodies as vessels to protect and nurture the foetus.

Pregnancy was described as an emotional and tiring time with an expectation of feeling ill requiring women to adapt. What was important for women during pregnancy was the provision of an optimal environment such that all expectations and behaviours remained focussed on the growing foetus. Accordingly, women prepare their bodies as a 'vessel', by adjusting their lives in the transition to motherhood.

### 6.2.1 Life changing event and a natural progression

For most women, transitioning to motherhood is seen as a big life event, changing their lives. Started from the confirmation of the pregnancy with a positive test strip, women describe the gradual process of accepting and adapting to motherhood. When it was a planned pregnancy, women started adapting their bodies in advance and express delight at achieving conception. On the other hand, when it was not a planned pregnancy, women recall shock and disbelief, followed by stages of acceptance and adapting.

Women who were trying for a baby recall being surprised that pregnancy happened quicker than expected but joyous at achieving conception.

Em I think I found out I was pregnant probably within sort of six weeks or so, yeah em we were trying but it was a surprise that it happened quite so quickly (laughter). Em I think we expected it would take a few months whereas I think it was that fast and... I think I'd em only come off the pill sort of a month or so, so it did happen quite quickly. We were expecting not to be quite so quick but er (hesitates) we were quite pleased (Fay, 25-35).

For women who confirm a planned pregnancy, this is a period of excitement and happiness as they freely share the baby news firstly with their partners and later with family, friends and colleagues.

Well, we'd been trying um, and my periods had been getting... my cycle had gone to like 35 days. And I was thinking has it? You know, I should have had my period by now. So, I did a test and it was really thin, positive. And I got (husband) to have a look and he said, "Hmm, might be" (Hanna, 45-53). But I wasn't expecting anything to happen because I hadn't got my periods back by that point (Hanna, 60-61).

In contrast, for women confirming an unplanned pregnancy, the two red lines bring surprise and shock followed by an agonising time, seeking agreement from their partners, debating when to relay news to close family and friends in order to get approval. During this time of decision making, the women describe a process of personal reflection and evaluation, accepting pregnancy as their duty and they refer to it as making the right decision. For example, Mandy, a first time mother recalls her shock and surprise when she found out she was pregnant. For her, the decision was a difficult one requiring self-evaluation and mutual agreement to become parents with her boyfriend.

Well, it was a surprise pregnancy for me and (boyfriend), we weren't planning to keep it from the start, so it's been a lot of decisions and surprises really...yeah, it was a difficult time really. It was strange for a while, you know, it had been a difficult decision for us, but then when we went on that holiday, we started talking about things, our plans and we thought, yeah, even if it's early, we thought we could care for the baby, so we all just agreed really. I remember it was an emotional time, so I started to worry, ...it was thinking about having to tell everyone, you know, it comes out eventually, and then I was looking at myself ... with a big tummy and all fat. Yeah, so I remember thinking about a lot of things, about my career, and things (Mandy, 27-50).

In the same light, Tara living alone, describes her experience when she found out she was pregnant and the decision to disclose to her family about her pregnancy news:

I was getting a little pain so I went to the doctors and he said "do you think you could be pregnant?" I said "oh no I'm just waiting for my period" and then when I thought about it I got a pregnancy test or my boyfriend got the pregnancy test. Then we went to the doctors once that was positive. Yeah it was a bit of a shock (Tara, 27-31). ... So I'd decided to tell them [my parents] when I phoned. ... It would give them like a week so literally that week I was ill and sitting in the house literally doing nothing really, just eating ice pops and then when I went down I was feeling better em but yeah I was just taking it easy and watching TV, getting over, getting used to the idea (Tara, 66-73).

For these women who confirm an unplanned pregnancy, the journey to motherhood is preceded by self-evaluation and need for re-assurance from their partners. The women describe this period as a very scary, emotional time, where they had to examine their lives and how the arrival of a baby would fit in as Tara narrates:

It's a bit scary at the start because I didn't know how things were going to go but it's quite a gradual, you get used to the idea of idea of having a baby (laughs). My boyfriend's been brill... you would think that he would be scared off but he's been brilliant he's been there the whole time. He was the one actually, I was the one a little more shocked, he was really excited (**Tara, 98-105**).

Generally, the women define pregnancy as a gradual process of adapting to this 'big life event' which necessitated reassurance and rethinking of other life plans. Pregnancy acceptance was interpreted as a progression in the relationship to either start or increase family size. The desire to become pregnant was in part to meet social expectations but also to confirm thriving relationships. For example, Janine, a first time mother describes her pregnancy as a natural progression and an expected course after marriage:

...the thing well, when I found myself pregnant I mean obviously been trying you know we're married and in a settled relationship and everything else (Janine 8-9).

In comparison, Fay, a second time mother recalls how becoming pregnant was not only a 'want' but a social expectation. All her friends were at a point in time of having second babies and therefore her pregnancy was in line with the social progression of her peers. The timing to increase family size could have been somewhat influenced by peers.

...(we go with) loads of other people with similar age children, I made loads of friends and we're now all busy having second babies, laughter (**Fay, 83-84**).

Moreover pregnancy was reported to be a marker for strengthened and committed relationships. Decisions to keep the pregnancy for women who did not plan the pregnancy reveal consolidated relationships and a commitment to start a family.

We were pregnant on the, it was the 18th of July, it is when he was conceived. And it was the September 25th, I think when we made the decision to keep him. So, we found out end of August, Yeah, a month... We had been to [gynae] hospital, had seen a counsellor while we were there, and had booked in to have an abortion. ...[but] we made the decision while we were away to keep it (Mandy, 167-175).

The use of 'we' in Mandy's narrative divulges a process of relationship strengthening, filtering throughout the narrative reflections of early pregnancy. In later pregnancy, women reveal how this acceptance resulted in positive adaptation to motherhood, suggesting pregnancy was like a missing piece in life as Tara narrates:

It was very good actually em I felt like, like about when I was pregnant I felt, it felt right like you know when you can hear a noise and you don't realize it is there until it comes off it's like I didn't realize anything was missing until I was pregnant. That's actually how it felt... (**Tara 95-97**).

Furthermore, pregnancy meant reorganising and planning life, factoring in care demands, and the possibility of the baby's early arrival, disrupting normality. Accordingly, women report making arrangements around pregnancy outcomes. This was a recognition of the demands of motherhood once the baby arrives.

Em I made sure I was doing most of the work during my pregnancy and it helps that I wasn't so ill except for the those first two weeks... I didn't feel that tired even though

I was on iron tablets they said I was anaemic anyway I didn't feel tired I didn't feel any of the symptoms a bit, I just carried on really, made sure I was at uni, the library most days getting it done, em because I thought if I was, it was better to do it now before the baby and have less work to do when I'd had a baby (**Tara, 124-129**). I had everything planned like I knew what I had to do if she came earlier than the exams I'd have to push it back to August but I didn't want to do that (**Tara, 272-273**).

In agreement, Fay described preparation for the busy early postpartum:

...this pregnancy I've been trying to sort of cook more than we need and freeze it so that I had ready ready meals (when baby arrives) (Fay, 338-339).

Once the pregnancy is confirmed and accepted, it is then that the women recall the beginning of motherhood, as a journey requiring a focus on their bodies to provide an optimal vessel for the development of the foetus.

# 6.2.2 Somatic symptoms affecting behaviour

Women refer to pregnancy as a highly emotional time centred on the baby and the women's expectations during this time. The feelings of surprise and excitement, shock and guilt that abound in the early days after confirmation are shortly followed by fatigue and exhaustion. Women report an expectation and negotiation of morning sickness, where they continually adjusted for the wellbeing of the baby.

### 6.2.2.1 Negotiating early pregnancy symptoms

Nausea and morning sickness are prevalent in the early months of pregnancy and contribute to feeling tired. All women report fatigue and lacking energy as an early marker of pregnancy affecting their behaviours. Feeling tired was amplified by having an older child to take care of as described hereunder:

Oh I was tired, so tired, really tired. But obviously you've already... when it's your first, with your first pregnancy you've only got yourself to think about, haven't you? But then when you've got, when it's your second pregnancy you've already got somebody to look after. Um, which was, it was hard because I was really tired (Hanna 74-78).

Most women reported feeling constantly nauseated and some morning sickness, especially in the early months of the pregnancy.

...there was a bit of morning sickness a bit at the beginning, feeling a bit queasy and what have you. And er, em... I had quite a bit of sickness and er, cos that changes how you eat doesn't it. So yeah, I used to live off breadsticks and things, in the mornings to make sure that you are [??eating-RT]. Yeah but other than that, it was perfectly fine (Mandy, 12-19).

They relate the feeling of being ill to what they expected and in reference to food. Second time mothers described pregnancy experience in relation to their previous one; whereby they acted and negotiated challenges based on their previous contextualisation of pregnancy.

Em, I think it was quite normal em em I didn't really have much morning sickness. Em although with my previous pregnancy I'd felt more sicker at tea time. And I'd found that it was actually sort of when I actually ate I felt better so, so this pregnancy I'd sort of made sure that I didn't get hungry as much. So I made sure that I didn't feel sick (Fay, 1-6). I wasn't actually sick I just sort of felt sick but wasn't, but once I'd eaten I felt lots better so I thought that that was sort of the key to avoiding any feelings of sickness. I'd make sure that I didn't get really hungry (Fay, 10-12).

In comparison, those who had no previous experience report an expectation of illness based on the experiences of family or friends.

...I was quite ill for like two weeks, I wasn't actually like physically ill but just sort of couldn't do anything, felt weak and then not eating it kind of got into a bit of a cycle. Then I was actually ill one morning and then I was fine for the whole the rest of the pregnancy. Yeah I had two weeks of being ill and then the rest of it completely fine (Tara 11-16). I called my mum up to ask her and she said that she was ill like that the whole way through with both me and my sister so I was like dreading it cos I literally couldn't do anything else apart from sitting on the sofa (Tara, 81-83).

The women expected to experience more sickness during pregnancy and describe feeling relieved when symptoms weren't as expected. Absence of intense symptoms like morning sickness led to perceptions of a 'better than expected' experience of early pregnancy.

I didn't get sickness, no. I did have some nausea and like I said tiredness. But other than that I was pretty much alright really I think. Um, not even, if wasn't even specific foods or drinks or anything. I didn't have any cravings for anything. And I don't think I went off anything either, food wise (**Hanna, 99-100, 110-112**).

The expectation of morning sickness had implications on women's eating. In general, women recall their eating experience in pregnancy to be in stages, starting with being

picky eaters and not eating much during the early months of nausea and morning sickness.

At the start it was there wasn't load of cravings it was just that I couldn't eat a lot of food. There was a lot more things that I didn't want to eat before like I say I use to eat a lot of fresh veg eat any veg but I started getting picky I didn't like broccoli anymore after more after the first two weeks I think that was because I was ill and I was eating broccoli at the start I just associated it with that. I didn't like BBQ smells at all, BBQ sauce BBQ smoke didn't like it whereas before I would (Tara, 448-451).

This was followed by going off food as a result of change in the palate while maintaining eating healthily for the baby. For example Janine, pregnant for the first time agrees in her recollection of her eating behaviours during pregnancy.

...my palate changed a bit you know in that I wanted more salty stuff em but also kind of more err vegetables things as well you know so which is not bad (Janine- 161-162)...but then I had the weird aversions as well there were certain things that I couldn't eat. I couldn't eat peas I couldn't eat carrots you know boiled carrots you know it was very odd so I was kind of like right ok we'll choke this down (Janine 164-166).

Food aversions reportedly put women off certain foods although women persistently continued to eat the foods they felt were essential for baby's growth as Fay narrates:

Errm, Oh salmon I went off salmon! ... I've it was sort of, really I didn't fancy cooking salmon or eating salmon and that was it... Again I did eat salmon a couple of times cos I know it is good for you, laughter and it is good for brain development of babies and things like that, so although I didn't really want it I did eat it.. Oh I cooked it, I didn't have a problem cooking it's just sort of the first few mouthfuls I had to force down and then I had to keep going (Fay, 265-284).

# 6.2.2.2 A change in behaviour towards 'doing the right thing'

Women's stories reveal a change in behaviours and practices adjusting to the idea of motherhood in terms of body preparation and life re-organisation. All women recall including multivitamins and supplements like folic acid in preparation for the pregnancy or after pregnancy confirmation. Adjusting behaviours involved reducing or stopping smoking and alcohol intake, while also trying to 'do the right thing' for the baby.

Those who had a planned pregnancy recount cutting out particular foods like alcohol and soft cheeses as foods to avoid, while purposefully increasing good foods such as vegetables and oily fish.

I already knew that em sort of that there are certain things you can't eat... so em cut out well to be honest there wasn't a lot to cut out really, laughter, I think the main thing was sort of soft cheese and things like and I don't like that anyway and blue cheese so it was easy enough to avoid. Em, erm (long hesitation) we, well I cut down the drinking again (laughter), although I'd sort of well I wasn't drinking a lot anyway, just sort of have a glass of wine on a Friday night, sort of cut that out again, laughter... it was sort of two or three times a week. Sort of glasses of wine but we I sort of gave up drinking while I was pregnant more or less I had the occasional [drink] but especially not in the first few months (Fay, 39-53).

Fay's account reveals prevalence of 'pregnancy food and eating' from the outset, and attempts to adhere to the health promotion discourse to optimise the foetal environment and reduce harm. In agreement, women who did not plan the pregnancy also report changing eating behaviours soon after pregnancy acceptance.

I made sure I ate more spinach and stuff and I was taking iron tablets and folic acid em vitamin D but no I avoided all the stuff they say, I didn't have stilton not that I had any but and things like that (**Tara, 56-58**). Yeah I don't really eat oily fish but they said you need to eat oily fish so I went and I bought some and I made sure that I was having a lot of spinach with the folic acid and I was more conscious of what I was doing and I'd avoid really like bad things, like McDonalds and takeaways and stuff ...(although I did have them if) it was convenient (**Tara, 189-197**).

All women were conscious of their choices and decisions regarding food, but women who did not plan the pregnancy recall extra attempts to follow good practice. For example:

I think I was reading a lot, about what to eat, about how to feel, I also felt guilty to be honest, you know that we didn't want the, you know [baby], so I was reading about good things to eat, also to make sure I wasn't doing something badly (**Mandy**, **63-65**).

For Mandy, feelings of guilt from not wanting the baby at the start, appear to underpin her desire for 'good mothering' and doing the right thing for the baby. The feelings of guilt can influence experience by strongly reinforcing behaviours. For example, two first time mothers who had not planned the pregnancy describe desire to keep "normal"

in terms of body image and routine. For Mandy, this was a continuation of previous weight management and pastime behaviour;

The gym, probably about once or twice a week, but then we walk quite a lot. Cos I've got some horses. So, we'd be out and about with the horses. And just generally up and active, I'm not a couch potato. I did stop going to the gym and stopped my membership at about 6 months, but generally, I did everything else so I was still quite active. So I would sport with my horses, erm right up until 3 days before he was born (Mandy, 98-104).

While for Tara, it was the desire to fit into her clothes sooner:

It sounds really pathetic, but I'd bought a new pair of jeans that I could only just fit into so I was going to sort of diet a little bit; I was really excited about wearing them. This was just before I found out that I was pregnant and I thought "oh no I'm not going to fit into them", laughter, it wasn't like too bad it wasn't horrible so that I was sort of thinking about it all the way through, so erm (**Tara, 168-174**).

In comparison, women who had a planned pregnancy, report no exercise before or during pregnancy. Hanna was previously mostly inactive due to work shifts but also reveals that keeping active during pregnancy was not possible due to developing pelvic girdle pain.

Um, some days I couldn't walk. Like usually I'd be able to walk to like (friend 1) and (friend 2's) house. And I found that... luckily (husband) was on night shifts so I had the car during the day. So, I just drove round instead of walking (Hanna, 508-510).

Women's motivations for change in physical activity were due to being shocked into healthy behaviour.

I know that I would be walking 40 minutes a day so you know and that sort of thing and I am quite active in my own way uhm but I'm not a dieter I never have been never been kind of like you know counting all the calories and everything else. It changed slightly in pregnancy because I lost quite a lot of weight I went the other way because I had morning sickness and everything else. When I went to my GP he em weighed me at 115 kilos (pause) ... felt more the way I em you know if I started you know em if you sometimes do feel a bit I've got to do this then you know I'd be walking to the supermarket over there. I'd be doing this I'd be doing that to kind of bring up your activity level a bit. Errm but so being told that I was kind of overweight ok! I knew I couldn't diet (Janine, 19-32).

For Janine, inclusion of physical activity followed being informed of the possible adverse pregnancy outcomes as a result of her high BMI which she found upsetting. It

was this shock that compelled her to healthy lifestyle behaviours although not necessarily to lose weight.

In summary, women describe the context in which motherhood starts, directly impacting on their pregnancy experience in relation to food and weight status. The women specifically reveal messages presenting pregnancy behaviour focussed on optimising the 'vessel' and how women absorb and accept the messages as part of 'good mothering' and doing the right thing for the baby.

The women then define their experience of motherhood in relation to childbirth and early postpartum hereby explored.

## 6.3 "It's a bit scary at the start..."and postpartum behaviour

Women's postpartum behaviour was largely defined by whether childbirth was a fulfilled choice, or not, and how quickly they recover after the birth. Women describe wanting childbirth to be a natural process with minimal medical interventions. Their stories reveal that the experience of childbirth was the cornerstone to postpartum feelings and behaviours. In addition, being a 'new mum' was a socially excluding time with women relying on support from healthcare professionals (HCPs) and their immediate family, notably their partners, as described by the following themes:

#### 6.3.1 Trust of HCPs and choice of childbirth

For all women, childbirth was a worrisome, emotional time with a desire for a natural birth. Women recall childbirth choice to have been influenced by previous experience or as a direct suggestion from their HCPs.

The women report previous birth experience helping in their decision making for the type of birth they wanted, and also as giving them independence and courage to request certain services. For example, Hanna shares her hopes from her previous birth:

It was excellent. Absolutely super-duper birth with [toddler]. And I really enjoyed it and I had the water birth and everything I wanted. And, um, the whole experience was really empowering. And I thought I can do this. I do believe that hospitals have

got their place and doctors have got their place with, with childbirth. But I, I do think that with a lower risk pregnancy that it shouldn't be a big issue to be able to have them at home. I thought it would be really nice to have [toddler] there as well, you know, at the birth. And I wanted to kind of almost have a bit of a guarantee that I'd be able to have a water birth (Hanna, 413-423).

For Hanna, her previous natural childbirth was empowering, and she wanted to have the same experience for her second birth in the comfort of her home. Indeed having achieved her childbirth method of choice was a rewarding experience as she narrates:

It was just lovely. Yeah. I'd definitely have another home birth if I had another child. Oh it was... yeah. I thought I'd have a bit of a battle on my hands or something when I said I wanted a home birth. But straightaway they were like, "Oh yeah, that's fine". ... by the time I went for my next appointment they said, "Yeah, the consultant has approved you for a home birth. It's okay". Every, but I remember every time I went to my appointment thinking, please don't let there be any protein in my urine; or please don't let my blood pressure have gone up, you know. And luckily everything was fine (Hanna, 475-485).

Hanna's experience highlights how previous experience empowers women but also how fulfilling women felt when they were able to have a childbirth of their choosing. In addition, women expected having a straight forward pregnancy to somewhat result in a natural straight forward birth. However, this was influenced by not only advice received from HCPs but also the "wants" of the baby.

I think mine was a very sort of straight forward pregnancy em I'd had previous daughter was C-section as well, due to, she decided not to come out (laughter). ...So my pregnancy itself, well both times, were very straight forward it was sort of the birth I didn't want a repeat of the first time so. All through my pregnancy I was saying I'd sort of wanted an elective C-section to avoid all the problems before, right until probably sort of 35 weeks when I thought actually (laughter) em maybe I'll try for a Vbac! ...it was actually the consultant appointment at the hospital that made me change my mind to discuss the elected C-section. I felt that, all he did was list all the risks of a C-section, nothing positive at all! Em, it didn't happen as he said (laughter)! ...I went for a scan and she was breach so then it was back to C-section. I just thought well that was fate, it was quite funny that I'd changed my mind and then the baby had forced my hand. ...It all seemed very much more relaxed I wasn't in labour for as long as last time because it was definitely going to be a C-section (Fay, 83-118).

Fay's story reveals her desire to avoid her previous childbirth experience by opting for a birth choice with a certain outcome. Her change of mind on receiving advice from the HCP is a recognition of the trust women have in HCPs; but also a confirmation of a belief that childbirth was out of her control, controlled more by the baby itself as she concedes that fate and the baby determined how she gave birth. Even at childbirth, the baby is given an active role, echoed throughout pregnancy, and this plays a part in women's behaviours and risk perception during this period which is largely focussed on the baby.

In comparison, first time mothers with no previous childbirth experience to rely on, describe birth decisions based on wanting a natural birth with interventions kept to a minimum. The information to make these decisions was mainly from HCPs, societal expectations and experiences of close family and friends. This is illustrated by the experiences of Mandy, Janine and Tara. The women's narrative also describe how childbirth was marred by events over which they had no control:

...had about 10 more hours of contractions em and then they just stopped! Yeah but when my membranes [waters] broke they had a bit of blood so they were worried about that and so they sent me up to the labour ward to be induced once I was an hour and didn't have any more contractions. Everything was fine but it just sort of stopped and then I was induced and it was 25 hours. And then but I'd had an epidural and so I'd had it so much that I couldn't feel myself pushing and so I ended up having to have a forceps delivery because I couldn't get her out on my own so she came out with the hands (signals position). Yeah the hands were above her face it helped, laughter (Tara, 290-297).

For women who delivered by their planned method, childbirth was straightforward, a good and rewarding choice, while for those whose birth did not take place as planned (for example, unplanned CS), the experience was upsetting, a disappointment for the mother and, as if it were a personal failure. For example, Mandy and Janine, both first time mothers recollect negative feelings of how their birth plans changed from a normal birth to a caesarean section:

The only problems (we) had were the last 4 days of it and then the one week overdue- so it was late. And that's when we had a lot of problems with it and we ended up in hospital but the rest of it was perfectly fine. Apart from having a caesarean (Mandy, 3-5).

Mandy's experience is in the context of a planned natural birth but the baby was overdue and later needed to be birthed by caesarean section due to arising complications. While Janine:

I had a TENS machine amongst other things and I would have had the birthing suite with the pool but I was only 2cm so they sent us home... I had gone from 2cm to 9cm so I transitioned at home (and I didn't progress) ...they decided to give me an epidural and ...got me to stop pushing for an hour and a half because they already had a woman who was already having a C-section em and then they didn't know if they needed to help (baby) out or whether if they would give me a C-section but as soon as they got me in there they weren't happy with the way that she was facing, so they tried forceps to get her out and she was born at [time] so it was quite a lot quite a lot of pushing for me but I can't say that I remember a lot of it (Janine, 487-501).

For Janine, like Mandy, childbirth was out of her control and she had to follow HCPs judgements and decisions for a safe birth, showing complete trust in HCPs through no questioning. However, even when women were relieved to have a healthy baby, they describe feelings of disappointment at not having a natural birth and how it affected ability to look after the infant, something seen as a personal failure.

There was only me and [husband] and em yeah it was (long pause), just it wasn't necessarily traumatic, I'm not upset by the fact that I had a caesarean or anything else you know cos I've read a lot of stuff about guilt and that sort of thing I don't. It's what needed to happen but... (Janine, 505-508).

Even though Janine states not being upset about having a caesarean birth, her "reading about guilt" shows a contradiction in her report of this experience. Janine's guilt appears related to her overweight status contributing to not having a natural birth, and hence seen as a personal failure. Her rationalising that "it was what needed to happen" could be a coping mechanism whereby she was reconciling with the difficult events in order to promote recovery. Indeed Janine continues, describing upset on events she still had problems with revealing determination not to fail:

It's all the things that happened after that! It was, I didn't have, I had well, em lots problems in the hospital because she wasn't feeding correctly em I had some brilliant support from a couple of midwives and a couple of midwives just wanted to fill her with formula and that sort of thing and it was quite. Em well I was in for four days and they started telling me by the second day that if I wasn't able to produce more milk that they would em start feeding her formula and I had to say no where I

needed to. Keep trying I need to keep trying, surely I've got a couple of days (**Janine**, **509-513**)!

It appears that women's experience of childbirth affects their health status postpartum, with women who had a negative experience reporting difficulty adjusting postpartum. This adjustment included learning to breastfeed the baby, responding to baby needs while taking care of the self. Indeed both Janine and Mandy described difficulty in adjusting, reportedly taking longer to physically recover and do usual things other than taking care of the baby.

....[we] have had difficulties you know I have just had to I have just finished taking antibiotics for a bladder infection which left me you know I was in bed all day Saturday I couldn't move you know and that sort of thing and I've just had ill health since the baby was born and I've not been kind of like jumping around and as active as I normally am em so (Janine, 471-474).

The experience of childbirth influences women's focus, coping and decision making regarding choice and risk. A negative experience of childbirth resulting in difficulty to cope may lead to development of postpartum depression shown to exacerbate overweight status.

#### 6.3.2 Postpartum rollercoaster and "survival" eating behaviours

Women's experience of motherhood shows a chaotic start as women adjust to caring for the new-born. There is a continued focus on the infant, women having sleepless nights and constantly worrying about the health of the baby. Accordingly, the postpartum period was said to be a time for 'survival', a 'rollercoaster'. However, women revel in the feelings of being needed as they adjust to motherhood.

The appreciation of becoming a mother is said to happen once the baby is at home, where the woman has full responsibility to care for the child. Women reveal that worrying about baby, illness and baby crying made early postpartum a tiring time. Unforeseen events such as changes in baby's health condition have to be adapted to as evidenced by Hanna's experience where her baby developed breathing difficulties following a successful home birth:

Oh, bit of a rollercoaster I think. Because I had a really good home birth and, um, obviously I felt good afterwards...and the next day everything wasn't- she was unwell [and taken to hospital] (Hanna, 557-558) ...suddenly she just looked like this really sick baby with all wires coming from her. You know?... I managed to hold it together. And then the night we came home, um, I had a massive crying episode for like, I couldn't stop for about two hours. It was horrendous! But I think it was probably that day for when your hormones plummet as well, you know. So, I think everything had just got on top of me because I'd been strong for baby in the hospital (Hanna, 637-654).

The experience of an ill baby in early postpartum affects women's psychological status such that their own needs become demoted to prioritise the baby as in Hanna's being "strong for baby". In agreement, Mandy narrates:

(Baby) was there for 10 days and I was there for 15 because I was in for 5 days prior... [but now] he is absolutely fine and touch wood! Ah, we have less time, with each other, because we got to be fussing around [baby] all the time. And I wouldn't say we've had less sleep! Well, I've had less sleep I guess and I've been in bed now-I feel bad for it! [Interruption] The caesarean, obviously is restrictive (Mandy, 181-194).

The early postpartum period as a time of survival, was characterised by limited sleep due to night feeds and baby sleep disruptions, tiredness, and movement restrictions as a result of post birth recovery. This meant a change in women's priorities where the self takes second place and more concern and attention remained on the new-born.

But since the birth everything has gone a bit topsy-turvy you know obviously I've not been em yeah I was in hospital for four days em my mobility was a little bit hampered by the fact that I had a leg bag on and things and em and she wasn't feeding properly she was screaming during the night and that kind of takes a toll and we were just kind of eating anything we could just to kind of survive you know (Janine, 457-461).

The need to "survive" during perinatal period clearly prescribes women to erratic eating habits, mainly based on convenience. There is a continued focus on the baby requiring women to adapt to baby needs, reportedly feeling constantly fatigued and sleep derived.

Em well at the start I was so tired like she doesn't, she didn't sleep very well but I am quite used to not having much sleep .... I am quite used to working on little sleep. It was that it was quite hard to just get any length of time to sleep it would be like two hours and they say to sleep when the baby sleeps but I needed to get my work done then (Tara, 133-138).

Women focussed on the baby's health and needs, with worries about whether the baby is well and feeding enough, whether gaining weight and the general health of the baby, resulting in inadvertently forgetting about their own health and needs. The women report feeling needed when they were taking care of the 'helpless baby'. This was very demanding, yet fulfilling as the women learned how to feed, clean, love and communicate with their baby.

...(on being a mother) I love it em just like I said before I felt that I was missing something now you sort of feel like you are important to somebody like em yeah it's been really nice it's been hard but I feel that I've grown up a lot. I feel like I can do anything now, now that I've done my degree and sort of had her and I'm more confident in myself (**Tara, 401-404**).

Uhm, although he is only five weeks old, so I just think it is a short term it will be like we are cut from friends but, long term it won't be! Because he just needs you they say, so we have to stay a bit more at home (*Mandy*, 251-253).

Consequently, the women reveal content to not only relegate their own needs prioritising the baby, but also to make social sacrifices. The description of "he just needs you, so we have to stay a bit more at home" reveals women's acceptance of 'good mothering' expectations.

With a focus primarily on the infant in the immediate postpartum, women priorities are to get into a mothering rhythm as well as recover before any healthy eating, and weight consciousness could be contemplated.

Well I mean it is just about survival at the moment and I am hoping that we have sort of turned a corner now at least so I can at least start providing you know food for my family you know in a better way em because yeah (Janine, 469-471). Now I don't really care I'd much rather be able to like kind of like you know em walk up to the park quite happily and that sort of thing that's more my goal. Is for me to at least feel healthier and be moving around than losing weight you know and that sort of thing so. Yeah that's the thing I want to be happy I want to be, it's more important for me to be able to push my baby around and show the world than to kind of be back in my [jeans]...but you know that's more important to me (Janine, 677-688).

Women recount care for the baby as most important in early postpartum. Moreover lack of time to cook meant that women's food habits hinged on snacking and mood eating.

Eat whenever you can! At the start I was eating quite a lot because when I was really heavily pregnant I couldn't eat at all cos she was right there on my stomach and I 'd eat a little bit and would get heartburn and at the start I was like quite hungry when I was breast feeding I'd eat so many biscuits (laughs) but health wise we still cooked quite fresh but not as much as we would cos like, we didn't seem to have much time, but like since the first month we've definitely gradually got healthier and healthier probably even more so than we were before (Tara, 330-335).

Women report being worried mainly about the health of their infant and whether the baby is feeding well or not. Also food behaviours were influenced by breastfeeding towards increasing breastmilk supply as Janine recounts on healthier eating:

I am only just kind of getting to the point where I can cook again and actually make sure that we are you know eating well which you know is worrying me slightly as I am having trouble with feeding her so I do feel that my diet probably has taken a toll on that so I am making myself sort alright ok I need to eat I need to eat some fruit make sure I am eating some fruit some yogurt and oats and all this and that and all these kind of funny things to help with milk production em but yes the last kind of couple of weeks of pregnancy plus this first couple of weeks of being a parent quite different- for me! (Janine, 461-467).

As women settle into routine childcare, eating habits appear to improve focussed on providing good food for the baby, although reported by only those breastfeeding. All women try to harness the routine of shared care and demanding motherhood;

I've had all that support and stuff, obviously it's a bit scary at the start because I didn't know how things were going to go but it's quite a gradual, you get used to the idea of having a baby (laughs) (**Tara, 98-100**).

The impact of this from the above quotes is a shift in women's behaviours regarding food whereby they integrate their needs with the baby's needs. We see a start of healthier food choices and options once women adapt to caring for the baby with hopes to make more healthy meals and take care of the self.

## 6.3.3 Support system and opportunities

The accounts of women in the early postpartum tell of their pregnancy and birth experience revolving around the social, professional, and informational support sought and received during this period. Information seeking was very high during pregnancy; more so for first-time than experienced mothers. There were three main

sources of support: HCPs, whose role was primarily medical; family and friends who have a social role; and the internet for accessing quick information, and engaging with others. In all this, the stories of women reveal a motherhood journey relying on the affirmation of love and commitment from and to their partners, as well as actively seeking support from family and friends.

### 6.3.3.1 Role of significant others

The stories of women reveal their experience of pregnancy to be centred on affirmed love for their partners. Women report growing closer to their partners during pregnancy and this making for stronger relationships, as Tara intimated:

Em it's probably made us stronger, em before I'd been quite, what's the word, I could get quite jealous easily errm, so I was a bit insecure about everything, I think that's with past relationships and stuff, but he's been there the whole time even when I was fat, makes me feel better and helped especially when I do go through little days when I like "oh I'm fat" or am feeling really rubbish. Yeah we were in a student house together we had separate rooms and now we've got our own flat (**Tara, 241-247**).

Therefore, partners were the preferred source of support both during pregnancy and in the early postpartum period. Women report discussing and reaching out to their partners if they were worried, and for emotional support.

Yeah, I mean, support wise, it's just (boyfriend), yeah. That would probably be it really (*Mandy, 20*).

Husband obviously. I'd like to say my mum but that wouldn't be true at all really (Hanna, 522).

Also, women reveal being supported by their partners in taking care of older children but also helping out with the baby as in these examples:

My husband. I should give him a mention! He is, is brilliant em yeah he looks after toddler more because obviously I'm spending lots of time with the baby so he's looking after the older one, but he's also very good with the baby (Fay, 301-304). (Boyfriend) has been here for six weeks (on) compassionate leave off work ... which has been much easier (emphasis), coz we do everything together. And we split (chores) quite a lot as well. So, when we bottle feed, generally (boyfriend) bottle feeds, coz I always think I breastfeed. If I bottle feed him, and breastfeed him, he might get confused, coz he can smell it. So, as a rule, and because it is something that dad can do, (boyfriend) does bottle feed, does all the nappies during the day as

well and cleans his bum. So, I will do him on the night time, so we just split everything (Mandy, 325-336).

Even though women report mainly the support from their partners to be centred on taking care of and meeting the needs of the infant, their role in providing emotional support and encouragement during this period presents an opportunity to champion healthier eating.

...he always feels guilty cos the problem we've been happening is with the food (breastfeeding) which is me and he wants to support me as much as he can. Em so he sees me getting upset about my breastmilk about all this sort of thing but he can't do much about it but he can do things like formula feed and that sort of thing and that's the thing because then mummy isn't confusing her too much because then she associates formulas with daddy. So you know it's all this thing about you know em cos even then food and that sort of thing is fundamental obviously you know I'm having issues but he wants to support me as much as he can. He will give her the formula if she needs it so you know but he you know makes sure I am all right you know he's very he's absolutely supportive and I couldn't hope for anything more and I am very very lucky...he is on six weeks holiday (Janine, 550-562).

While focussing on the baby during this period, women were appreciative of someone sharing the baby chores but also taking care of them and supporting them navigate the difficult times. Family and friends were useful for giving guidance regarding nutrition and food choices and what to expect in terms of somatic symptoms, and eating during pregnancy for first time mothers.

So far my parents have provided me with support and his parents have been as well em just like looking after us when we go down, make sure we are eating all right and that lot, resting but then a lot of the time I've been up here and they live down south so it's just been really my friends (**Tara, 110-112**).

In contrast, for women with older children family were sought regarding childcare:

...my mum was there during the birth. Well, she came to look after [toddler] and she took (toddler) for a walk and came back, and luckily they were back just in time to see the baby being born. Which was perfect timing wise. But I didn't, I didn't really see her much during the pregnancy. ...Husband's family have been really supportive. Um, you know, they've been like looked after (toddler) if I've when we've had plans to do things or whatever when I was pregnant. Towards the end of the pregnancy, um, I had a day where I thought she'd stopped moving, and I rang the labour ward and they said, "Come in and we'll monitor you". So, we dropped (toddler) off at husband's parents. And went to the hospital. And everything was fine (Hanna, 523-538).

Interestingly, women reported feeling left out and disconnected from their friends as the pregnancy progressed. Only mentioned by women pregnant for the first time, discussions of social exclusion and not being able to do activities with their friends, continued in postpartum.

I sort of felt a little bit disconnected from my friends, they'd go and I would sort of still sit there while they had a pre drink and I would just sit there ... but my partner at the start said "oh yeah you have fun you're not going to be able to do this sort of thing when we've got a baby so you might as well" but towards the end it was getting a bit hard being the only one but he didn't go out much maybe once a month if anything (**Tara, 208-213**).

Tara continues to express how this made her miss her friends in the context of having taken a different life path towards motherhood while her friends were still free:

Yeah he'd sort of try and stay in with me or he'd still go out or drink with them when they were pre drinking in the house or something but then it sort of got a bit hard and I felt a little bit left out. So I did go through a little bit of an upset period when he stopped drinking with me, err but the not drinking wasn't hard it was just difficult not interacting with my friends as much (**Tara, 217-220**)!

Also during perinatal period, it was increasingly impossible for women to leave the house for pastime activities and going out for drinks or meet friends as Mandy, also pregnant for the first time recalls:

Usually because I used to do a lot of stuff independently, but there are a lot of things that you can't take a baby to. Things like the horses, and so it affects that! Like I went to the horses tonight, but normally, I would just get up and go out and do them, but now I have got to worry about who is going to stay and look after (baby). Errm and social life as well, because we normally do go out quite a lot, for drinks, to have nights out with friends, but we have stopped. Cos, we can't [laughs] cos he is a small person, we have to stay with him (Mandy, 242-249).

Because it's the women who have to make changes to their lifestyle, first-time mothers report feeling socially excluded by their partners and friends. This could be explained by differences in life trajectories as becoming a new mum left these women having no friends with similar experiences. The journey to motherhood therefore is seen as departing from the usual things women loved, the way of life, starting a new life chapter. Motherhood involved becoming committed as a couple, a lonely transitioning

from a couple to a family requiring decisions to consider first and foremost the infant. This demanded women to adjust engrained behaviours and life to focus on the baby.

Women starting out with no 'mummy friends' describe motherhood as a lonely alienating time. In contrast, women with other children did not report being lonely or missing their friends, rather describe sharing experiences and bouncing off ideas with friends who were also mothers as already described.

I think some of (friends) seem a bit more concerned about weight and how much weight they'd putting on and I tend to be the one doing "don't worry about it". I think one of my friends was even calorie counting during pregnancy I was "oh don't worry about it you're pregnant it's you know you need the energy" (Fay, 422-426).

These separate accounts present two avenues for promoting healthy behaviours among women. For first time mothers, their partners would be central to discussing and providing healthy eating support while for others, social groups would give an opportunity for health promotion.

Women's construction of weight reveals aspects of self-evaluation in weight to be tied in with how clothes fit, how women compare to friends and family but also their emotional state.

...when my clothes start getting a bit tight. Or I'll, if I'm, if I'm feeling a bit upset about something else in my life then I might look at myself in the mirror and think oh, you know, I'm looking a bit fat or whatever (Hanna 242-244).

For Hanna, it appears that negative emotional state "being upset" results in negative body image perception specifically towards overweight status "fat". This has implications in how women view their bodies during a highly emotional period of pregnancy and postpartum and how this then translates into food behaviours. She narrates further;

Um, and sometimes like my mum and my sister might say, "Oh, you know, you could do with losing some weight". My mum and my sister they're both, um, slimmer than I am. Uh, but they're both always like dieting and watching their weights and things. Um, but I don't think that what they do is particularly healthy with regards to their weight loss. But, you know, so. It makes me think about it then (Hanna, 248-254).

By comparing with her mother and sister, Hanna acknowledges being more aware of her overweight status (BMI=30.4), but is more attuned to it when they comment that "you could do with losing some weight". Even though Hanna's narrative suggests different perceptions of what is and isn't a healthy way to lose weight, the acknowledgement of "thinking about it" proposes that women may be comfortable with their weight status but become more conscious 'to do something' when prompted by significant others. This emphasises the role of family and significant others encouraging weight management and healthy food behaviours.

### 6.3.3.2 The role of Healthcare Professionals (HCPs)

Women were regularly in touch with HCPs especially the midwife during pregnancy and the health visitor in postpartum whose role, in addition to the expected medical support also included social support in terms of advice and guidance.

...you've got midwives which have been good and then we went to antenatal classes which was really helpful. Yeah they just talk you through things like the birth and cos I didn't know anything (**Tara**, **113-116**).

Also,

...they do ask you and make sure that you're ok that sort of thing they know they ask you questions they make sure you know you are actually coping you are ok. Em It was good it was good because that's the thing isn't it I was trying to keep stress to a minimum but knowing that someone else would ask me "are you ok" that's sometimes you know it was quite a good thing (Janine, 279-284).

Generally, the role of HCPs during pregnancy was mainly medicalised; focussed on illness finding and medical interventions as will be later explored in **6.4.4.2** under discourses. After birth however, women report a supportive role teaching women how to care for the baby and of themselves as in these narratives:

We had lessons in the hospital support from the breastfeeding coordinator and so we did it all with her. Because he did not feed for the first week. Yeah, so, we had loads of lessons. And erm we know we are doing it right! and we know we are latching him on ok. Yeah, cos they taught us all of that, they were really good on teaching us, but, you know, how wide the mouth should be, and which part I should be using and so on (Mandy, 310-318).

I was worried about her sort of whether she was feeding enough and I did phone the midwife then and they got back to me very quickly and said no no, she's fine which was very reassuring (Fay, 243-245)!

Women acknowledge HCPs' social support as they adjusted postpartum. Starting from hospital after childbirth, HCPs offered re-assurance, advice and support to women enabling them settle into motherhood.

They popped her on, she was easy, but like there was sometimes a little struggling like with positioning or it would hurt for a little while em you know it was good to have somebody on hand or it would have been quite easy to have gone "oh I'm just going to bottle feed" but because they were there any time that I needed help I asked them, so if I needed help I would just ask (**Tara, 308-311**).

Once home, women report HCP support to include routine baby and mother checks, baby weigh-ins, and advice regarding feeding and sleeping challenges. For some, HCPs were the only contact outside the home and the home visits were eagerly anticipated contact with the outside world. Where there were problems, women were immediately referred to a GP or to hospital consultant care as further explored under medicalised care **6.4.4.2**.

However, HCPs offered little or no help to women postpartum regarding their own health outside postpartum "body" checks. The home visits centred on the health of the baby and little else about mothers eating or weight status. Only Mandy recalls being told how to take care of herself while in hospital.

...(coming home) I didn't eat as much! And then the midwife said to me. I don't drink enough, I don't eat enough. And then she told me to go to bed with biscuits, didn't she? I don't! But she told me to go to bed with biscuits and to eat chocolate if I want chocolate! And she said, to just eat all the time, because I am breastfeeding and I wouldn't have enough milk otherwise (Mandy, 217-220).

Women's weight and eating behaviours were generally not discussed by HCPs in pregnancy or postpartum except for Janine who started out with high BMI. She received reassurance from the midwifery team in pregnancy as below:

...when I went for my booking in appointment with my midwife and I talked to her about it(high BMI risks) cos obviously I had some concerns and she was just like "uuhhhh you know I wouldn't worry about you know she basically said it just a pinch of salt to be honest you know. My BMI was 31 obviously they prefer, it's preferred to be under 30 and she said with your body type and everything else I wouldn't personally I wouldn't be that concerned and that sort of thing. So she just put my mind just at rest just enough for me to not feel guilty I suppose you know it was kind of like well I'm dooming my child to begin with em so she was a great help cos she just said you know you're doing all that you can ...she was confident that I knew how to eat healthily and that I was trying to you know (Janine, 110-123).

Indeed her HCPs gave reassurances postpartum in this extract:

I have had a couple of midwife visits at home and one of them (Midwife 1) who I'd only seen she'd been ever so lovely and supportive! She came to see me a few days ago and she says you're already going down! I thought what do you mean? "Your tummy, you're already you've already lost some weight" and that was kind of like ok cos I have actually checked my weight since and I have I'm about I think 111kg at the moment so I've lost I have you know I've lost some weight, but that's not my focus at the moment (Janine, 637-643).

For Janine, reassurances over her weight were central for her emotional health in pregnancy. Her HCPs in postpartum were supportive of her mothering progress however weight loss reassurances were not specific as they did not guidance on proper amount of weight loss that wouldn't affect her caring for the baby as she elaborates.

You know I mean em that's worried me slightly cos I knew that there are some things that kind of go away you know and everything else em my blood volumes less and everything else em but I can't find much literature to say what is a healthy weight loss in the first few weeks. Cos everything is kind like about getting back beach body back, (laughter) and that's not what I want to know, I want to know the healthy amount to lose you know if I am breastfeeding (Janine, 645-649).

Janine reveals the confusion of not knowing how much weight to lose while still focussed on the baby as important in postpartum. Also the expectation to return to the slender ideal resurfaces once women have adapted to childcare. For women worried about their weight status, the lack of direction and support from HCPs may intensify body image insecurities.

# 6.4 Cultural constructs of pregnancy and motherhood

The previous themes have illuminated on the existence of cultural constructs prescribing how women should behave during the transition to motherhood. Notably, viewing pregnancy as a public event requiring women to be receptive of comments,

advice and ridicule over behaviour. Also, behavioural constructs previously recommending restraint eating appear to disappear replaced by an expectation of increased food intake without guilt. And finally, medical and digital discourses directly influencing women's experience of their pregnancy and motherhood such that women had to conform to the medical constructs while corroborating information by harnessing digital avenues as further explored below:

### 6.4.1 Temporality of body image insecurities

## 6.4.1.1 The emergence of a pregnant body

Women describe having body image insecurities during their adult lives in line with the socially prescribed slender ideal.

Just with like weight probably yeah not like majorly I have always been just a bit conscious about the way I want to look slim or whatever (**Tara, 227-228**).

As a result, women describe always comparing their weight and watching what they eat in order to keep a slender body and narrate worries on how pregnancy and motherhood would impact on their view of the body. From the onset of pregnancy, body image insecurities describe how revealing pregnancy is, necessitating disclosure.

I remember it was an emotional time, so I started to worry, you know, we work together, ...and there aren't many women, so ...it was thinking about having to tell everyone, you know, it comes out eventually, and then I was looking at myself (at work) with a big tummy and all fat (*Mandy*, 46-49).

Mandy reveals feeling insecure at the prospect of getting fat as a result of pregnancy. Working in a predominantly male profession, Mandy felt threatened by the prospect of venturing away from the slim ideal. Consequently, this heightened weight consciousness illustrated by regular weighings and maintaining an exercise regime.

But I remember being conscious of how I looked you know, if I met guys laughing in the corridor and thinking oh they know, and that kind of thing (Mandy, 54-55). I was tired a lot, kind of much earlier than normal, so I was doing less exercise. I didn't want to put on too much weight, so I kept being active, but would tire quicker. I read in the book about how much weight to put on, so it was reassuring, and I tried not to put too much weight on (Mandy, 71-74).

During pregnancy, body image insecurities are heightened in some women and this continues into the postpartum. The stories of women reveal a different view of the pregnant body. For Mandy, pregnancy meant "a big tummy and looking all fat" and this intensified her body insecurities. In contrast, some women recall a relaxed expectation of the slim ideal once they were pregnant. This is depicted in the stories of women who initially had weight worries describing wanting to show off their pregnant bodies so that they were not mistaken for being 'fat'.

When I was pregnant I was actually happy with my belly. It's different it's not like being fat (emphasis). I didn't want, I wanted people to know that I was pregnant, not that I was just fat, laughter. So yeah but then afterwards it's taken me quite a while to get my belly down again, to like what it used to be, because before I was pregnant I was quite slim and I know it's going to be slow (**Tara, 233-236**).

Mandy and Tara show a differentiation in the view of the pregnant body, but also suggest that it is bad to be seen as "fat" confirming the gendered discourses of the slim ideal. However, the interpretation of the pregnant body also reveals temporality of this slim ideal accepting of a bigger pregnant body while expecting women to revert to the ideal postpartum. Indeed previous body consciousness and weight worries appear to stop during pregnancy, resurfacing only postpartum.

But then towards the end of my pregnancy people, people were saying to me, "You look like you're losing weight in your face" and, and everybody kept saying about how my bump was all at the front and from the back you couldn't tell that I was pregnant; I just looked normal and things. And then that did make me start thinking, oh well maybe if I can just kind of keep it a bit like not trying to gain too much weight. Then maybe it'll be easier for me to keep it off or get it back off afterwards. Um, but I didn't make a conscious kind of effort to not eat or (Hanna, 185-193).

Women's stories show awareness of necessity to "get back" to their pre-pregnancy body at some point after birth confirming the relaxed expectations of being slender during pregnancy. This may impact on women's eating behaviours as it permits disinhibition.

### 6.4.1.2 Pregnancy as a public event; free to touch and comment

Women report experiencing surprise treatment of their 'bumps', by others during pregnancy. The recognition of the pregnancy stipulated that the pregnant body

belonged not only to the woman but to the public. The physical visibility of pregnancy seemed to give others permission to touch, comment, and advise on acceptable pregnancy practices.

People will just come up and they touch your bump! (laughter). Uh someone once said to me when I was a few months pregnant that you have to get used to people wanting to touch your bump. And I was like, Aah! Touch your bump? (laughter). And you know what? It is true. Everyone wants to come by and have a good feel. And there was this one person I have met, I don't know, I did not know when I went round the shop, and they went uh (gestures touching/feeling belly)! Like, I was used to it at that point [laughter]. Do you know what, it didn't bother me. But when someone first told me that people would touch my bump, I said oh my God, no way! But then at that point, when it is so far here. And people are excited when they see your belly out. I am just like go on. And they just like, I'll take a look at that. But definitely there are people at work, whom you may not see for a week or for two weeks, and they will be like, oh let me feel it. They would be happy, and you are like, get off! (laughter), but yeah (Mandy, 382-399).

Mandy, experiencing pregnancy for the first time, found the public treatment of pregnancy initially dreadful but later was accepting of the practice of others touching, and feeling the bump and baby. What is interesting from her account of this experience is the reference to "when it is so far here" and "people are excited when they see your belly out" which seemed to contribute to her allowing people to touch. Having been very body insecure, Mandy's "getting used" to people touching could have been a way of her accepting the pregnant body as not fat. This was reinforced every time people wanted to "feel the baby", confirming that "we know you are not fat, but pregnant".

In addition, women reported receiving advice regarding how small or big their bump was. Particularly, a big bump was not referred to as being fat but rather in relation to what women could or couldn't do. Advice ranged from what to eat, taking enough rest and preparations for the birth. *See Hanna (lines 185-190) quote, Page 217*.

It is only in the workplace where pregnancy was treated rather differently as Mandy recalls:

...you find that the males in the place, look at you a bit like...because, I was pregnant, I was a risk, a health and safety risk! ...being pregnant cos I am a risk and that it

would stop me from doing certain things! ...So, that was a little bit annoying.... I don't wanna be stopped from doing things because I am pregnant (**Mandy, 367-377**).

Mandy's experience, reveals how the view of pregnancy as a public event can protect women from body image insecurities, but may promote certain eating behaviours and acceptability of weight gain. Also, women's experience of normality, while being treated as different, creates a paradox during this period. Being treated differently especially in the workplace for instance may curtail women having children early, rather leaving it for later when their careers are established. Implications of this on maternal weight development will be explored later.

## 6.4.1.3 Reappearance of body image insecurities postpartum

The women reveal a re-emergence of body image insecurities but describe how postpartum challenges delay taking action on them. Women compared their postpartum weight loss expectations and progress with either their own previous experience, friends in similar circumstances or consulting with their own mothers.

I spoke to my mum about em and (boyfriend) my partner's mum em they didn't they said they mentioned breastfeeding helps lose weight, but they didn't really say much more about it. I just wanted to know... like I'm not going to be fitting into these clothes for a while! Like (boyfriend's) mum said that with her first one she didn't even put on any weight afterwards cos he was quite a tiny baby but when she had the second one she ballooned out and it took her a few months to get down again and when (I asked) my mum she sort of ballooned out the first time and then she her hips sort of got bigger and she couldn't fit in the same clothes she did before so I was a bit worried about that (**Tara, 156-165**).

Tara's experience reveals how women normalise "ballooning out" in pregnancy, passing this "knowledge" down intergenerationally such that present women can expect to mirror their mum's experience regarding pregnancy weight. Indeed Tara, previously keen to show off her pregnant body, expressed worries about "ballooning out" and how it would affect her body postpartum.

Weight consciousness in postpartum resurfaced when women could not get back into their pre-pregnancy clothing. Although not voiced directly, women describe feeling bigger than preferred. I suppose I've been more wary of it, but yeah I can relax em I was quite happy I did say that I wouldn't worry about losing any weight or anything until after Christmas. I think I'm two stone heavier (laughter) currently. Yeah I am actually! I don't exactly know what I was before I was pregnant but I was at least a stone and a half probably two, but more concerning is that my clothes don't fit at the moment. I am beginning to think that I need my other clothes to fit (**Fay, 148-163**).

The stories reveal a recognition of a changed body after birth characterised by realisation of extra body fat and for some women, caesarean scars:

I mean because my body has changed, I can tell my body has changed from the way that the scar is, it has made my em the way the fat lies here (across tummy) has changed and I can see that already and I am trying not to worry about it or anything else because I know that things still have to kind of suck in you know and collapse but I know that I will not be you know actively losing weight for at least you know, I don't know whether I ever you know it depends on how I feel about my body after I'm a bit more healed here and that's the thing, it is more important that I actually don't end up with you know because you know looks very horrible around here (points to lower tummy), laughter, that I that I feel I can be vain about you know about how my body has coped after you know cos I'm not I've never had surgery before and that sort of thing so it's kind of like (Janine, 658-668).

The postpartum period brackets away women's concern about the self, setting it as a time for recovery and adapting to motherhood, revisiting the self later. However, women recall feeling insecure about being told they still had the "pregnancy belly". The fear that "people will still think I am pregnant" is real for some women and this is compounded by difficulties in recovery and coping postpartum as well as limitations on exercise following for example caesarean births.

...the first few days I was a bit kind of ...I felt very very large I felt very very big round here and I was thinking people are going to think that I magically had a new born at six months pregnant you know. It's just one of those things, someone is going to say something "when's it due", you know something like that. So I did have a little bit of that paranoia when I was out of the house. Now I don't really care I'd much rather be able to like kind of like you know em walk up to the park quite happily and that sort of thing that's more my goal. Is for me to at least feel healthier and be moving around than losing weight you know and that sort of thing so (Janine, 669-681).

Even though Janine describes not caring about her body image postpartum, she narrates experiences of paranoia and heightened body image insecurities. Janine cares very much about how she looks, however, problems with her recovery postpartum and baby's health shifted her priorities. Adjusting to motherhood and caring for the baby,

are more important for women during this period leaving them with no time to worry or act on their weight insecurities or losing weight in general.

I think with all of us being so busy it's been quite good because I haven't had time to like think about my weight and stuff and haven't had time to worry about that, just got on done everything em so I was expecting to sort of put on a lot of weight now and then once I finished my degree I would focus on it (**Tara, 351-354**). (I am) not so worried about the way I look I use to do my hair but now I just don't have time to do it (**Tara, 406-407**).

Experienced mothers report not being worried about losing weight quickly after childbirth on the backdrop of their previous experience as Fay narrates:

Em I don't know I thought I did think that as soon as the baby arrived sort of weight would just sort of fall off magically! I think because I was sort of breastfeeding I thought that that would sort of really boost the weight loss but it wasn't until- it was very slow weight loss until six months and then it seems to speed up which I thought was odd because by six months you're breastfeeding a bit less but it was then that I didn't I don't think I did anything differently particularly then but the weight loss seemed to speed up (Fay, 188-199).

For Fay, having successfully managed to reduce weight after her first pregnancy, reveals not being overly concerned but yet aware of necessity to lose the weight at some point:

I'm not so much in a rush to lose the weight as to get back into the clothes the clothes that I've got so it's not so much the weight as the, it's either that or buy a new set of clothes. (Husband) hasn't mentioned it, he don't seem concerned. It's always em my desire, any desire to lose weight is always to make my clothes fit better rather than...At the moment I'm trying to get back into my jeans so its sort I've been looking at my jeans "Oh I want to get back into those" (Fay, 354-371).

In addition, the display of the celebrity post-pregnancy body in the media was discussed as influencing how women construct and view their postpartum bodies. Often reinforcing body image insecurities due to display of shapely pregnant and skinny new mother celebrities, the media events around the time of data collection gave the women reassurances about their bodies.

It annoys me sometimes like when you see people who had a baby like a week or a couple of weeks and then they're at the gym or whatever trying to lose the weight. I quite like when Kate Middleton when she had (her baby) I liked the fact that she still had her mum tum when she came out of hospital, and she wasn't like hiding it

behind some massive dress or whatever. Because that's the way it should be, you know. Women are (pauses)... we don't just bounce back again, do we? (**Hanna, 803-810**)

Although these women's narratives show increased weight and body image insecurities, women reveal lack of information and support regarding weight management during pregnancy and in the postpartum period. Information regarding pregnancy weight was through media stories or women's own reading and experience.

They don't weigh you, do they, the midwives? And I haven't been to my GP for a while, throughout the pregnancy. Then they were not interested in having appointments or anything, only midwives. And if you do take your weight, with the midwife, they kind of, they don't want you to worry about it. They are like, don't you worry about your weight you'll be fine, no don't worry. And so, I did it by myself at the gym (Mandy, 83-87).

When women are worried about their weight as Mandy was during pregnancy, there appears an expectation of support from HCPs. Lack of this support may leave women resigned and confused on what healthy options to take.

In postpartum, women acknowledge weight loss associated with the birth and some expecting to have lost more.

Obviously not feeding myself properly. A couple of days before I gave birth I weighed myself and I was 17 stone two. Um, and then on the day or the day after we got back from hospital I just got on out of curiosity, because I don't weigh myself normally, um, and I'd gone down to 16 stone. Um, obviously I had a ten pound baby; but the midwives even commented how big my placenta I was. It was really big. So, um, I thought that one stone two was probably (Hanna, 741-746).

Hanna reveals being focussed on weight loss due to the birth, ignoring her lack of eating and rather rationalising weight loss to childbirth. Whereas some weight loss can be explained by process of birth, the expectation that a lot of weight is lost at birth can prescribe some women to overeating in pregnancy in the hope that it will be shed off at birth.

The women's experiences of being a mother in the early postpartum period show priorities to the baby such that any practices and behaviours were geared towards caring for the baby neglecting the self as an issue for later. The goal for these women was to be healthy enough, be better mothers (caring for the baby), putting body image insecurities at the back of the priority list. The women put forward slow recovery, concern for the baby and lack of time as hindrances to physical activity and weight loss efforts during this period.

### 6.4.2 Expectation of increased food intake

### 6.4.2.1 Increased food intake in pregnancy

Generally, women describe pregnancy as a time to eat more, and relaxed eating behaviours diverging from pre-pregnancy. For example, postponing weight management efforts until after the pregnancy, women reported practices of disinhibition and eating without feeling guilty during pregnancy.

I was surprised I thought I would balloon out, I kind of put on weight on my bum and a bit on my belly but not been too bad. Well, literally I've been breastfeeding so I think that's helped to keep the weight down em but I ate the same amount as I'd normally. I eat quite a lot anyway I think just normally but I ate the same amount throughout, but I didn't feel so guilty when I had the odd biscuit. Yeah I didn't do anything consciously to keep it down just thought I will deal with it after the pregnancy (**Tara, 46-54**).

Tara's experience shows relaxed behaviours of feeling no guilt to indulge while Janine describes pregnancy disinhibition.

Well that's the thing because I was at work and I was, this sounds terrible cos we are a couple of doors down from a Greggs so it was that sort of you know "oh I'd really like a sausage roll" and then we had a really nice security guard at work and he's say you know (whispers) "do you want me to go and get you one"? He'd say you can have it on your break! It's like oh no, but part of me because I knew I'd lost the weight I'd kind of like well surely that's not so bad if I do actually have that little bit on top you know! ... then I would have sausage rolls as well so at least I was trying to keep it you know then adding animal fat and pastry to it, which wasn't a good thing but... my whole weight thing is kind of like I have to try and put as much good stuff in and then the occasional bad thing just to make myself happy so (Janine, 191-213).

Pregnancy disinhibition was as a recognition of relaxed food inhibition and body image pressures on women during pregnancy but also the social description of 'eating for two'. Generally, women describe previous behaviours surfacing in pregnancy such

as treat-eating, where 'being happy' is important. Pregnancy was supposed to be a happy time, not a time to worry about weight or putting off food restrictions that form a part of non-pregnant women's lives.

Em during the day I think I snack! I've snacked a lot more em and being pregnant I've not really thought about restricting snacking, (laughter). Em at work there's quite a constant stream of cakes and things, (laughter), em and I've just not worried about whether I'm sort of snacking on them too much, I thought I'm pregnant I'll sort of deal with it afterwards, laughter (Fay, 141-145).

In agreement, Hanna recalls:

Actually I probably ate more McDonalds (laughter). Oh gosh, maybe when I was between four and six months pregnant I think! I remember (friend1) saying to me, "I'm feeding my placenta and you're just giving it McDonalds!" (laughter). I was going more often, but not horrendously more (Hanna, 214-220).

Pregnancy was a time to indulge, partly because of relaxed ideals on guilty eating but also equating wants to baby needs. Women rationalised eating and disinhibition to baby's needs, for example reference to "I am feeding the placenta".

I was like when you're pregnant, this is the time you can eat em so I was quite fine, I was like, well if I fancied something it's obviously what the baby wants. Yeah meaty things yeah I'd want meat or chocolate and anything like that but yeah and broccoli I liked at the start and chicken kiev or something so [boyfriend] sort of runs out and gets it. It wasn't too bad it was like I need it or fancy it but yeah when I was pregnant I knew I was going to get big so I might as well eat anyway, but like I said I wasn't actually that hungry anyway but I was pregnant so it was a bit like that (**Tara, 177-186**).

These stories reveal women rationalising their increased snacking and general food intake on the pretext of already growing bigger- a social construct allowing for increased food intake due to relaxed ideals. Moreover, giving the baby an active role in "it's obviously what the baby wants" partially explains why women have reduced control over eating behaviours in pregnancy. As the pregnancy progressed, women tended to eat smaller meals more frequently but continued with snacking.

Towards the end, I think because she was quite obviously big, I ran out of room. I couldn't eat big dinners very much (**Hanna, 115-117**) ...but if I felt hungry, I would eat what I wanted anyway. Just normal. Just like sandwiches and fruit or choc, or

chocolate and crisps or. But I tended to have more snacky things or smaller portions ... just because I couldn't manage bigger (**Hanna, 271-275**)!

Based on the expectation to eat for two, women reveal feeling disappointed by the lack of tummy space in late pregnancy which dictated they eat smaller meals.

The only problem was that towards the end I probably ate less than I would eat normally cos I got really bad heartburn and you could feel the baby sort of there all the time and didn't feel really hungry which is weird cos I thought I'd eat twice as much, laughter, eating for two excited cos I could eat so much but I couldn't really eat that much (Tara, 20-23). I think quite a lot of people could be concerned that they shouldn't [eat more?], but with me that this is an excuse to eat and I was happy to do that, but some people might still not eat as much as they should because they might try and keep it down (Tara, 323-326).

## 6.4.2.2 Selective continuation of eating behaviours postpartum

The snacking behaviours remained after childbirth possibly due to lack of time to prepare and eat healthily occasioned by intense childcare duties soon after the birth and constantly being tired as a result of limited sleep in early postpartum. Women report eating on the go, grabbing quick sugar foods and snacks like biscuits and crisps as common practice in early postpartum.

### For example: Janine, Hanna

The early pregnancy food behaviours of increased fruit and vegetable intake appear to stop, while late pregnancy eating habits of snacking remain without feelings of guilt. This can be interpreted as 'emotional eating'; where women consume comfort foods during stressful situations; reported across the group irrespective of parity.

I don't feel like I've been eating as much as I should really if I'm brutally honest. Um, maybe today and yesterday I probably have. But other than that I've been ...just grabbing for anything then. So, I really need to sort, sort myself out I think (**Hanna 727-735**).

However, women overly worried about their weight like Mandy, report losing appetite postpartum:

...the midwife said to me I don't drink enough, I don't eat enough. And then she told me to go to bed with biscuits, didn't she? I don't! But she told me to go to bed with biscuits and to eat chocolate if I want chocolate! And she said, to just eat all the time, because I am breastfeeding and I wouldn't have enough milk otherwise. I didn't go to bed with biscuits. And my appetite has got a bit better over time, hasn't it? I do eat a little more than I did. I'm just not hungry! ...I think, it is because I am not as active, because I am here with him! And although you wander after him all day, you are not out and about physically and mentally active! So, I think I am just not making myself hungry enough (Mandy, 205-231)

In Mandy's case, reduced appetite was attributed to lack of exercise since she was previously very active but didn't have time for routine exercise activities in early postpartum. In comparison, the rest of the women were not routinely physically active and report constant snacking and lack of time as their predominant postpartum eating behaviours.

## 6.4.3 Discourses influencing women's experience of motherhood

For this group of women, three discourses were described to impact on how women experienced pregnancy and the transition to motherhood. Firstly, women describe how their experience was centred on 'good mothering' such that behaviours and choices were baby focussed. Secondly, pregnancy and early postpartum were heavily laden with medical interventions leaving women with only the option to conform. And finally, women reveal relying on digital discourse preferring internet use over other forms of information as hereby discussed.

#### 6.4.3.1 Good mothering

The women's stories reveal behaviour always following the 'good mothering' discourse. Described as "doing the right thing" for the baby in **6.2.2**, good mothering spanned the entire experience from pregnancy through postpartum. From the start of the pregnancy, women's adaptation reveals a focus on providing the optimum environment for foetal development. Even while negotiating somatic symptoms, women made attempts to provide what was best for baby as illustrated in **6.2.2.1**.

Accordingly, women's eating was focussed on having the best nutrition for the growing foetus, characterised by increased healthy eating behaviours, eliminating bad foods from the diet while increasing especially fruit and vegetables as well as fish

intake as in **6.2.2.2**. These were reinforced by interpretations of motherhood as "large bodied" when describing the relaxed body image expectations in **6.4.1**.

The women's birth choices and decisions were also centred on primarily reducing risk to the baby and seen as an achievement when the women had a desired birth as described in **6.3.1**. The early postpartum also revolved around the health of the baby, with women especially reporting being "strong for baby" where they prioritise baby, neglecting the self as an issue for later when they have got into a "good mothering rhythm". Also women recall making social sacrifices in postpartum period as part of good mothering expectations to stay at home and care for the baby as in **6.3.2** "he just needs you".

The 'good mothering' discourse was described as a cornerstone to women's experience, interpretation and meaning of pregnancy and motherhood as it prescribed behaviour, practices, decisions and choices focussed on the baby as seen across all themes.

## 6.4.3.2 Medicalisation<sup>8</sup> of pregnancy and motherhood

Whereas pregnancy is a natural, normal process for most women, healthcare professionals (HCPs) continuously treated it as an illness characterised by constant checks, tests, and looking for ill health. The women's experience of contact with HCPs was such that it involved medical interventions like ultrasound scans, routine baby checks, monitoring and generally treating pregnancy as a medical event.

Firstly they were asking questions about you and your partner's health and like your family em then they sort of talk you through what the stages are of going to see them like at eight weeks, when you have your scan like at 12 weeks and then again at 20weeks and em then just they just talk you through what their part of it is (**Tara**, **86-89**).

My appointments tended to be quite short because I didn't really have any concerns it was more sort of check-up, baby's heart beat and blood pressure and things like

<sup>&</sup>lt;sup>8</sup> The *medicalisation of pregnancy* involves interpreting pregnancy as a disruption to health, requiring expert medical intervention, and thinking of pregnancy as primarily about health and illness. It involves a high degree of technological medical intervention and contact with clinics and hospitals, where women are assessed by medical experts who are the

that. Yeah, it was all kind of routine until we found out that she was breach, laughter (Fay, 383-385).

Women report contact with mainly the midwife and these appointments were also medical focussed, stipulating when to go for what checks, probing history of illness and baby progress. Moreover, advice given centred on cautions for what could go wrong or what tests needed to be done, results of which were rarely discussed with the women.

I went to my doctor to get it confirmed and the first thing he said was your BMI's too high. You will get gestational diabetes you will have trouble you'll not want to work,... I would never sign you off errm for a flight of that length because you're too fat and these sorts of things (Janine 10-14).

Janine's experience reveals how HCPs only diagnosed illness (high BMI) while not prescribing options for care and management. Also, women report the way HCPs checked but did not communicate findings especially when it was related to weight as Fay describes:

Em I was weighed, em a couple of times, at booking in appointment I was weighed and then I think towards the end of the third trimester em but I was never told it was any cause for concern at all. I also got weighed by the doctor at the six week check after I'd had her but again he didn't really comment on it (Fay, 344-347).

The narratives of Fay and previously Janine, reveal women's interest in discussing weight with HCPs both for assessment and follow-up support on management during this time. When HCPs did not communicate assessment results or support the women, the women express dissatisfaction and feeling upset at not being treated as individuals and being labelled as 'fat'.

It was upsetting because em it's one of those things because I always feel that I try and do the best for myself although I should not be carrying this extra weight I try and do the best ... and to be told that you know "oh well in a few weeks' time you won't want to go to work" and all this kind of stuff because you won't feel you will be able cos you are too fat was a bit.... It felt a little bit old fashioned to me, you know cos he also doesn't doesn't know me as a person so you know (Janine 72-79).

It was clearly distressing for Janine, especially when there was no follow-up support.

Any need for social support and advice required the women to be proactive to seek

and find their own support as this was not routinely offered during HCP appointments; see 6.3.3.2.

Indeed when Janine received support after proactively seeking it from other HCPs, she narrates feeling less worried and more positive:

I'd sort of told him (husband) but I didn't want to tell him too much I didn't want him to worry because ... my midwife wasn't worried and everything else so it was kind of like oh well I don't need to (be worried) you know I was trying to keep you know as stress free as possible that's what I try to do all the way through which was why the GP thing really kind of messed with me a bit because that was you know that was a stressful time (Janine 201-207).

The impact of this medicalisation of pregnancy for Janine was initially feeling like she was "dooming her child" and therefore not able to provide an optimal vessel for baby development. Support and reassurance from especially HCPs reduced the feelings of guilt and inadequacy which was important for her mental health and enjoyment of the motherhood journey.

For experienced mothers however, they reveal corroborating information received from their HCPs with other sources to make informed choices on medical interventions.

I am overweight though. But the thing that irritated me a little bit is, um, I did a bit of reading up about it and things, and I haven't my BMI was the same when I had toddler as with this pregnancy. But with my previous pregnancy weren't that you had to have a glucose tolerance test. So, I hadn't had one with toddler and the pregnancy had been fine. And I thought what is the point? But did it. ...(Also) I was offered the anti-D injection. But I did some reading up about that and I just decided obviously if I was going if I had a bump or anything I would have it; but I wasn't going just to have it prophylactically. So, I turned it down (Hanna, 139-153).

Women with previous pregnancy experience therefore appear to be more confident and empowered by their previous experience to challenge and question information given by their HCPs as Hanna elaborates:

I definitely considered everything that I was offered more this time in my pregnancy. Because I think you, you know more what to expect with your second pregnancy. And I, I felt more confident. And I thought if something happens and I do, like with the Rhesus thing, I thought if something happens and I do end up producing antibodies then that's that really; I have two beautiful children and I'll just stop there. Yeah. And I did have the injection with my previous pregnancy (Hanna, 157-173).

However, women report feeling out of control of the childbirth process and placing their trust in the HCPs. Women desired to have a natural birth (**see 6.3.1**), but their experience changed depending on the associated risk the HCPs described to them. Specifically for first time mothers, birth choice was dictated by events around labour for which women had no control. Feelings of disappointment for having had a 'medicalised childbirth' were strong among these women as discussed in **6.3.1**.

The impact of this 'medicalisation' can be described to affect especially first time mothers with no prior experience and women who exhibit conditions that threaten their ability to provide the optimal environment for baby development. When HCPs do not explicitly provide information and support, this impacts on women's psychological health which then could exacerbate emotional eating behaviours during this period.

## 6.4.3.3 Digital discourse driving information seeking

Like the narratives of antenatal women in Chapter 5, the journey to motherhood begins with two red lines on a pregnancy test strip and the postnatal women's stories reveal a change in behaviours and practices. This included health care seeking aligned with *medicalised* maternity services and adjusting personal life in preparation for the baby. Women also revealed high information seeking habits, predominantly "Googling", use of opinion forums and social media for advice from virtual friends. Harnessing the digital discourse served three purposes in women's experience of the transition to motherhood. Firstly, to see if what they were experiencing was normal, secondly to corroborate information and thirdly, to share experiences with virtual friends.

#### To check if it was 'normal'

Women describe using the internet to check if what they were experiencing was 'normal' (normal was good and expected), and to keep track of their progress in pregnancy. The women report using different internet resources to meet their

information needs, including signing up for digital newsletters, discussion forums, social media and groups during pregnancy.

Yeah, google. I would look up, erm, I have an email every week! Actually I read four emails every week with the pregnancy tracker. So, they would email you every week, and say you are week 18 and this is what is happening to you in your stomach and the baby's developing hair or teeth or brain or whatever... With Google, things like if I was feeling sick, or erm with how much weight should we be putting on when pregnant? I would google that type of stuff (Mandy 124-133).

The women were keen to find out information and healthy things to do as Tara narrates:

(Searching the internet) mostly about what I can eat like the doctor gave me most of the information anyway... because they are quite funny about things like you're not allowed too much like Vitamin A and liver and things have added Vitamin A and stuff like that so just looking up things like that and looking up what you should be feeling at that stage just to check if that was normal cos I was feeling quite ill (**Tara, 76-81**).

This behaviour of checking if experiences were normal or similar to others continued in the postpartum period. Women describe checking any queries they had as in this extract:

Yeah, still is as well! With the baby, because if the baby is poorly or doing something I will just Google! You should see my Google search list with all sorts of things! It is massive, with random things. ... I will google things on what you can have and cant when you are breastfeeding because, there are certain foods that you can and cannot have when you are breastfeeding and what have you. So, I google all that type of stuff. It's easier! (Mandy, 147-155).

#### • Corroborate HCPs advice and information

The internet was the first point for information seeking for most women with any minor worries during and after pregnancy. Women also reported corroborating information they received especially during pregnancy. Women describe wanting to research information they received from HCPs before making a decision as Hanna intimates:

Definitely more when I... gave birth to (toddler) I read more; I did more research. But with this one the reading that I did do, um, I acted on it more probably I think. I think because obviously I had the prophylactic (jab with toddler). Whereas I chose not to with this one. And I was going to turn down the GTT with this one, um, and then changed my mind and thought, well there's no harm in finding out (Hanna, 352-358).

Questioning medical interventions was reported at subsequent pregnancy and not mentioned by first time mums (**see 6.4.3.2**). However, women generally reported attempting to authenticate online information back and forth from different sources. For example:

The midwives gave me a lot of information. Uh, my friend as well actually (laughter)! And she gave me a lot of information when I was researching (health condition) ... I wanted to make sure I was making, you know, an informed choice to not have the jab (Hanna, 300-310).

Also,

It's just nice and comforting to have a book on the subject so you can just kind of check and just say right ok am I being irrational or you know I mean if you Google anything you're either gonna die or you are daft for bringing it up! It's one of those things its very kind of polarising and if you are a bit hormonal or if you are really really worried it's the worst thing I think you can do because you will just frighten yourself em. Whereas if you've got a phone number where you can ring the midwife or if you've got a friend whose been through it or if you've got a book which is at least written by somebody who has a little bit of you know (?professional expertise?) and it's not just a woman on a forum, (laughter), you know you can at least kind of judge or just or talk through it all (Janine, 313-321).

Some women caution on type of information available on the internet highlighting need for using credible sources for corroboration of information.

I try to, if I'm researching on the internet, because there's a lot of information out there that's dodgy (laughs), and I like to know that what I'm doing is evidenced based and that it's, um, oh, that it's not anecdotal and that it's a sound piece of research. Because if somebody did a study on ten people it's not really telling you very much (Hanna, 366-370). I did use, I did use mums.net, um; but I'd look for links to you know, to the evidence or to, back to whatever it was they were saying (Hanna, 380-381).

In addition, women who discussed their internet search behaviour were cautioned on credibility of information by their HCPs.

When it was probably something like that I would probably go on the internet em and they sort of told you to stay clear of like say like American sites em like those sort of sites, cos they treat pregnancy differently they treat it like a sort of almost like an illness and they do things different whereas here it's just a natural process. Yeah but I did look up a few websites if there wasn't like a clear answer then I'd call up or ask my mum or something like that (**Tara, 370-374**).

#### • To connect and share with friends

Some women narrate relying on virtual friends in the postpartum period for support with everyday challenges of caring for the infant. The use of social media was common and provided the women with tips and guidance from other mothers going through the same situation. For instance:

There's a Facebook group as well based here [name]. A lot of people I know in [name] are on there as well so that's a really good source of information. Lots of people ask questions about sleep, about baby groups that are on and things like that. Yeah but obviously the Facebook group as well it is [local] one so it's sort of virtual and real (Fay, 289-298).

Um, I use Facebook a lot as well. Um, mostly my friends. But I'm also like a member of a home birth Facebook group. And there's a mummy friends in [name] group, and obviously I'm a member of that. Um, and then I'm a member, I'm a member of like a sling, carrying your baby slings group (Hanna, 384-389).

It is worthy of note that only experienced mothers reported relying on social media groups for support and information. These women reported using the forums more in early postpartum to get help about baby feeding problems but also for company during the late night feeds as Fay narrates:

Not sure, possibly things that I had read online. Em I use the (forum) and the chat discussions on that yeah. Em really to get support from other mums who have babies of similar age. And see what experiences other people have had... (I go online) Too much, laughter, things to do in idle moments. It's too easy when you've got a phone. Em so yeah probably daily at least. Em it's good to share experience and see especially with other mums who had similar age babies and interesting to sort of compare notes although you try not to compare (Fay, 209-226). Em I now usually use it on my phone em previously I'd use the computer. It's nice to have a phone. Its good when in the middle of the night you're breast feeding and you can be sort of reading on the phone it's quite reassuring sometimes to know that other people are up in the middle of the night also feeding their babies (Fay, 251-254).

The reference to social media to connect by these women is a confirmation of being part of "the club", 'I am doing ok', and echoing with 'good mothering'.

Women's harnessing of the digital discourse was reassuring in providing quick information and answers but also companionship, to connect and feel as part of "the

club". This played a vital role in helping women to understand information, risks and also for support and potentially an avenue for shared experience.

## 6.5 Summary

Women's experience of motherhood is told in respect to their journey beginnings viewing pregnancy as a gradual, life changing journey started by confirmation of the pregnancy by two red lines. Pregnancy was described as a natural progression indicative of thriving committed relationships. Started as part of social expectation from committed relationships, women describe the desire to have children as an emotional process with increasing demands. Food behaviours during this period were centred on eating well for baby while previous behaviours of emotional eating, treateating continued without feelings of guilt.

Echoing the antenatal women's accounts, postpartum women expected increased food intake while not worrying about a bigger pregnant body. During pregnancy, women reveal a continuous adjustment prioritising the foetus over other needs as well as adjusting their lives in preparation for the baby. Women generally relied on family and friends during this transition, to share experiences and advice as they negotiated pregnancy. The narratives reveal heightened body image insecurities which settled once the pregnancy was visible and the body experienced as 'pregnant' but not 'fat'. Accordingly, women recall food behaviours of disinhibition allowing more snacking without social reprimands or guilt.

In the postpartum period, women express desiring a natural birth, although they agree that childbirth was out of their control. Therefore, women placed childbirth choices in the trust of HCPs for guidance. Women's experience of control and choice of childbirth strongly defined how they negotiated early postpartum in regard to coping and adapting to motherhood. The women's stories describe a massive change, the start of motherhood as a rather daunting experience, a time for survival due to the demanding,

stressful changes that take away women's independence and social life. They relied on their partners and immediate family to help with not only childcare but also social support in form of sharing meals and chores at home to enable the women to cope.

Furthermore, a longer recovery process and hospital stay (for baby) hindered women's return to normality and they describe feeling like they had lost their mojo in regard to things they previously liked to do such as cooking, sports and going out. The effect was that women were mainly sedentary and snack or treat eating. Importantly, motherhood oriented the women towards good mothering, where the women describe making personal and social sacrifices to care for the infant. Body image insecurities rebound during postpartum due to expectations to revert to the prepregnancy slim ideal.

Cultural constructs viewing pregnancy as a public event allowed people to not only touch, comment, and advise, women during pregnancy but also presumably censure for bad behaviour. In addition, pregnancy and childbirth were significantly medicalised events. Accordingly, women negotiated these strong cultural constructs by seeking information and support predominantly from the internet and their family and friends.

From these stories of pregnancy until the early postpartum, what is most important for women is the health of the baby. The women define their experience in terms of "doing the right thing for baby", taking on cultural constructs and discourses that placed the baby as priority with less concern over their own health, weight and food behaviours in postpartum period.

#### CHAPTER 7: SYNTHESIS OF THE RESULTS

#### 7.1 Introduction

This chapter provides a synthesis of the results from the three findings chapters. Presented as a continuum of women's experience regarding food and weight across the three groups, this section summarises the key findings.

Women's narratives in preconception, during pregnancy and postpartum period, share commonality in revealing strong gendered constructs and discourses that overhang and influence women's lives and decisions. These constructs and discourses were strengthened along the continuum to motherhood, and only the unique experience at each time point determined the significance of how these impacted on the women's eating and weight behaviours as hereby discussed:

## 7.1.1 What was important for women from the focus groups

In exploring women's views on weight status and food behaviours, the evidence from the never pregnant women discussions gave rise to themes of social contexts, gender constructs and discourses. The women highlight the meanings of their everyday experiences and practices, which are important in understanding how women negotiate life events. The narratives of the never pregnant women reveal important social contexts and gendered constructs that are a normative part of women's lives. Socialisation, social events, and social expectations influence women's eating and weight consciousness by prescribing food inhibition and weight watching. Accordingly, eating has emotional, biological and gendered meanings to these women. Also women expect and are expected to become mothers in their life trajectory reinforcing the gender rules women have to adhere to (Bailey, 2001). All these aspects form an important backdrop to how women experience pregnancy and transition to motherhood. The essence of women's experience before pregnancy gives the background to expectations and behaviour in and out of pregnancy.

### 7.1.2 The essence of women's pregnancy experience

Experienced as a gradual process, the essence of pregnancy was described as the beginnings of motherhood with social cultural constructs of pregnancy and discourses determining behaviour during this time. The change in women's priorities and focus from the self to the baby during this time is cornerstone in determining food behaviours while negotiating adoption of expected pregnancy discourses. The narratives of pregnant women echo preconceptual influences and expectations regarding food, weight and body image and how they are perceived in the transition to motherhood.

Women reveal embedded practices from pregnancy into postpartum displaying an evolving perinatal journey of behaviours. There is continued adaptation efforts towards 'doing the right thing for the baby' and also 'good mothering'. The women recall negotiating a changed palate, being picky eaters, positively navigating through morning sickness by persistently including healthy foods, stopping smoking and alcohol, and even starting exercise to reduce risk to the baby. Also women recall consulting fellow women who were seen as experts (their own mothers, or friends with pregnancy experience) and positively adapting to pregnancy changes and challenges. Pregnancy therefore starts off with a positive attitude towards health and this should be encouraged to enable mothers stand up against the social constructs that make women default towards unhealthful behaviours once pregnancy is established and in the postpartum period.

### 7.1.3 The tensions in the postnatal experience

These findings are a continuation of themes from the antenatal results and go further to reveal women's essence of having a baby at home after childbirth. Revealing a "shock" to the system initially after the birth, motherhood is experienced within social contexts and gender roles influencing and predicting food behaviours during this time. Being a mum was "a bit scary at the start, but [women] get used to the idea of having a baby" and this resulted in a conflict on eating behaviours. On one hand, women

desire to continue healthy eating focussed on the baby (breastfeeding, being in good health themselves), while on the other hand reverting to emotional treat and comfort eating as a result of early postnatal stress emerging from a negative childbirth experience and increased baby care demands. The tensions in women's experience of motherhood were mediated by previous gender discourses but also their experience of childbirth, all determining women's food and weight management practices post pregnancy.

## 7.2 The key findings across the continuum

Women's food behaviour has emotional, health and gendered meanings. The importance of these over the others is determined by the dominant discourses present at the different time points. This means that pre-pregnancy, women's eating and view of weight is geared towards the self of a gendered body image ideal; to be a size 10 or below, and requiring women to constantly watch what they eat. As women enter into pregnancy, this eating focusses on the baby and this continues postpartum. There are tensions in the postpartum period between the focus on the baby started in pregnancy that allows the transgression of the slim body accepting the "pregnant larger body" with the re-emergence of the focus on the self, present pre-pregnancy that requires women to conform and return to a previous body ideal in the postpartum period. When women are faced with such tensions, they negotiate courses of action based on their experience of the childbirth, present social and professional support. It is the negative childbirth and lack of support that reportedly drove women more towards emotional unhealthy eating behaviours. It follows that socialisation, social events, expectations and peer support are strong influencers to women's food and weight behaviours across the continuum.

In addition, women reveal changing dominant discourses across the motherhood continuum which influenced their views and behaviours regarding eating and weight status. Specifically the good mothering discourse is dominant at onset of pregnancy requiring a focus on the baby during pregnancy and into early motherhood. This involved putting the health of the foetus and baby ahead of anything else and the

willingness to "give up" their bodies, independence and even socialising events focussed on the baby as priority. This has profound influences on women's eating seen with an increase in healthful eating to include more fruit and vegetable and general mindedness about quality of the food at pregnancy onset and the reduction or complete cessation of unhealthy behaviours like smoking, alcohol consumption.

Women revealed to generally dislike exercise with only two women having routinely taken part in organised exercise like going to gym: one never pregnant woman and one postnatal participant. There was a general dislike for exercise across all groups, and for those who took part in routine exercise, motivations were either work related, or "to switch off". Bursts of focussed physical activity and exercise occurred when women's bodies were "going on show" for example in preparation for their weddings, or social events. Across the transition, women show preference for watching what they ate as opposed to staying active citing mostly lack of time and motivation to participate in organised exercise. Even when women report wanting to "do something" about weight creeping up, this planned action rarely involved any exercise but rather food eating restriction. Women's everyday experience and practice shows a preference of food restriction as a way of managing weight but not exercise.

Women reveal strong self- support behaviours starting with significant others as the central point of women's support. However, during pregnancy, there appears to be a shift towards friends who "have had pregnancy experience" either as professionals or as mothers themselves. The reliance on digital connectivity on fostering this support is evident in all women's stories, showing how they embrace the internet and "googling" to actively seek information, so as to either corroborate with other sources, enable sieving of info as well as to connect with other women who have been through a specific experience. In light of this, the digital discourse has emerged as providing opportunity to tap into to foster individual health behaviour efforts.

There is a strong recognition of and trust in health care professionals in matters regarding women's health across the 3 groups. From diagnosis and communicating weight status pre-pregnancy to the expertise during pregnancy and after childbirth,

the women reveal a reliance on the medical discourse and treating of the HCP as superior especially during pregnancy. Regarding eating and weight status however, the women reveal a lack of responsiveness of the care towards enabling them to healthful behaviours. Specifically, whereas the HCPs diagnose overweight status, women express disappointment at not being supported to "do something about their weight status" and sometimes refer to "taking it with a pinch of salt" in circumstances where diagnosis is done by an overweight HCP. These women expressed desire to be supported not only during pregnancy but before they even contemplate pregnancy as well as after pregnancy where no mentions of women's weight was discussed by any HCPs.

# **CHAPTER 8: DISCUSSION**

### 8.1 Overview

This chapter provides a summary and in-depth interpretation of the findings presented in this thesis; how they are situated within and extend the existing literature, highlighting what contributions this study brings to the evidence base of maternal obesity. The study explored how women negotiate pregnancy in regards to food behaviours and weight status along the motherhood continuum. A critical review of the literature identified gaps that necessitated an exploration of women's experiences of food and weight along this transition.

The discussion which follows provides a reflection on the study design and conduct of the research, highlighting the strengths and limitations as well as a final personal reflexive account in line with IPA. It then focusses on the integration of the findings by providing a summary of the main themes and bringing it all together into a continuum account of women's experience of motherhood. The evidence from each of the three findings chapters (the parts) is brought together into an account of women's experience in the transition to motherhood (the whole). This discussion offers a higher level abstraction of the data as suggested by Smith and Osborn (2008), where the findings are linked to the literature, enabling a discussion of how they contribute new knowledge, question, or add to existing literature. First a discussion of the strengths and weaknesses of the study is hereby given.

### 8.1.1 Study strengths and Limitations

The strengths and limitations of this study were assessed by applying the principles of quality in IPA as outlined by Smith and Osborn (2008) in conjunction with Yardley's (2000) guidelines for critique of IPA as already described in Chapter 3. In short, these principles encompass; the sensitivity to context underpinned by IPA, commitment to rigour, analytic transparency and coherence, and impact and importance (Brocki and Wearden, 2006, Yardley, 2000).

# 8.1.2 Strengths of the study

In keeping with sensitivity to context, IPA advocates that the sample be homogenous in order to exploit the individual accounts and meanings so as to create a narrative that presents convergence and divergence in the individual experience (Smith et al., 2009). This study utilised participants as experts of their experience, stratified by their pregnancy status, either as never-pregnant, or in pregnancy or early postpartum. Since it was the experience of food and weight around pregnancy that was key, the utilisation of women of childbearing age, outside teenage and late age (>40years) pregnancy, coupled with small participant numbers enabled a relatively homogeneous sample (Smith and Osborn, 2008). There were some differences between women's individual socio-economic characteristics (work, profession and education) but these only provided diversity in the accounts of the individual and collective experience.

In commitment to rigour and transparency, extracts of the steps in data analysis are shown in Appendices 12-15. The discussion in this chapter also contributes to study rigour, in enabling abstraction from superficial common-sense understandings (Smith and Osborn, 2008) into a construction of a meaningful version of reality from the women's stories (Yardley, 2000).

This is the first study to look at women's experience of food and weight in the context of motherhood at three time points, pre-pregnancy, during and post pregnancy. Even though different women were involved at each of these time points, their accounts combined together give an insight into what is important for women at these different periods of their reproductive lifetime. Whilst a longitudinal study would have seemed ideal and was considered, within the scope of this project as a PhD, it would have taken several years which was impractical in time and cost. This is because women would have to be recruited before pregnancy and followed until they have their children. Using different groups of women, made a longitudinal perspective feasible, while still elucidating on the same aspects which can be relevant and transferable to similar childbearing populations.

Also the FG participants were on average 25 years old, while antenatal and postnatal participants were averagely 30 and 32 years respectively. Even though it was not intended by design, this was of advantage as it logically portrays a longitudinal story of the motherhood continuum and the essence of women's experience during this time. The findings therefore would have resonance to most women in their reproductive years.

In addition, most data exploring maternal obesity has been dominated by positivist research, focussed on quantifiable determinants but not examining women's social world during the transition to motherhood. This study being qualitative in nature brings a new perspective in understanding the essence of this transition, explicating the context in which food behaviours are social- culturally embedded in women's experiences, and how all these aspects interrelate in the development of maternal obesity.

This is the first study to compare perinatal experiences regarding food and weight in women, who do not have underlying eating disorders, or are overweight and obese. Also, this study explores the experience of women who had a low risk pregnancy in antenatal and postpartum. Previous studies have looked at women in pregnancy under specific conditions for example, gestational diabetes (Dye et al., 1997), BED (Knoph Berg et al., 2011), overweight and obese (Lindsay et al., 2015).

# 8.1.3 Study Limitations

The limitations of this study mainly lie in the methodological shortcomings and its application. Principally, the use of focus groups in IPA has been cautioned as diverging from the IPA aims of detailed exploration of personal experience (Brocki and Wearden, 2006). However, their use in the present study was to explore the experience of being an adult woman within a British cultural context, so as to unpick the gendered meanings and interpretation of discourse. The strength that FGs allow participants to agree or disagree with each other was paramount in unpicking the diverse prepregnancy beliefs and discourses that impact on women's eating. This is in line with

known merits of FGs as providing insights into the diverse range and variation in opinions, ideas and inconsistencies within a particular community in regards to beliefs, practices and the members experience about a given topic (Krueger and Casey, 2014). Used in conjunction with interviews, the gold standard in IPA, they collectively help to meet the aims of the study.

Moreover, the FG sample was homogeneous in as far as recruiting women who have never been pregnant, but they also had similar background characteristics like race, age, education level. In addition, because food and weight are a sensitive study topic, participants were previously unknown to each other, which enhances diversity of results (Brocki and Wearden, 2006) as their experiences and influences may not be directly influenced by similar social structures and environments. The FG data were analysed separately from the interview data so as to accentuate the stories of the women within each group and unearth agreement and divergence in their individual experiences.

The semi-structured interview sample was fairly homogenous on the basis of important variables (Pietkiewicz and Smith, 2012) as described in Chapter 3, notably white British, living locally, pregnant or postpartum, between 20-40 years (most were in their 30s), without underlying medical conditions or eating disorders, among others. The average age was chronological which would be expected when looking at women's stories along the motherhood continuum.

Whereas the researcher had some experience in qualitative research, the conduct of FGs was a learning experience evident in the shorter responses at onset of the first FG. However, adjustments in framing of questions and probing participants in turn resulted into better participation and interaction with less talking from the researcher as the FG progressed. Even though the beginning FG responses were initially constrained, the researcher returned to some of these ideas later in the FG for clarification. Indeed the findings from the second FG show nuances which were consistent in the essence of the experience.

Another potential limitation was that participants self-selected in that they responded to the adverts, were aware of and keen to participate in the study. This was a potential problem especially with the FG because of the homogeneity of the sample on social characteristics, as all participants were at least college level educated. This could have an influence on their experiences of femininity and general perspective on life compared with women not educated to the same level. Besides, the social context in which they exist and experience their narratives and interact with others may also be different. Therefore, where there are potential effects of education level, this was highlighted within the interpretations of FG data. Also for the individual interviews where participants were diverse, their self-selection for the study, like the FG participants, could mean that they are more aware of their eating and weight related behaviours. A randomly selected group of women may present different influences on their eating and food habits, as food may not be on their radar, but this would go against voluntary participation principle of research participant rights (WMA, 1964). However, from the diversity of women's experiences and narratives, self-selection was seen to positively contribute to the understanding of the strong culturally embedded discourses often taken for granted in everyday lives of women. The effects of a selfselected sample on possible differences in the meaning of their experience have been highlighted.

Due to the serial nature of the interviews, some follow-up interviews were carried out by telephone to the convenience of the participants. However, one participant preferred a telephone interview at the onset, and it is clear from her narrative that the data misses some expression contexts which could have enriched her account. Interviewing her in person could have provided a far more in-depth and richer account of her experience. Also the follow-up interviews were brief, as women were re-visiting previous experience and information. Some women preferred phone interviews at follow-up possibly because of the demands of motherhood and return to work. It is possible that telephone interviewing could have contributed to the short length of these interviews but also these women may have wanted to "hide" from the researcher if they were much larger and feeling body insecure at follow-up. Indeed one

participant intimated how she was going to start "looking at her weight" after the interview. In this case, self-selection may have given some participants a reminder for healthful behaviours like exercise especially in later postpartum.

# 8.2 Reflexivity: elucidating the position of the researcher

Continuing from the initial reflexive statement in Chapter 1, this narrative is in the first person as a self-reflection of my journey from data collection through analysis, interpretation, and writing up. Derived from my personal research journal, it relates to how my background and preconceptions influenced and affected the conduct of the study, and the potential impact on the product of this investigation.

#### 8.2.1 Refinement and data collection

The study idea was conceived from a doctoral idea for a competitive University of Hull bursary. Interest to undertake this study and refinement of the scope was informed by career interests in nutrition, my experiences as a first time mother and gaps in the literature. Having gained more weight after childbirth than before and during pregnancy, I was keen to explore other women's experiences regarding food and weight in postpartum. Funding by the University covered tuition and administrative costs to facilitate the doctoral studies but did not influence the nature and conduct of the study. The lack of research funds limited geographical coverage of the study.

The research project started well, on track with successful contact and consultation with the midwifery teams who gave immeasurable support, advice and guidance that fine-tuned the study design. With their help, I looked at the practicalities of NHS recruitment, considered potential limitations and tailored the recruitment to enable random participant selection and identification. This enabled a smooth ethics process for the Faculty ethics and NHS R&D approvals.

Recruitment of FGs was straightforward with an oversubscribed response to the adverts. However for pregnant and postnatal participants, the process of data collection was tricky and took longer than anticipated. It involved hand-delivering

leaflets to Children's Centres, targeting pregnant women at their first antenatal 'booking-interview' or late pregnancy MW appointment. Even though I delivered in excess of 200 leaflets, participant interest was very low so I visited these centres regularly to determine why. Surprisingly, no leaflets had been distributed, partly due to work overload for the teams but also due to inadequate knowledge about the study by the midwives who were directly interfacing with the women. Without a research passport to directly contact the women at these clinics and also being of non-health professional background seemed to disadvantage my gaining support for recruitment using midwife teams. However a change in approach where I attended at clinics and explored other distribution points such as use of hospital sonography clinics and local print media helped increase leaflet distribution and response.

The interviews took place at participant homes and for a few at their workplace as convenient. This enhanced women's freedom, as they freely invited me, a stranger to the comfort of their homes or private space within their workplace. FGs were held in a central place chosen by participants as the Faculty meeting room. In choosing this venue over a café, women expressed preference for privacy and also that it was more central and comfortable which is important to reduce power dynamics.

# 8.2.2 Influence of my background

My background as Black, non-British recruiting and interviewing Caucasian women may have potentially deterred recruitment but did not appear to negatively affect the progress of the interviews. Some participants however acknowledged the 'difference' with emphasis in their narratives for example "in Britain, we have..." This seemed to encourage opening out and women tended to give more elaborate accounts of 'British' sociocultural practices and descriptions of their experience. I used this difference from the participants to take an outsider perspective where women revealed more detail and context of their experience to enable my understanding of their experience, while double-checking inconsistences. This facilitated a detailed insight into women's descriptions of "common knowledge" experiences and influences.

Being female, contributed to the development of trust with the women, evidenced through their welcoming me into their homes and sharing of intimate details of their experiences and insecurities, which are often hidden in everyday speech. This was important in women's discussion of difficult experiences around pregnancy and childbirth enhancing transparency which may not have been possible otherwise.

# 8.2.3 Power dynamics in data collection

It is worthy of mention that my disclosure of being from a non-medical background, protected me from participants' requests for professional opinions and confirmation of information. For example, a participant mentioned how she had wanted to ask for my opinion on what she had been told by her midwife, if I were a health professional.

Further, being professionally non-medical facilitated free discussion regarding care and support without fear of reproach, in effect giving me an insider status into their lived experiences. In interpretation of the findings, I highlight where there were differences in what was said and what participants meant. The researcher-participant dynamics during the interviews were almost equalised, in part as a cultural outsider and researcher but an insider by gender, a mother, a peer (similar age) and by non-medical profession. This may have been different if I had been a practicing HCP with different personal attributes.

Moreover using feminist perspectives for this research meant that I showed compassion to women during the interviews. I signposted and kept in touch with one woman who disclosed challenges adjusting postpartum due to negative childbirth experience, to ensure that she accessed support. By relating to their experiences, I set out to recognise how women recounted their gendered experiences and elicited what was of essence to them.

### 8.2.4 Addressing subjectivity due to my life experience

My social constructs on food behaviours and how they affect weight status during and after pregnancy stem from my experience as a first time mother and how strong

cultural practices dictated what I had to do during and after pregnancy. My cultural background viewing the 'mother ideal' as a larger woman after childbirth further motivated me to learn how uniquely the women experienced their pregnancy within a different cultural context. Indeed, from the women's narratives, they talked to me as if to educate me on the 'system' giving detailed descriptions of their experiences, choices and options and even how maternal services run, sidestepping everyday knowledge assumptions often made when you are a part of the culture. I was the outsider and I viewed this as privilege as it gave inner insight on what mattered most in their experience.

Also having had a different cultural experience of pregnancy, I probed for more information to capture the detail in the women's experiences. I acknowledge a difference in women's stories and cultural constructions from my personal constructs, and have purposefully bracketed these while I interpret the women's narratives necessary for in-depth engagement with the data (Brocki and Wearden, 2006). By bracketing my preconceptions, I present the meaning of women's experiences and what is important to them during this time. To understand pregnancy and motherhood, giving a voice to women's stories can be an immeasurable source of knowledge and learning, specifically in regard to behaviour change initiatives addressing multifaceted maternal obesity and women's wellbeing.

### 8.2.5 Conclusive statement

Looking back on this study from proposal writing, to the ethics application process onto data collection and up to thesis write up, I feel that I have matured as a researcher, learned new skills and appreciated how individual preconceptions impact on not only data collection processes, but also the interpretation of the findings. In my discussion of the results, I highlight some culturally taken for granted narratives which inadvertently influence women's lived experience of pregnancy, weight and food behaviours. My unique characteristics have contributed to viewing the narratives with a different eye to bring to the fore these often taken for granted discourses and influences on women's food behaviours.

# 8.3 Bringing it all together: The findings

Amalgamating the women's stories in a discussion of the essence of their experience across the motherhood journey, from pre-conception, through pregnancy and into the postpartum period, demonstrates that women's lives are defined by social contexts, temporal gendered expectations and constructs as well as social discourses. The following subsections pool together women's narratives, highlighting effects on food behaviours and weight status before, during and after pregnancy as well as implications for interventions and research. The findings reveal insights into behavioural and social contributors to eating and weight behaviours that may lead to or exacerbate maternal obesity (Crawford, 2010). Current literature is cited where the study findings agree or not, and an overall interpretation of the meanings is discussed.

#### 8.3.1 Social environment and socialisation

From the diverse women's experiences, we see how women are social beings, their lives dependent on close relationships. Socialisation and social contexts were influential in women's view of their bodies impacting on food and weight practices.

#### 8.3.1.1 Social contexts

Pre-conceptually, women were self-aware, understanding their eating preferences, while emphasising hindrances to healthful eating habits. The women could easily highlight weaknesses when it came to unhealthy food choices but no strengths for eating healthier. This continued throughout pregnancy into postpartum, with only the baby being described as a motivator for eating healthily (Szwajcer et al., 2007), but women's narratives still capitalised on barriers to healthful eating. Generally, women are aware about food; this increases in intensity during pregnancy especially for first time mothers and can have positive impact for women's future health and that of her family (Szwajcer et al., 2007, Inskip et al., 2014).

Women reveal that lack of defined social contexts contributed to suboptimal eating habits. The important social contexts were being single and living alone, limited finances, and lack of time or "being on the go" (Evenson and Bradley, 2010). These negatively affected food behaviours such as eating preferences, quality, frequency and timing. When such social settings were changed, the women report regulated and better eating styles, implying that a change in status should predispose women to better eating habits once, for example in a long term relationship or married. Women recognised the role of partners as enablers of more structured eating, where the couple would plan and make efforts at home cooked meals as found in other studies (Evenson and Bradley, 2010, Blake et al., 2011). Therefore, when these women have stable relationships, they expect social contexts to be a positive influence to their eating and weight experience (Thornton et al., 2006). This is important for understanding how women experience motherhood in that these social contexts are often 'stable' during pregnancy and motherhood as women are mostly coupled and not living alone.

The change in this social context however appears to be beneficial to only 'normal sized' and 'skinny' women where significant others encouraged healthy eating and structured eating for these women. Conversely, partners always colluded in enabling the proliferation and satisfaction of women's 'biological' cravings while also hindering healthy eating efforts (Szwajcer et al., 2007) in larger women along the continuum. The large women reveal diminished personal control (Lindsay et al., 2015) resulting from the provision of "bad foods" by their partners and the lack of encouragement when they attempted weight loss and management regimes. Just like friends and family, partners were being protective of large women through reassurances over their overweight status pre-conception, in a way discouraging their drive to healthy lifestyles (Collins, 2011).

The implications of this for women during and beyond pregnancy is increasing weight status being treated as irrelevant by their significant others, which may encourage overweight states. Moreover, the narratives of pregnant and postnatal women reveal that some partners gained weight when the women were pregnant, and also that partners did not acknowledge or comment on women's increased weight during and after pregnancy (Darvill et al., 2010, Finnbogadóttir et al., 2003). Accordingly women thought they did not have to worry about their weight or even embark on weight management. It follows that, being married or in a relationship appears to improve healthy eating only when women were normal sized, but encouraged higher weight status when women gained weight or were already larger (Klos and Sobal, 2013, Averett et al., 2008). The vital supportive role partners play, puts them in an ideal position for health promotion efforts to encourage healthy food behaviours among women during and after pregnancy but also among large sized non- pregnant women.

The women's narratives reveal the start of motherhood to be influenced by attributes of age, relationship status and expectations. This timing of motherhood was related to women's age as a marker of body readiness, amplified by being in stable relationships. There is an expectation that being married or in a stable relationship is a sign of readiness for pregnancy, and motherhood is an expected life progression (Devine et al., 2000). Indeed even when it was not a planned pregnancy, the decisions to carry on with the pregnancy reflectively reveal the partner's commitment to the relationship (Brunton et al., 2011) and a gender pre-set of women's readiness for motherhood (Miller, 2007). Hence, women negotiate feelings of guilt if they started off not sure about an unplanned pregnancy (Jones et al., 2014). The essence of body readiness was centred on food and emotion, whereby women describe a process of adapting their bodies to 'be right' for the pregnancy. Women adapt their bodies for pregnancy by stopping unhealthy habits like smoking and alcohol consumption, replaced by intake of preconception vitamins and folic acid (Szwajcer et al., 2007, Verbeke and De Bourdeaudhuij, 2007). This adaptation confirms the importance women put on motherhood (the baby) becoming a key motivator for healthful behaviours (Verbeke and De Bourdeaudhuij, 2007) which is essential in that personal importance of an action brings longer lasting effects on behaviour in life course studies (Szwajcer et al., 2007) and from self-determination theory. Indeed the healthful food behaviours continued in the postpartum especially for women who were breastfeeding like in Chen et al. (2014), confirming the importance of the baby driving their food choice and behaviour.

Yet another aspect of social context was seasonal eating (Ma et al., 2006) and social events that determine eating behaviours while relaxing expectations in regards to body image and weight consciousness. There is a temporal acceptability of weight gain where women are allowed to be larger during the cold winter months, yet expected to revert to the slender ideal in the summer months when the "body goes on show". Women's behaviour during this time is driven by social pressures to conform, and group belonging where "everyone is doing it", referring to weight loss in preparation for the summer. This was mediated by fashion trends and retail shop stocking of foods that emphasize this temporality. Therefore, women are said to start pregnancy and motherhood already pre-programmed by social events accepting of weight gain (Ma et al., 2006). Indeed once pregnancy was confirmed, the women coveted for the 'baby bump' to show (Earle, 2003), revealing no worries about the larger pregnant body other than being uncomfortable. This finding is in line with studies that have found increased body satisfaction during pregnancy, compared with pre-pregnancy (Loth et al., 2011, Clark and Ogden, 1999, Fairburn and Welch, 1990) and postpartum (Carter-Edwards et al., 2010). However, the expectation of a large pregnant body, yet without weight consciousness characteristic of women's lives, is shown to lead to increased eating, subscribing to the 'eating for two' construct. This is evidenced in the women's report of "fancying more foods" and having a "niggling feeling to eat more" once the pregnancy started to show.

In addition, a sense of belonging from accounts of "everyone is doing it" was nuanced during pregnancy and in postpartum where women reveal behaviours fitting within a 'mum club' especially for second time mothers. As postulated by Phillips (2010), the sense of belonging can sustain behaviours and practices suggesting a window of opportunity for healthful interventions.

### 8.3.1.2 Social interaction and pressures

Social interaction and social pressure resulted in comparison and competition, such that women conceptualised their weight relative to family and friends. Socialisation and social events distributed women into two categories: for smaller women, socialisation led to eating more, so as not to be seen as too skinny, while for larger women, socialisation required food restriction. Milieus played an important role in women's personal control and encouragement of better eating with smaller women describing motivations towards a healthy weight, while larger women reveal no positive group influences in encouragement to eat better or lose weight (Lindsay et al., 2015, Nuss et al., 2006). Without support, some of the larger women resorted to food restriction and inhibition especially when in public, while binge eating when they were alone. Social comparison continued in pregnancy where women compare food intake, pregnancy weight gains and 'bump' sizes with pregnant friends or family member's experience. However, food intake comparisons and weight status during pregnancy were underplayed by strong constructs and discourses during this time (Maher and Saugeres, 2007), resurfacing in later postpartum. Along the motherhood period therefore, social interaction and peer pressure (and support) play an important role (Thornton et al., 2006) in women's view of their bodies (Befort et al., 2008), eating choices (Sorensen et al., 2007), information (Nuss et al., 2007), weight management efforts (Lombard et al., 2010) and women's wellbeing (Jones et al., 2014).

The evident dislike for planned physical activity and routine exercise in women's narratives describes social pressures to look good and social comparisons among women in regard to body image and weight attitudes. The motivations for exercise pre-pregnancy were partners, peer pressure and body shows over the summer months. In pregnancy and postnatal, motivations for exercise were mainly prior exercise (Gaston and Cramp, 2011, Hausenblas et al., 2008), partners (Symons Downs and Hausenblas, 2004, Clarke and Gross, 2004) and if prescribed by HCPs (Clarke and Gross, 2004) as necessary for the welfare of the baby. These findings answer some previous research gaps in providing insights on approaches regarding physical activity

(Kuhlmann et al., 2008), specifically that previous interest in physical activity and participation in exercise before pregnancy continues in pregnancy and is taken up postnatally to enhance weight loss (Gaston and Cramp, 2011, Clarke and Gross, 2004). Also, because of increased barriers to exercise in postpartum (Pereira et al., 2007), introducing exercise before women become pregnant would enable it to be embedded within their routines which they return to in later postpartum. Encouraging physical activity during pregnancy should emphasise the benefits and expel the misconceptions on its effect on the baby (Clarke and Gross, 2004, Evenson and Bradley, 2010). Maternal obesity interventions need to involve both diet and physical activity (Amorim et al., 2007, Jebb and Sritharan, 2005, Krummel et al., 2004, Rooney and Schauberger, 2002) while taking into consideration women's motivations for longer lasting effects.

Women describe actively seeking information and support from family and friends when faced by unfamiliar events. Pre-conceptually, such events included illness or medical diagnoses, important life events like marriage and later pregnancy and motherhood. Pregnancy and motherhood was perceived to be an unfamiliar, emotional, life changing experience (Johnson et al., 2004) requiring reassurances and support (Miller, 2007) from those regarded as knowledgeable (Darvill et al., 2010). However, whereas second time mothers sought support mainly regarding childcare, first time mothers support needs were chiefly to help them navigate the unknowns of pregnancy and postpartum (Darvill et al., 2010, Miller, 2007). This was centred on what to expect, what to eat, and body changes (Johnson et al., 2004). Therefore, first time mothers were more open to health promotion and support (Johnson et al., 2004), which they then potentially transfer to subsequent pregnancies, as evidenced by the second time mothers who reported being more confident (Miller, 2007), required less pregnancy support but more family and childcare support (Smith, 1999).

In addition, women tend to seek validation and support from special and trusted others in their lives (Befort et al., 2008). Pre-pregnancy, validation is mainly from family and friends which continues during pregnancy (Tovar et al., 2010, Thornton et al., 2006)

seen in priorities to relay pregnancy news, sharing pregnancy worries and progress (Darvill et al., 2010). In pregnancy, women actively sought support from their mothers and female 'expert' friends who had gone through motherhood (Brunton et al., 2011, Darvill et al., 2010, Szwajcer et al., 2005) or were health professionals. Throughout these time points, women acknowledge HCP knowledge regarding weight assessments and checks (Johnson et al., 2004), and expressed desire for HCP advice and support in healthy food and weight management (Befort et al., 2006). However, women's narratives revealed HCP's only assessing weight but not providing support, which may result in frustration especially for those overweight, or worried about their weight status without positive social support (Paquette and Raine, 2004). The reliance on social support and recognition of HCPs during the motherhood continuum can be positively utilised to advise, and encourage healthy eating and weight behaviours (Misra and Grason, 2006, Calfas and Marcus, 2007, Befort et al., 2006, Paquette and Raine, 2004).

# 8.3.2 Gendered expectations and constructs

The narratives separate women's meaning of pregnancy into gendered and social-cultural constructs that women buy into during this period. Notably the temporality of the slender ideal (Bailey, 1999), expectation of pregnancy on women's life course (Nelson, 2003), view of pregnancy as a public affair (Miller, 2007), eating as an emotional aspect of being a woman and the expectation of increased food intake in pregnancy (Feig and Naylor, 1998). Women are vulnerable to these strong cultural constructs as they influence their eating behaviours and are said to responsible for current rising obesity in this group (Nasser, 1997).

# 8.3.2.1 Social cultural constructs of pregnancy

Whereas women's lives are filled with social comparisons, weight consciousness and image insecurities, the social construct viewing pregnancy as a public event means that people can touch, comment, give advice and even monitor women for bad

behaviour during this time (Hodgkinson et al., 2014, Bailey, 1999, Miller, 2007). The public were "free" to comment on women's choices, all advising to 'choose healthy' habits such as quit smoking, replace cola with juice; all of which were well received by the women; an acknowledgment of the changing focus from self to the baby (Darvill et al., 2010). The significance of public view of pregnancy was in the way objectification of women's bodies lingers (Earle, 2003) while modifying their body insecurities by recognition of a big body as 'not fat' but pregnant (Hodgkinson et al., 2014). However, contrasting with findings of Earle (2003), the narratives show that women complied with the feminist resistance of the oppressive slender ideal in their acceptance of the larger pregnant body. The acknowledgement of women's growing baby bumps with requests to feel the baby was interpreted as a direct public acceptability of weight gain during pregnancy confirming the temporality of body image ideals (Skouteris et al., 2005).

Women report strong aspects of cravings as either a continuation of emotional eating, a biological need or even a gendered way of reward. The uniqueness of cravings identified with monthly menses reveals this to be a socially acceptable time to indulge in otherwise usually "forbidden" foods. This is because, women routinely exhibit inhibition eating to conform with the slender ideal, however, the uniqueness of the monthly menstruation appears to socially provide a time they are allowed "treats" commonly referred to as cravings, an intense desire for a food until one has had it. Indeed, women report freely satisfying these cravings without guilt when they "occurred" around menstruation. However, when these occurred outside this period, women reveal these cravings as random indulgences, often as comfort eating or treats. Some women believe that food cravings were a body alert system in which the body responds to a deficiency compelling more intake of that particular food. Therefore women's eating appears to be constructed as emotional, gender specific (Nuss et al., 2006) and even sometimes as out of their control determined by the body. In pregnancy, the experience of cravings mirrored these aspects contributing to increased food intake (Abraham et al., 1994). Moreover, temporal body image expectations accentuated cravings, and some women even labelled their cravings as "the baby needs". The cultural acceptability of cravings appears to underpin women's emotional eating behaviours throughout the motherhood continuum which should be considered in health interventions targeting food behaviours and weight.

# 8.3.2.2 Gender pressures and constructs

The women describe a gendered expectation to be pregnant and a mother within a woman's lifetime confirming the strong cultural emphasis on biological motherhood (Bailey, 1999, Battersby, 1998). Reasons for starting motherhood were social based, primarily wanting to belong to a club (Brunton et al., 2011), as a "fashion trend" among friends and expected as part of the life choices women have to make (Miller, 2005). Even though these women describe putting career before motherhood, they expect to have children as part of their lifespan, becoming more urgent as women progressed in age (Gross and Pattison, 2007), into their 30's. They view the pregnant body as a vessel to keep and nourish the baby (Hodgkinson et al., 2014), thereby endorsing the oppressive viewing of women as incubators (Battersby, 1998). The narratives reveal social expectations of pregnancy as a restrictive time, filled with do's and don'ts that women have to adhere to and these appeared to be influenced by HCPs, media and culture, (Phillips, 2010) passed down inter-generationally. These rules were mostly focussed on foods to avoid in pregnancy but also a focus on the baby, relaxing social expectations and ideals and allowing for disinhibition, diverting from women's normative eating behaviours.

The experience of early pregnancy reveals women's confirmation of body readiness through surprise and excitement at achieving conception. The expectation and experience of somatic symptoms acts as a sign of pregnancy confirmation, while morning sickness was described in relation to the ability to eat. After pregnancy confirmation, the embodiment of the foetus begins to emerge where women's eating shifts to the wellbeing of the baby (Darvill et al., 2010, Szwajcer et al., 2007). The experience of change in hormones and a changed palate is reported in terms of fussy eating, while the focus on the baby makes women's strive for healthier food. Women's eating is centred on "being happy" with the pregnancy but also rationalise eating to

"this is what the baby wants". This continues during the postnatal period, only that meeting the baby needs takes on a different form, in terms of provision of breastmilk for those breastfeeding, while responding to feeding and changing cues deprive women of time and energy to make healthy meals (Chen et al., 2014, Blake et al., 2011). The prioritisation of the baby needs is influential on postnatal women's food behaviours (Szwajcer et al., 2007) specifically said to promote healthier eating for those breastfeeding (George et al., 2005), and for others eating on the go and snacking on unhealthy foods. This observation could explain why healthful eating subscales generally did not change as expected among postnatal women in previous studies (Nuss et al., 2006, Devine et al., 2000).

In the never pregnant women's narratives of limited finances prescribing poor diets and diminished personal control, women associate food with mood and emotion, such that boredom and stressful situations lead to poor food choices centred on 'treat' and 'comfort' food eating. These eating behaviours continued in pregnancy where healthy eating was centred on "being happy" while in the postpartum period women reportedly having "treats" and consuming unhealthy foods when they were low, tired, or stressed (Lindsay et al., 2015). This has been coined as emotionality of women's eating seen to lead to overindulgence and contribute to unhealthy weight status (Nuss et al., 2006). Women's experience of 'being a mum' was as an emotional rollercoaster, an extremely tiring time where the baby's needs are seen as priority (Szwajcer et al., 2007), most significantly for those who had a negative birth experience. This study confirms the long-time experience women have with food (Gross and Pattison, 2007), becoming more legitimised during pregnancy (Tovar et al., 2010, Clark and Ogden, 1999). The area of personal control is especially important as current intervention studies reveal women being more empowered to eat and feed their children more healthily if the women had a greater sense of control (Inskip et al., 2014).

Women expected childbirth to be a straight forward, normal process and expressed disappointment when this did not happen (Brunton et al., 2011). The effect of the negative childbirth experience for the women was twofold: first they wholly adopted

"good mothering" discourses including acceptance of social isolation (*Mandy, Tara*) but they also reveal especially poor eating habits postpartum (Nyman et al., 2010) as well as poor coping and delayed recovery (*Janine, Mandy*). This presents new insights into the impact of HCP intervention in childbirth when women expect but do not get a normal birth (Brunton et al., 2011, Nyman et al., 2010). For these women especially, being a new mum was about survival such that women's own needs were relegated to prioritise the baby, and as a result women's food behaviours mostly defaulted to previous behaviours of snacking and mood eating during this period (Nyman et al., 2010, Nuss et al., 2006, Lindsay et al., 2015). The implication of emotional eating in the motherhood period is in its potential to kick-start weight development among women where negative events create a weight gain-unhealthy eating vicious cycle.

When women experience negative emotions, (sadness, anger, boredom, or negative life events), they tend to comfort eat, which in turn increases their weight status (Krummel, 2007, Nuss et al., 2006). Then being overweight and obese predisposes them to more eating in response to emotional cues (Nuss et al., 2006, Lindsay et al., 2015). Moreover, compared to men who describe meal-related comfort foods, women reportedly prefer "junk food" snacks for comfort eating especially chocolate and ice-cream (Wansink et al., 2003) as seen in the narratives here. Equally, the women felt more guilt, and less healthy than males regarding consuming comfort foods (Wansink et al., 2003). This shows how indulgence in comfort eating guilt-trips women and fuels the psychological cycle of women's eating and weight development.

In awareness of the self, women reveal the description of slender ideal to which they have to conform (Paquette and Raine, 2004). The narratives reveal that being a size 10 or below was the ideal requiring no input in terms of exercise or to have any worries about body image. Therefore, behaviour was mediated by social prescriptions of the slender ideal (size 10 or below) requiring that women conform through constant watching of weight (Abraham et al., 1994), social comparisons with family and friends, as well as awareness of the foods that may contribute to overweight status. Moreover the women's accounts reveal that it is socially unacceptable to refer to women as fat,

describe a 'fear of fatness' in a way consolidating the social slender ideal that is linked to eating disorders (Nasser, 1997, Conner et al., 2004, Knoph Berg et al., 2011). The normative display of slimness as attractive means that larger bodies are regarded as bad, often displayed as prop points in the media (Greenberg et al., 2003), which may heighten body insecurities among women and propagate continuous body consciousness. Although this slender ideal was dominant prepregnancy, this appears to change during pregnancy but the slender ideal was still a recognised ideal like in (Davies and Wardle, 1994). Accordingly, women who did not return to the slender ideal, exhibited self-reassurance behaviours such as "feeling happy" with their postpartum body, and reassurances from significant others (Hodgkinson et al., 2014).

Women are socially constructed to be conscious of their weight on an on-going basis focussed on overweight status. Never pregnant women were reactive to comments and interpretations of their weight describing a fear of weight gain. During pregnancy, women continued to be weight and body conscious (Skouteris et al., 2005) although with higher body satisfaction (Loth et al., 2011) and aspirations to exercise after birth. Weight worries during this time acknowledged pregnancy weight as acceptable, inevitable (Hodgkinson et al., 2014, Loth et al., 2011), yet controllable by "keeping an eye on it" and eating well (Earle, 2003). Women who were overweight or obese surprisingly perceived their weight to primarily be a risk to the baby's health but not of risk to themselves. The implications are that the overweight and obese women's motivations for weight management during this period would only be focussed on the baby (Szwajcer et al., 2007) which is an important aspect to consider in health promotion efforts for this group.

Preconceptually, body insecurities also reflected women's emotional status, with especially negative emotions triggering a view as "fat" (Nyman et al., 2010). Indeed this appears to influence women's view of their body during pregnancy, with those "happy" with the pregnancy, embracing the social acceptance of a larger pregnant body, while those struggling with pregnancy acceptance still revealing body image insecurities (Fox and Yamaguchi, 1997, Lora-Cortez and Saucedo-Molina, 2006), which was only

relaxed with public recognition of the body as pregnant (Hodgkinson et al., 2014, Loth et al., 2011). Women emphasize that their changing body image insecurities were initially high at the start of pregnancy, describing being fat as bad (Hodgkinson et al., 2014) and desired for the pregnancy to show, so as not to be mistaken as fat (Earle, 2003) in line with the gendered slim ideal.

In the postpartum, the expectation to bounce back to a slender body is real, only initially suspended by priorities of baby's health and post birth recovery. In later postpartum however, body image insecurities were heightened especially for women returning to work outside the home (Hodgkinson et al., 2014, Pereira et al., 2007). These women described attempts at food inhibition and watching what they ate, returning to some pre-conceptual behaviours (Rocco et al., 2005). This finding suggests that return to work puts women on pressure to conform to the slim ideal (Crowell, 1995) and also potential peer influences may motivate women taking on healthful behaviours in late postpartum especially previous physical activity levels (Pereira et al., 2007). However, this questions whether decisions to stay at home may be related to weight and body image insecurities following childbirth.

#### 8.3.3 Social and motherhood discourses

There were strong systemic discourses women subscribed to during pregnancy. Principally, the trust in medical assessment of health as superior, good mothering and digital discourse currently taking off in everyday lives.

#### 8.3.3.1 Social discourses

Women are keen information seekers, harnessing the digital discourse to check what was normal, corroborate information and also connect to share experiences. What was "normal" was not defined and this could be variously understood given the diverse information available on the internet. The implication of women's need to confirm normality are that women may become overly worried if they deviate, but also finding

stories of other women going through the same experience could proliferate unhealthy behaviours like overindulgence. On the other hand, defining normal could lead to healthful behaviours if information is accurate and of good quality (Anderson and Klemm, 2008). This calls for research to understand what is "normal" in women's search for digital information but also what sources are trusted where this information comes from in the context of pregnancy (Szwajcer et al., 2005, Romano, 2007).

The digital discourse was commonly used as the first stop for information. Referred to as "Googling" the search for information on the internet was routine in women's lives due to increasing ease of access through mobile handheld gadgets (Romano, 2007). It is important to note that women sought HCPs when their worry was "serious" but otherwise consulted the internet, friends and family for reassurance (Nuss et al., 2007). This has been reported as worry for maternity services where women's use of mobile apps takes over their utilisation of HCPs for support (Robinson and Jones, 2014). However, the internet was used to siphon out what was worth worrying about and for general factual information. This was of essence to women's experience of pregnancy and postpartum, as googling provided self-support when women were worried, but also supported feeling in touch with other women in a similar experience. Essentially, adopting the digital discourse was the women's way to feel in control of the pregnancy (Romano, 2007) and adjustment to mothering through tracking progress, assessing bodily changes but also to imagine what the baby would look like. It also provided an opportunity to validate various information women received during this period, to ensure they were making the right choices focussed on foetal health. Using the internet to check for normality but also for information can be an important tool in encouraging healthy behaviours in and out of pregnancy as greater nutrition knowledge has been associated with reduced postpartum weight retention (Nuss et al., 2007). In their study, Nuss et al. (2007) found internet users to have higher knowledge test scores and show lower postpartum weight retention.

First time mothers reported a unique experience of motherhood as being disconnected from their friends as the pregnancy progressed and became most

evident postpartum. This social exclusion was accepted earlier on as part of good mothering behaviour but became increasingly unsettling as they got into mothering routine (Darvill et al., 2010). A similar finding of social isolation has been reported in a research synthesis by Brunton et al. (2011) that some relationships with non-mothers ended when women became pregnant and among first time fathers (Finnbogadóttir et al., 2003). This is of significance to women's food behaviours as social exclusion was linked to poor food behaviours of binge eating and unhealthful food choices in never pregnant women in this study, while socialisation and comparisons encouraged better eating. Tackling social exclusion and isolation could help address comfort and unhealthy eating habits for especially first time mothers after childbirth. Socialisation with women in similar circumstances can offer support to women (Brunton et al., 2011) as they navigate the stressful early periods of motherhood to ensure all round positive health (Jones et al., 2014, Darvill et al., 2010). Health care needs to facilitate contact between pregnant mothers to ensure support after birth (Darvill et al., 2010) especially for first time mothers. Social networks made can potentially be transferred to future pregnancies as evidenced by the second time mothers who reported no social exclusion as they had friends, who they shared with as all mothers.

# 8.3.3.2 Pregnancy and motherhood discourses

The essence of women's experience of pregnancy and postpartum strongly depicts a continuum where behaviours which start in antenatal (and are based on continued acceptance of societal discourse which begins pre-conceptually) continue into the postpartum but become slightly nuanced due to the changed context. Throughout, "good mothering" discourse was a pivotal influence on women's behaviour, decisions, assessment of risk and choice. This was reinforced by gendered expectations drawing the focus to the baby during pregnancy (Darvill et al., 2010, Brunton et al., 2011) (Szwajcer et al., 2007), continuing but slightly different in postpartum. The women all recall adhering to "good mothering" expectations such as prioritising the baby, staying home, acceptance of social exclusion, but also making healthy eating efforts during

pregnancy (Verbeke and De Bourdeaudhuij, 2007, Chen et al., 2014) and in postpartum especially if they were breastfeeding (George et al., 2005) or nearing weaning. Implications of this are that healthy eating and weight interventions would be more effective if they begin antenatally continuing into the postnatal period. In addition, promotion of breastfeeding would continue the focus on the baby to further enhance healthful behaviours (George et al., 2005) while also encouraging postpartum weight loss for the mothers (da Silva et al., 2015).

The women expected and constructed motherhood as good or problematic, benchmarking themselves against medicalised definitions of normality and wellbeing while acknowledging HCP services as superior. The experience of pregnant women's contact with HCPs describes the expectation and realisation of medical treatment of pregnancy (Furber and McGowan, 2011). Women's appointments were characterised by tests, scans, and assessments of baby health and development (Miller, 2005); questions relating to pregnancy wellness, but rarely on women's support needs (Furber and McGowan, 2011). Women recall care as non-responsive to their weight worries and eating support needs (BBC Health, 2010), not explanatory except when women were proactive, and appeared to label women as "fat" since no actual weight measurements took place when women were told they had a high BMI. These findings mirror the experiences of obese pregnant women in the qualitative study by Furber and McGowan (2011). Extending their recommendations that health care be supportive, this study adds that HCPs need to be responsive to the needs and concerns of women regarding diet and weight during and after pregnancy. Providing better information and explanations (Furber and McGowan, 2011) can have a positive impact on not only women's enjoyment of the pregnancy, but also on their personal wellbeing during and following the pregnancy (Jones et al., 2014).

It is interesting that even when HCPs only assessed women's weight but not offering any support (BBC Health, 2010), the meaning of women's contact with HCPs was trust in their expertise (Verbeke and De Bourdeaudhuij, 2007) and superiority. From prepregnancy, the women desired for HCP support in respect to better eating and weight

management if they were larger, otherwise, this support was more important to the women if it came from significant others (Szwajcer et al., 2005). In pregnancy and postpartum however, women coveted HCP advice and support regarding any worries and more so about food and weight. Advice on food and weight during pregnancy however necessitated women to be proactive most of the time as it was not routinely provided. The findings in this thesis agree with and extend previous dietary behaviour research among pregnant and non-pregnant women (Verbeke and De Bourdeaudhuij, 2007, Szwajcer et al., 2009) by highlighting gaps and importance of HCPs to provide nutrition communication during pregnancy and promote healthful behaviour in the postpartum (Huang et al., 2010, Szwajcer et al., 2005).

In addition, women's reflections describe desires to have a normal childbirth, expected especially when the pregnancy was "straight forward" and medically problem free. The women reveal childbirth choice to have been influenced by HCPs but also the baby having an 'active role' on how they wanted to be born. They acknowledge having no control during childbirth, trusting HCPs, and recall disappointment when it did not go as planned (Hodgkinson et al., 2014). The meaning of this experience was reflected in the way women cope and recover, with negative experiences particularly voiced to delay the recovery process (Ahn and Youngblut, 2007). The experience of the birth had a dominoes effect on women's behaviours with positive experiences aiding not only quicker recovery but also quicker efforts to better eating and weight management. Negative childbirth experiences in contrast promoted poor eating habits characterised by snacking on especially junk foods like biscuits, chocolate and generally comfort eating. The low mood after a negative childbirth experience also exacerbates body image insecurities (Walker, 1998), while women retract from socialisation. A recent study confirms these findings that low mood is a barrier to positively changing health behaviour (Lindsay et al., 2015), while stresses related to adaptation in the postpartum (Ahn and Youngblut, 2007) or to a new lifestyle have been described to contribute to unhealthy behaviours in systematic reviews (Messina et al., 2010, Campbell et al., 2010). Therefore recognising women's choices and failures to achieve the choices of childbirth can be a start point in identifying women more likely to struggle postnatally.

# **CHAPTER 9: CONCLUSION**

Just like overweight status doesn't develop overnight, maternal obesity starts and is shaped by eating behaviours developed over a long time, influenced by social and gendered constructs running from the pre-conceptual context, through pregnancy and after childbirth. There is a vast amount of research regarding maternal obesity, however, the contributing effects of eating and weight practices on postpartum weight retention and subsequently maternal obesity are not well studied (Kajale et al., 2015, Evenson and Bradley, 2010, Kuhlmann et al., 2008). The study findings compliment previous research and bring new insights in providing explanations to socially constructed weight development during and following pregnancy. This study has presented women's viewpoints and interpretation of how their experience contributes to eating behaviours during the transition to motherhood.

Previous studies have reported increased body satisfaction and lifestyle changes during pregnancy, without explanations about why this is the case (Loth et al., 2011, Davies and Wardle, 1994, Rocco et al., 2005). This study utilising the narratives of women reveals the change in social mediation of behaviour where public acceptance of increased weight in pregnancy yet expectations to revert to pre-pregnancy in later postpartum increases body satisfaction.

From the findings of the study, pregnancy is experienced as a temporary life transition, which all women must undergo as a gender expectation. Pregnancy behaviours are also temporary in regards to women's eating, but women are introduced to a "good mothering" discourse that becomes of importance to women's eating and healthy behaviours. From this point forward, women are deliberately protective of their babies, and will change their own behaviours and routines to be 'good mothers', providing a safe and nurturing environment. Therefore, interventions are needed to span the course of women's reproductive years as recommended in a recent narrative analysis (Inskip et al., 2014). Echoing other studies pregnancy presents a time when women are more receptive to nutrition information (Szwajcer et al., 2012, Szwajcer et al., 2007). Accordingly, interventions for women during and after pregnancy should factor in

women's motivations: the baby, the self and the social environment (Szwajcer et al., 2007), such that they are of direct benefit to the baby, involve the baby, and offer childcare options (Pereira et al., 2007, Gaston and Cramp, 2011). Of significance is the need for involvement and support to partners and other social relations in promoting healthful behaviours among women (Clarke and Gross, 2004).

In addition, the study confirms a life course perspective of women's eating revealing women's behaviour to be predominantly directed by emotion, which together with social constructs and discourses influence women's food and weight behaviours in the transition to motherhood (Osler, 2006). The life course perspective posits that special events may have long-term impact on health and behaviour in later periods of the life course (Devine et al., 2000, Osler, 2006). Negative life events and experiences predispose women to unhealthy behaviours across motherhood, continuing the emotional eating behaviours present from preconception. Identifying how dominant constructs become significant during the motherhood transition is a positive step towards addressing little known social-cultural determinants of maternal obesity. It is proposed that while developing interventions to address maternal obesity, the life course perspective on weight and food behaviour, as well as changing circumstances women find themselves in at different points in their lives should be considered (WHO and ILC-UK, 2000).

Deviation from an expected normal childbirth negatively impacts on women's coping, recovery and wellbeing in the transition to motherhood. Also as a result of body insecurities, the mental wellbeing of women is of utmost importance in addressing overweight development as it fuels the cyclical response. This study suggests that for most women without support, negative childbirth experience and heightened body insecurities lead to comfort eating, which leads to increases in weight; lack of support regarding weight management then worsens body insecurities presenting a vicious cycle of poor eating behaviour, weight development, which in turn impacts on women's emotional wellbeing. Therefore women who experience childbirth diverting

from their choice may require support in postpartum, and subsequent identification and referral for mental ill-health is vital (Darwin et al., 2015, Jones et al., 2014).

Further, the digital movement has provided women with a quick way to access information, is a vital resource for connecting women but also a source of self-assurance. Therefore, supporting women to positively navigate through the vast online information can help improve their choice and be used for health promotion. Moreover the trust in health professionals for assessment but also provision of support can tap into the digital discourse to positively guide women to healthful behaviours and eating. HCPs should assess extent of internet use to support women both ways by introducing them to reliable sources but also providing information for those who do not routinely use the internet (Anderson and Klemm, 2008). This provides grounds for provider-delivered interventions (Kuhlmann et al., 2008, Evenson and Bradley, 2010) to improve uptake of health promotion and targeted interventions.

Women's behaviours are driven by different motivations and expectations (Brunton et al., 2011, Szwajcer et al., 2007), emphasizing the importance of 'conditional and interactive' health service provision and promotion where provision of health services considers the individual's needs, choices and motivations (Szwajcer et al., 2007, Bedwell et al., 2015). The need for women to be supported as individuals across pregnancy and childbirth has recently been described as a failure of care provision (Jomeen and Redshaw, 2013). In line with recommendations from a recent systematic review and meta-synthesis by Hodgkinson et al. (2014), healthy lifestyle and nutrition advice should focus on what is important to women during this period. As the identified prime motivation, successful efforts need to show benefits to the baby, while building on previous healthy behaviours. The sustained importance of body image ideals rather than weight may motivate women to consider healthful weight behaviours. This is in agreement with Inskip et al. (2014) who indicated the need for interventions that address psychological barriers to eating well and being more active.

The experiences of women reveal social support and socialisation as significant, while HCPs are key players for trusted information and targeted support. The time points at

which different players would be more significant to enable more individual focussed interventions is hereby proposed **Fig 9.1**. At all these time points, health promotion about nutrition and exercise is required (Krummel, 2007, Kuhlmann et al., 2008), while integration of services with interventions will best utilise the low staffing numbers of the NHS (RCM, 2013).

Health promotion efforts need to continue spanning the motherhood continuum, as should empowering of HCPs through training and integration of services to increase their confidence and morale (Bedwell et al., 2015).

# 9.1 Policy recommendations

The findings of this research suggest a policy shift from present guidelines that specify only overweight and obese women be given targeted support regarding diet and exercise during pregnancy (NICE, 2010); proposing that HCPs should freely dialogue with all women on issues regarding their weight at every opportunity, offer support on healthy eating and weight management plans, and refer to targeted programmes and services.

In addition, in integration of services, it is suggested that health visitors (HVs) should participate in providing food and weight education during postnatal mother and baby checks. Their baby checks should include assessing knowledge and practice about healthy food and weight, provide information on activities to encourage more active mums, refer obese mothers for targeted support and to local services for fitness and cooking skills programmes.

# 9.2 Practice implications: proposed intervention- Fig 9.1

As recommended by Kuhlmann et al. (2008), many opportunities exist to work with women during their transition to motherhood years regarding maternal obesity, however, optimal time points to intervene have not been clearly established (Calfas and Marcus, 2007). Most intervention studies have separately concentrated on the quantifiable determinants of maternal obesity (Boardley et al., 1995), in standalone

interventions (Kuhlmann et al., 2008) or targeting women with particular conditions. The experiences of the women reveal unique time points and potential players to provide integrated lifestyle interventions collated into **Fig 9.1**. Although there is some overlap in the proposed intervention model, the continuity and changes in healthcare provider interactions can be used to maximise women's participation during their transition.

The interventions are suggested at three levels for each of the reproductive phases in transition to motherhood. The micro-level describes interventions that women can access by themselves. The meso-level gives interventions involving the family unit and social relations, while the macro level defines institution wide considerations and inputs.

#### 9.3 Recommendations for further research

The findings reveal women not receiving sufficient advice and support regarding food and weight during the adult lives except for assessment. There is need for research on how HCPs perceive their role in relation to maternal obesity and guiding women's eating behaviours during and after pregnancy. In addition, studies should explore the current practice regarding information pregnant women receive about eating and weight management during and after pregnancy within the UK context in order to understand why there seems a gap in service provision by HCPs.

Research should audit frequently visited internet sites by pregnant and postpartum women to assess content and quality of information, as well as what "works" that women prefer for example social media compared to NHS sites and utilisation of internet communication channels in health promotion by HCPs.

Further research should explore how social contexts and acculturation among the increasingly multicultural population impact on food behaviours and weight status. This will enable further identification of groups for tailored interventions in light of known high weight status and PPWR among minority groups.

Figure 9.1: Proposed intervention model

	• Macro level: Assess wellbeing and adapting to motherhood: childbirth dissatisfaction, breastfeeding problems, sick baby, as triggers for emotional eating and mental health illnesses.
Postpartum:	•Health visitors are key as they have prolonged contact with the mother and the baby during this tip primes them for giving advice to women about their own health behaviours (eating & exercise).
HVs and MW	• <b>Meso-level:</b> Family support -emphasise healthy behaviour focussing first on the baby then the mo eg, good eating for breastfeeding and recovery, exercise to reduce stress.
	<ul> <li>Setting up fitness interventions for mums, mum clubs and support group meets.</li> <li>Micro-level: Any interventions to factor in direct benefits to the baby, involve the baby and, or offer alternative childcare options for mothers.</li> </ul>
	• Provide weight management and healthy food counselling., encourage breastfeeding and exercise
	• Macro level: HCPs openly dialogue about food and weight.
Pregnancy:	•Check emotional eating triggers such as 'unplanned' pregnancy, starting out overweight or obese single motherhood.
	•HCP utilisation, acknowledgement of and signposting women to reliable digital resources.
MWs and Dietitians	•HCPs to treat women as individuals with unique circumstances and worries.
	<ul> <li>Meso level: Partner education about healthy food and weight in pregnancy.</li> <li>Peer support- facilitate mother groups or clubs, encourage breastfeeding and exercise.</li> </ul>
	• Micro level: Encourage eating and weight behaviours to focus on benefit first to the expected by then to the mother. Educate about breastfeeding in weight management
	• Macro level: Health Promotion about healthy eating and weight, exercise.
Pre-conception:	•HCPs actively assessing weight and providing support.
The conception.	•Create individualised care plans for overweight and obese.
GPs and Dietitians	• <b>Meso-level:</b> Support partners of obese and overweight individuals- provide information, couple interventions like cooking and weight management classes.
	• Micro- level: Develop lifestyle digital interventions.; encourage physical activity

# 9.4 Final thoughts

The conduct of this study has in a way been like an experience of pregnancy, started with excitement, navigating through the process by juggling personal and cultural conflicts towards the final goal culminating into this thesis. Like the women's narratives, what has been important is the support of close family, and friends (colleagues, supervisors) but also the expectations playing an important role.

Taking this back to the women's stories, motherhood is an expected life event in most women's lives. The way women negotiate the strong social influences during this time plays an important role in their food behaviours, body image and subsequently their general wellbeing. Whereas the discourses and gender constructs can disadvantage women towards unhealthful behaviours, the same can be harnessed to positively support women through motherhood. The study underscores the need to harness the digital or eHealth opportunities, to treat women as individuals and be responsive to their weight and eating worries, and also to support partners of women during this period. Effectively supporting women across the continuum can help break the cycle of bad cultural constructs and discourses to make motherhood a fulfilling life event.

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#### **APPENDICES**

## Appendix 1: R&D approval for NHS Participant Identification Centres

## Hull and East Yorkshire Hospitals 1/15

NHS Trust

Research & Development Department 2<sup>nd</sup> Floor, Daisy Build Castle Hill Hospital Castle Road Cottingham East Yorkshire HU16 5JQ

13/03/2013

Mrs Ritah Twehevo Faculty of Health and Social Care University of Hull Hull HU<sub>6</sub> 7RX

Dear Mrs Ritah Tweheyo

R1404 REC: 12/NW/0819

Exploring how women negotiate pregnancy in relation to food behaviours and weight status: an interpretive phenomenological study

NHS Permission to be a Participant Identification Centre for a Research Study

Thank you for submitting details of this study for NHS Permission from Hull & East Yorkshire Hospitals NHS Trust to act as a Participant Identification Centre (PIC) for the above named study.

I can confirm that NHS Permission for the PIC activities is now granted and can begin in the Trust subject to the following conditions:

- Activities at HEYHT are contained to that of a PIC site only (as listed in part C of the NHS R&D
- That staff at HEYHT are not involved in the informed consent process.
- That all participant interviews and focus groups are conducted outside of the HEYHT until such time that all staff participating in the research hold substantial or honorary contracts/letters of access with this Trust (including the sponsor staff conducting interviews as part of the study protocol). Any staff not holding an appropriate contract of employment (or honorary contract) will not be indemnified by HEY Trust.
- That data is stored and transferred in accordance with the Data Protection Act (1998) and you must ensure that all data collection, transfer and storage does not contravene HEYHT Confidentiality and Information security Policy <a href="http://intranet/policies/policies/134.pdf">http://intranet/policies/policies/134.pdf</a>, specifically the Information Storage and Transfer Procedure. If you are in any doubt about adherence with this policy in relation to the above, please contact the R&D Office.
- That no patient identifiable data is sent outside of the research team at Hull and East Yorkshire Hospitals NHS Trust (except where covered by the patient consent form).
- That the security of data transfer will be in accordance with the Trust policy on encryption and that data access controls are in place (individual user accounts and passwords).
- That no patient identifiable data is held on laptop computers (except where encrypted as per Trust policy)
- That an appropriate mechanism is in place in line with the Sponsors instructions and Trust policy to check for any patient deaths prior to sending follow-up questionnaires or contacting patients for follow-up.
- Any suspected misconduct by anyone involved in the study must be reported in accordance with HETH Trust policy.

  Capies of all airpendments with related approvals, applications and documents forwarded to the
- (H Trust R&Q Office when appropriate.

Hull and East Yorkshire

www.hey.nhs.uk

– We Care

# Hull and East Yorkshire Hospitals NHS

NHS Trust

- Copies of annual safety reports and Ethics annual progress reports must be forwarded to the HEYH Trust R&D Office.
- Copies of the end of trial/study notification, summary reports and details of any publications must be forwarded to the HEYH Trust R&D Office.
- The HEYHT R&D office must be notified of any staffing issues that may prohibit the Trust from fulfilling its obligations during the course of the trial.

May I wish you every success with the study.

Yours sincerely

James Illingworth

Research and Development Manager



www.hey.nhs.uk

— We Care —

## **Appendix 2a: NHS REC Approval**



#### NRES Committee North West - Lancaster

3rd Floor Barlow House 4 Minshull Street Manchester M1 3DZ

Telephone: 0161 625 7434

13 November 2012

Mrs Ritah Tweheyo
Faculty of Health and Social Care
University of Hull
Hull
HU6 7RX

Dear Mrs Tweheyo

Full title of study: Exploring how women negotiate pregnancy in

relation to food behaviours and weight status: an

interpretive phenomenological study

REC reference number: 12/NW/0819

Protocol number: RS19 IRAS reference: 107114

Thank you for your email of 12 November. I can confirm the REC has received the documents listed below as evidence of compliance with the approval conditions detailed in our letter dated 09 November 2012. Please note these documents are for information only and have not been reviewed by the committee.

#### Documents received

The documents received were as follows:

Document	Version	Date
Participant Consent Form	2.1	01 November 2012

#### 12/NW/0819

## Please quote this number on all correspondence

You should ensure that the sponsor has a copy of the final documentation for the study. It is the sponsor's responsibility to ensure that the documentation is made available to R&D offices at all participating sites.

Yours sincerely

Anna Bannister
Assistant Committee Co-ordinator

E-mail: nrescommittee.northwest-lancaster@nhs.net

Copy to: Mr Gethin Owen,

Mr James Illingworth, R&D Manager

## **Appendix 2b: NHS REC Opinion**



#### **NRES Committee North West –Lancaster**

3rd Floor Barlow House 4 Minshull Street Manchester M1 3DZ

Telephone: 0161 625 7434

09 November 2012

Mrs Ritah Tweheyo
Faculty of Health and Social Care
University of Hull
Hull
HU6 7RX

#### Dear Mrs Tweheyo

Study title: Exploring how women negotiate pregnancy in relation to food

behaviours and weight status: an interpretive

phenomenological study

REC reference: 12/NW/0819

Protocol number: RS19 IRAS reference: 107114

The Proportionate Review Sub-committee of the NRES Committee North West - Lancaster reviewed the above application on 08 November 2012.

#### **Ethical opinion**

The Committee asked you if you have considered the chance that pregnancies may not progress as there is a risk of miscarriage in the first trimester and what you would do to avoid distress for women in this situation when making the second contact. The Committee wondered if it would be possible to contact the midwife who recruited the woman in the first place just to check the pregnancy is progressing normally. The numbers are small so this would probably be possible.

Your response to the committee was, as this is a longitudinal study involving serial interviews, there may be attrition from women who wish to withdraw for personal reasons or in case of adverse unexpected pregnancy progression such as still births for those recruited 36 weeks and beyond (for the postnatal group), or miscarriage for the pregnancy group. Other considerations that would automatically withdraw the woman from the study include development of gestational diabetes, preeclampsia, ectopic pregnancy, and other long-term pregnancy complications. To reduce distress to the women at the follow-up interview, it is ideal that women inform the researcher of their intension to withdraw should they no longer meet the criteria or just wish to. However, knowing pregnancy as an emotional time for parents, this may not always happen and therefore the following have been considered:

- 1. Contact midwife prior to contacting women for 2nd interview. The ideal mode of contact would be confirming pregnancy progression with the midwife for all women recruited. However, because community midwives are only going to give out study adverts and information leaflets, but not directly recruiting the women, it would be difficult to establish which midwife is responsible for which recruited women. Also because the study will explore role of health professionals in women's experiences, and coupled with small numbers of women to be recruited, re-confirming pregnancy progression with the midwife will breach their confidentiality and might affect on who takes part in the study. It is possible that women not happy with or not in agreement with health professionals might shun participation if they know that the researcher will inform their midwife of their participation. For these reasons, women's participation will not be divulged to their health professionals, and pregnancy progression will not be checked this way, which should also reduces the burden of the research onto the midwives.
- 2. Check with the Antenatal Clinic Administrators for confirmation of pregnancy progression: The other alternative would be to check with the Antenatal clinic administrators by giving them the names of the participants requesting confirmation of their pregnancy progression. Although this can to some extent still maintain confidentiality, it might increase distress to women as the researcher would still have to contact the women to inform them of their being withdrawn from the study. Also women who may not have been informed of any pregnancy complications or anomaly following routine tests and scans may find it intrusive and more distressing being informed by the researcher. Further, ANC administrators often do not find out whether or not a woman has had a miscarriage until when she has missed scheduled appointments. Therefore, in addition to potential for more distress to women, pregnancy progression confirmation at this stage may still not be up to date.
- 3. Sensitively ask women to update researcher (Suggested): The researcher will ask all participants after the first interview to give a pregnancy update by communicating to the researcher as conveniently preferred about their pregnancy progression after the first interview. Participants who wish to withdraw for any reason can text, email or call the researcher, but also that the researcher would be contacting them 3-4months after the initial interview to check pregnancy progress or birth and plan for the second interview. This approach will preserve confidentiality for all participating women without need for sharing details of their participation with their midwife or health professional unless in the event of safeguarding concerns discussed under ethical duty. The follow-up contact will be handled in a sensitive way in case there are women who have had complications and poor pregnancy outcomes. In such case, the researcher will express sympathy

and inquire on their sources of support, pointing them to available different sources of support such as Antenatal Results and Choices (ARC), Down's Syndrome Association and more listed on the Appendix. All women will be thanked for their participation and informed of dissemination procedures as described in the protocol.

The Committee were happy with your response to their concerns and happy with your suggested actions.

On behalf of the Committee, the sub-committee gave a favourable ethical opinion of the above research on the basis described in the application form, protocol and supporting documentation, subject to the conditions specified below.

#### Ethical review of research sites

The favourable opinion applies to all NHS sites taking part in the study, subject to management permission being obtained from the NHS/HSC R&D office prior to the start of the study (see

"Conditions of the favourable opinion" below).

#### Conditions of the favourable opinion

The favourable opinion is subject to the following conditions being met prior to the start of the study.

Management permission or approval must be obtained from each host organisation prior to the start of the study at the site concerned.

Management permission ("R&D approval") should be sought from all NHS organisations involved in the study in accordance with NHS research governance arrangements.

Guidance on applying for NHS permission for research is available in the Integrated Research Application System or at <a href="http://www.rdforum.nhs.uk">http://www.rdforum.nhs.uk</a>.

Where a NHS organisation's role in the study is limited to identifying and referring potential participants to research sites ("participant identification centre"), guidance should be sought from the R&D office on the information it requires to give permission for this activity.

For non-NHS sites, site management permission should be obtained in accordance with the procedures of the relevant host organisation.

Sponsors are not required to notify the Committee of approvals from host organisations.

### Further conditions specified by the REC:

- a) The Committee would like to see the Consent form revised to:
  - i) Have the name of the study and the University address at the top.

It is the responsibility of the sponsor to ensure that all the conditions are complied with before the start of the study or its initiation at a particular site (as applicable).

You should notify the REC in writing once all conditions have been met (except for site approvals from host organisations) and provide copies of any revised documentation with updated version numbers. Confirmation should also be provided to host organisations together with relevant documentation.

#### **Approved documents**

The documents reviewed and approved were:

Document	Version	Date
Advertisement	2	19 October 2012
Evidence of insurance or indemnity		14 October 2011
Interview Schedules/Topic Guides	2	22 October 2012
Investigator CV	Tweheyo	
Investigator CV	Jomeen	
Investigator CV	Graham	
Letter from Sponsor		26 October 2012
Participant Information Sheet	2	19 October 2012
Protocol	3	12 October 2012
REC application	3.4	29 October 2012
Referees or other scientific critique report		26 April 2012
Summary/Synopsis	3	12 October 2012

#### **Membership of the Proportionate Review Sub-Committee**

The members of the Sub-Committee who took part in the review are listed on the attached sheet.

#### Statement of compliance

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

#### After ethical review

#### Reporting requirements

The attached document "After ethical review – guidance for researchers" gives detailed guidance on reporting requirements for studies with a favourable opinion, including:

- Notifying substantial amendments
- · Adding new sites and investigators
- Notification of serious breaches of the protocol
- Progress and safety reports
- Notifying the end of the study

The NRES website also provides guidance on these topics, which is updated in the light of changes in reporting requirements or procedures.

#### **Feedback**

You are invited to give your view of the service that you have received from the National Research Ethics Service and the application procedure. If you wish to make your views known please use the feedback form available on the website.

Further information is available at National Research Ethics Service website > After Review

12/NW/0819

Please quote this number on all correspondence

With the Committee's best wishes for the success of this project

Yours sincerely

Dr Lisa Booth Chair

Email: nrescommittee.northwest-lancaster@nhs.net

Enclosures: List of names and professions of members who took part in the review

"After ethical review – guidance for researchers"

Copy to: Mr Gethin Owen

Mr James Illingworth, R&D Manager

**NRES Committee North West - Lancaster** 

## Attendance at PRS Sub-Committee of the REC meeting on 08 November 2012

### **Committee Members:**

Name	Profession	Present	Notes
Dr Nigel Calvert	Associate Director of Public Health	Yes	
Mrs Gillian Rimington	Paralegal	Yes	
Professor Jois Stansfield	Academic supervisor	Yes	

## **Appendix 3a: University of Hull REC Approval**



Ms Ritah Tweheyo Faculty of Health & Social Care University of Hull FACULTY OF HEALTH AND SOCIAL CARE

T: 01482 464524 E: j.kelly@hull.ac.uk

OUR REF 091

31 October 2012

Dear Ritah

Re: Exploring how women negotiate pregnancy in respect to food behaviours and weight status: an interpretive phenomenological study

Thank you for your swift and comprehensive responses to the issues raised by the Faculty Research Ethics Committee in respect of the above. Following these responses, I am delighted to be able give Chair's approval for the study.

May I wish you every success with your study.

Yours sincerely

Janet Kelly

Chair, FHSC Research Ethics Committee

cc: file/supervisors

Sc Kelly

## **Appendix 3b: University of Hull REC Opinion**



Ms Ritah Tweheyo Faculty of Health and Social Care Faculty of Health and Social Care

T: 01482 464530 E: j.kelly@hull.ac.uk

**REF 091** 

30 October 2012

Dear Ritah

Re: Exploring how women negotiate pregnancy in respect to food behaviours and weight status: an interpretive phenomenological study

Thank you for submitting the above proposal to the Faculty Research Ethics Committee, which was discussed at a meeting on 29 October 2012.

This is a robust, well-thought through proposal, with a clear methodology that clearly highlights the aims and research objectives. However, before the committee can grant ethical approval there are a few minor points that we would like you to address as follows;

- 1. Regarding inclusion criteria of 20-40 years please give a rationale for excluding women outside this age bracket
- 2. The footer on the Consent form and the Study Information leaflet should appear at the top of the forms as part of the introduction paragraph
- 3. Please provide clearer instructions on how to complete the Consent form.
- 4. Please also make it clear on the Consent form that the focus group interview will be taped.

The Committee hopes that you will not find these points too onerous to address. Once you have addressed the above satisfactorily I will be in a position to grant Chair's approval.

Yours sincerely

Dr Janet Kelly (Chair Faculty Ethics Committee)

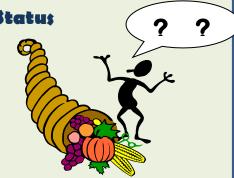
cc. file/supervisors

Schelly

## **Appendix 4: Focus Group Advert**

Women's Eating Behaviours and Weight Status

Would you be interested in discussing your views or experiences about food, eating behaviours and weight gain or loss?



I am a researcher in the Faculty of Health and Social Care at University of Hull. I am currently seeking participants to take part in a research project to

explore women's eating behaviours and how they affect their weight status.

I would love to hear from you if you are:

- ♣ Aged between 20 40 years
- Living in Hull
- ♣ Do not have any eating disorders and are not on a diet



I am interested in YOUR views, opinions and experience about food behaviours and weight issues.

✓ By taking part in this research, you will be contributing to better understanding of women's everyday experiences about eating behaviours and weight status.

✓ If you choose to participate, we shall have a group discussion over tea or coffee at a convenient location.

Please get in touch if you would like to take part or for more information.

Text/Ring: Ritah: xxxxxxxxxx or email: R.Tweheyo@2010.hull.ac.uk

Thank you for taking time to read this. Please contact me for further information.

## **Appendix 5: Study Information Leaflet: Focus Group**

<u>Project Title:</u> Exploring how women negotiate pregnancy in regard to food behaviours and weight status

**Sub-Title:** Women's food behaviours and weight status

#### Dear Participant,

This is an invitation to take part in a study about women's food behaviours and weight status which has been approved by the University of Hull-Faculty of Health and Social Care Research Ethics Committee: Ref: 091. This is part of a larger research project aiming to explore women's eating behaviours and weight status change with pregnancy. Before you decide to take part, please take time to read the following information to understand why this research is being done and what it will involve.

- 1. Purpose of the study: Women are increasingly overweight and obese worldwide, and this has largely been attributed to pregnancy and motherhood as triggers of overweight status among women. However, not much is known about what women go through that may impact on their food behaviours and weight status during and after pregnancy. Listening to women's voices is important in the debate to understand the social pressures of weight status among women and how eating behaviours develop following motherhood.
- 2. Why have I been chosen? We are asking women who have never been pregnant and are not planning a pregnancy within the next year to take part. The aim is to compare influences on eating behaviours at different times in a woman's life.
- 3. The design of the study: We are interested in learning from the experiences of women about influences on eating behaviours and how these relate to weight status following pregnancy. To understand this, we need to hold an open discussion with women who have never been pregnant to gain an understanding of everyday influences and pressures women are faced with regarding food and weight status.
- 4. **Do I have to take part?** It is up to you to decide whether or not to take part. If you do, you will be given this information sheet to keep and be asked to sign a consent form. Your participation is voluntary and you are free to withdraw at any time without giving a reason.
- **5.** What will happen to me if I take part? We are asking women to participate in one focus group discussion with a total of 10 women. If you decide to take part, we will ask you

- some questions to make sure you are eligible. After this, we will arrange a time and place convenient for all the 10 women to meet and chat over a cup of tea/coffee. This discussion will last no more than 2hours and will be audio taped.
- 6. What do I have to do? If you would like to take part in the study, you should contact the researcher either by email, text message or call on Tel: x075 05825754x. The researcher will contact you immediately via your preferred mode of contact to arrange an initial assessment.
- 7. What are the possible risks of taking part? The only risks that may arise are as a result
  - of participating in a relaxed, round-table discussion with other women you may have never met before. You are free to refuse answering any questions that you are uncomfortable with, but can voice your disagreements during the discussion. Everyone will be offered an opportunity to raise further issues after the discussion has ended.

## Remember: Even though you have agreed to take part in the study:

- You can decide to stop taking part at any point
- You do not need to answer questions that you do not wish to
- Anything you tell us will be absolutely confidential and your personal information will be known to only the researcher
- Audio tapes of the discussion will be destroyed after the research report.
- 8. Will my taking part in this study be kept confidential? All information collected from you during the research will be kept to the highest levels of confidentiality and all the data will be allocated a unique name (pseudonym) to ensure that your identity is only known to the researcher.
- 9. What will happen to the results of the research study? No reports or research will identify you individually. All participants will be acknowledged in any published results arising from this study. If you are interested in a copy of the study report, please let me know and I will be delighted to send it to you when it is finalised and available.
- 10. **Contacts for Further Information:** If you have any further questions about this research, or would like to participate, please feel free to contact the researcher via text/ phone or email on <a href="mailto:R.Tweheyo@2010.hull.ac.uk">R.Tweheyo@2010.hull.ac.uk</a> Tel: x075 05825754x

# Thank you for taking time to read this information sheet and considering taking part in this research.

## **Appendix 6: FG Consent Form**

This research explores how women negotiate pregnancy in regard to food behaviours and weight status. Audio taped focus group discussions and individual interviews will be used as part of the research. This consent form specifically refers to participation in the **Focus group discussion.** This part of the study has been reviewed and approved by the University of Hull- Faculty of Health and Social Care Research Ethics Committee: Ref: 091.

Name	Signature Do	ate
I hereby agree to take part in this study		
I consent to anonymous use of quotes fron final report	n the focus group discussion in the	
I consent to being audio recorded during the	ne focus group discussion	
I agree for the information to be shared wi of Hull who are involved in this research	th other researchers at the University	
I understand that participation in this study at any point during the research	is voluntary and that I can withdraw	
I understand that all the information gathe confidentially and will remain anonymous	red during this study will be treated	
I confirm that I have read the Information I ask further questions about the study and	• •	
Please read the statements below and tick	to give consent in the adjacent box	ζ.

If you have any further inquiries, please contact me

Ritah Tweheyo Phone: 01482 464690, Mobile: 075 05825754

Email: R.Tweheyo@2010.hull.ac.uk

## **Appendix 7: Pregnant and Postnatal Advert**

## Women's Eating Behaviours & Weight Status Study

Pregnant or Just given birth?

Would you like to discuss your pregnancy experiences about food, eating behaviours and weight?



I am a researcher in the Faculty of Health and Social Care, University of Hull. I am currently seeking participants to take part in a research project to explore women's eating behaviours and weight status.

I would love to hear from you if you are:



- British
- **♣**Aged between 20 40 years
- ♣Pregnant or have just given birth
- Living in Hull
- ♣Have no previous eating disorders

  Discussing YOUR views, opinions and experience will:
- ✓ Contribute to better understanding of women's everyday experiences about eating behaviours and weight status in transition to motherhood.
- ✓ If you choose to participate, we shall have an interview at a convenient time and place.



This study has been reviewed & approved by the NHS Research Ethics Committee Ref: 12/NW/0819- PR

If you would like to take part or need more information, please Text/Ring: Ritah: 07xxxxxxxx or email: R.Tweheyo@2010.hull.ac.uk

Thank you for taking time to read this

## **Appendix 8: Study Information Leaflet- Pregnant and Postnatal**

# Exploring how women negotiate pregnancy in regard to food behaviours and weight status

#### Dear Participant,

This is an invitation to take part in a study exploring how women's food behaviours and weight status change with pregnancy. Before you decide to take part, please take time to read the following information to understand why this research is being done and what it will involve.

- 1. Purpose of the study: Women are increasingly overweight and obese worldwide, and this has largely been attributed to pregnancy and motherhood as triggers of overweight status among women. However, not much is known about what women go through that may impact on their food behaviours and weight status during and after pregnancy. Listening to women's voices is important in the debate to understand the social pressures of weight status among women and how eating behaviours develop following motherhood.
- 2. Why have I been chosen? We are asking women who are pregnant or have just given birth in the last 3months to take part. The aim is to compare influences on eating behaviours at different times in a woman's life.
- 3. The design of the study: We are interested in learning from the experiences of women about influences on eating behaviours and how these relate to weight status following pregnancy. To understand this, we need to hold individual interviews with pregnant women and women who have recently given birth so as to understand everyday influences and pressures women are faced with regarding food and weight status.
- 4. **Do I have to take part?** It is up to you to decide whether or not to take part. If you do, you will be given this information sheet to keep and be asked to sign a consent form. Participation will not affect any care you are receiving and you are free to withdraw at any time without giving a reason.
- 5. What will happen to me if I take part? We are asking women to each participate in 2 individual interviews. If you decide to take part, we will ask you some questions to make sure you are eligible. After this, we will arrange a time and place convenient for you to have your first in-depth interview. This will last no more than 1hour.

- **Follow-up interview:** There will be one follow-up interview at least 3 months after your first interview. This follow-up interview will last about 20-30 minutes to get an update of any changes in food behaviours, influences and experiences.
- 6. What do I have to do? If you would like to take part in the study, you should contact the researcher either by email, text message /call on Tel: xxxxxxxxxx, or return the "I would like to participate" slip in the free postage envelope provided with this pack. The researcher will contact you immediately via your preferred mode of contact to arrange an initial assessment.
- 7. What are the possible risks of taking part? You may be asked sensitive questions about your personal experience of being pregnant and any conflicts regarding food and weight status. This might be disturbing for some people as it may evoke difficult feelings you may have undergone related to pregnancy symptoms like

Remember: Even though you have agreed to take part in the study:

- You can decide to stop taking part at any point
- You do not need to answer questions that you do not wish to
- Anything you tell us will be absolutely confidential and your personal information will be known to only the researcher
- Audio tapes of the interview will be destroyed after the research report.
- vomiting and nausea. You are free to refuse answering any questions you are uncomfortable with and these will be skipped during the interview.
- 8. Will my taking part in this study be kept confidential? All information gathered from the research will be kept to the highest levels of confidentiality and all the data will be allocated a unique name (pseudonym) to ensure that your identity is only known to the researcher.
- 9. What will happen to the results of the research study? No reports or research will identify you individually. All participants will be acknowledged in any published results arising from this study. If you are interested in a copy of the study report, please let me know and I will be delighted to send it to you when it is finalised and available.
- 10. Contacts for Further Information: If you have any further questions about this research, or would like to participate, please feel free to contact the researcher via text/ phone or email on <a href="mailto:R.Tweheyo@2010.hull.ac.uk">R.Tweheyo@2010.hull.ac.uk</a> Tel: x xxxxxxxx

Thank you for taking time to read this information sheet and considering taking part in this research.

## **Appendix 9: Pregnant and Postnatal Consent Form**

# Women's Food Behaviours and Maternal weight status Study

Faculty of Health and Social Care
University of Hull
HU6 7RX, Hull
United Kingdom

## **Consent Form for participating in study**

This study explores how women negotiate pregnancy in regard to food behaviours and weight status. Audio-taped focus group discussion and individual interviews will be used as part of the research. This consent form specifically refers to participation in the individual interviews. This part of the study has been reviewed and approved by the NHS Research Ethics Committee: Ref: 12/NW/0819.

Name	Signature	Date							
I hereby agree to take part in this study									
I consent to anonymous use of quotes from the	ne interviews in the final report								
I consent to being audio recorded during the	interviews								
I agree for the information to be shared with of Hull who are involved in this research	other researchers at the Universit	У							
I understand that participation in this study is at any point during the research	voluntary and that I can withdrav	v							
I understand that all the information gathered confidentially and will remain anonymous	d during this study will be treated								
I confirm that I have read the Information Lea ask further questions about the study and my	• •	0							
Please read the statements below and tick	lease read the statements below and tick to give consent in the adjacent boxes.								

If you have any further inquiries, please contact me

Xxxx xxxx [Name] Phone: xxx Email: xxx

## **Appendix 10: Sources of Support**

If you feel upset and distressed by issues discussed during the interviews, there are a number of resources and support options available. Please contact your midwife, or GP or health visitor in the first instance. The following organisations may be helpful.

#### **SEED Eating Disorder Support Services**

SEED is a group of ordinary people who have had first-hand experience of eating disorders. They provide confidential, independent, non-judgemental advice and support to sufferers and carers to facilitate recovery.

http://www.seedeatingdisorders.org.uk

HELPLINE: 01482 718130

Email: <u>info@seedeatingdisorders.co.uk</u>
For: Nutritional advice and support:

Contact: Emma on:

nutrition@seedeatingdisorders.co.uk
Tel: 01482 561856 (Wednesdays 6.30-

7.30pm)

#### **Fitfans Hull**

FitFans is an NHS commissioned project to provide free weight loss support for all people in Hull. Support includes specialist lifestyle and exercise programmes for men and women.

http://www.fitfans.co.uk/ Telephone: 01482 224545 Email: info@fitfans.co.uk

#### **Hull Community Mental Health Team**

The community mental health service in Hull is provided by the council's social services department and Humber NHS Foundation Trust. For carers or sufferers of long term mental health needs, or people in need of rapid, intensive support.

#### **Contact**

Single point of access (SAP) team – Tel: 01482 617 560

Crisis and home treatment team (out of office hours, weekend and public holidays)

- Tel: 01482 335 790

#### **BEAT (Beating Eating Disorders)**

Beat is a UK nationwide organisation supporting people affected by eating disorders, their family members and friends. They provide support, help and information to people directly affected.

http://www.b-eat.co.uk/

#### **Helplines:**

Adult Helpline: call 0845 634 1414.

Email: help@b-eat.co.uk
Youthline: call 0845 634 7650.

Text: 07786 20 18 20 Email: fyp@b-eat.co.uk

#### **Why Weight**

Why Weight is a FREE weight management service provided by NHS Hull and City Health Care Partnership. It provides weight loss support and advice with training in healthy eating and cooking skills.

#### **Contact:**

CALL: (01482) 335209 Text: WEIGHT to 61825

WEB: www.healthyroutes.co.uk

#### **Hull & East Yorkshire MIND**

Mind is a leading charity providing mental health information and support to anybody affected by mental health issues. Contact the Hull & East Yorkshire Mind

http://www.mindhey.co.uk/

Info Line: 01482 240133 Email: info@mindhey.co.uk

Tel: 01482 240200

# **APPENDIX 11: Summary of the key resources used in the review**

Authors	Study	Туре	Participants	Key findings	Research gaps/ recommendations
Azarbad, L. and Gonder-Frederick, L. (2010)	Obesity in women. <i>The Psychiatric</i> clinics of North America, 33, 423-40.	Literature review	Various published articles	Reproductive transitions of pregnancy and menopause increase obesity risk Obese women experience weight related stigma and discrimination than men.	Research to consider individual differences, motivations and treatment readiness
Bailey, L. (1999)	Refracted selves? A study of changes in self-identity in the transition to motherhood.  Sociology-the Journal of the British Sociological Association 33(2): 335-352.	Qualitative research using interviews	30 Women pregnant for the first time shortly before childbirth	Discourse analysis of middle glass working women. Pregnancy offered opportunity to feel vulnerable, excused ascribed to temporary hormonal changes. Motherhood was like entering a new world.	Call to further exploration of themes identified Further work on the gendered experience of the body
Brunton, G., M. Wiggins and A. Oakley (2011)	Becoming a mother: a research synthesis of women's views on the experience of first-time motherhood. London, EPPI Centre, Social Science Research Unit.	Systematic literature synthesis	125 studies on women's views of motherhood in the last 30years. 60 studies used in the in-depth review.	Popular research topics were women's mental health, SES, teenage mothers, and becoming a mother/identity.  Women describe being lost in the field of medical care, reliance on HCPs for information, delay in childbearing.	Gaps in motherhood transition research, first vs second time mothers, diverse groups of women. Research to show clear participant demographics
Carter-Edwards, L., Bastian, L. A., et al. (2010).	Body Image and Body Satisfaction Differ by Race in Overweight Postpartum Mothers. <i>Journal of</i> <i>Womens Health</i> 19(2): 305-311	Assessment supplement to a Two-arm, randomized, intervention study	162 women, (73 African American, 89 white) in intervention Active Mothers Postpartum (AMP) study	Racial differences in PWR, body satisfaction and ideal body. Black cultural influences add to the obesogenic environment, encouraging obesity in black women compared to white women. Postpartum period time with many changes in a woman's life	Research to explore what different mothers value in transition to motherhood needed to address their weight and health concerns
Clark, M. and Ogden, J. (1999)	The impact of pregnancy on eating behaviour and aspects of weight concern. International Journal of Obesity (United Kingdom).	Retrospective cross-sectional study using a questionnaire	50 primigravid women and 50 non-pregnant nulliparous women in London	Pregnancy legitimises increased food intake Pregnancy results in changes in eating behaviours and aspects of weight concern. Relationship with previous dietary restraint.	
Conner, M., Johnson, C., and Grogan, S. (2004)	Gender, sexuality, body image and eating behaviours. <i>Journal of Health Psychology</i> 9(4): 505-515.	Primary research quantitative study	121 participants, into 4 sexual orientation groups; heterosexual men and women, homosexual men and women	Greater body dissatisfaction among heterosexual women and homosexual men. Heterosexual women had smaller ideal body shapes Social prescriptions of the body are greater among heterosexual women. Women had higher levels of emotional eating.	

Crane, J. M., J. White, P. Murphy, L. Burrage and D. Hutchens (2009). Crowell, D. T. (1995)	The effect of gestational weight gain by body mass index on maternal and neonatal outcomes. <i>J Obstet Gynaecol Can</i> 31(1): 28-35. Weight change in the postpartum period. A review of the literature. <i>J</i>	Population based cohort  Literature review	Diverse published journal articles looking	Pre-pregnancy BMI determines GWG and pregnancy outcomes GWG in line with IOM guidelines can reduce risk in adverse outcome Women who gain more weight in pregnancy show significant weight retention after 6months	
	Nurse Midwifery 40(5): 418-423		at postpartum weight loss, weight retention and weight gain.	postpartum Low pre-pregnancy weight returned to previous weight more quickly Low SES indicators place women at greater risk of PWR Black women are twice more likely to retain weight than white women	
Ellison, G. T. H. and Harris, H. E. (2000)	Gestational weight gain and 'maternal obesity'. <i>Nutrition Bulletin</i> 25(4).	Meta-analysis review	Uses findings of an earlier systematic review and 4 recent longitudinal studies that addressed methodological inaccuracies previously.	There is an increase in weight status following pregnancy but with variation. Certain factors especially specific pregnancy characteristics and predisposition to gain weight could explain this variation.	Research into pre-existing tendency to gain weight over time and characteristics of pregnancy and postpartum that modify weight status.
Feig, D. S. & Naylor, C. D. (1998)	Eating for two: are guidelines for weight gain during pregnancy too liberal? <i>The Lancet</i> , 351, 1054-1055.	Literature viewpoint	Reviewing the applicability of IOM guidelines	Guidelines are based on observational studies and not community-wide randomised trials These studies only show association and not causation.  IOM guidelines encourage over nourishment which is unwarranted in industrialised societies. IOM guidelines targeted to low-birth babies but not health of the women or optimal foetal outcomes for most women.	Need to explore multiparity and GWG recommendations. To explore the root causes and social circumstances of high risk pregnancies. Large scale RCT urgently needed to assess the impact of dietary interventions for high risk underweight pregnant women and those who are overweight or obese pre pregnancy.
Furber, C. M., McGowan, L., et al. (2013)	Antenatal interventions for reducing weight in obese women for improving pregnancy outcome. Cochrane Database Syst Rev 1: CD009334.	Systematic Review protocol	To consider all RCTs and quasi-randomised controlled trials comparing weight loss interventions among obese pregnant women	Outcomes for mother and infant, maternal weight postpartum Childhood weight	
Gore, S. A., Brown, D. M. & West, D. S. (2003)	The role of postpartum weight retention in obesity among women:	Review of the literature	Step wise review and articles assessed for	Highest PWR in women with highest GWG	Research to include minority women

	a review of the evidence. Annals of behavioral medicine: a publication of the Society of Behavioral Medicine, 26, 149-59.		quality. Examines the role of pregnancy in the development of overweight.	High GWG increased twofold risk of being overweight at next pregnancy Pregnancy as major contributor to overweight status. Excessive PWR among minority women.	Controlled studies of weight control programs are needed. Study of obesity treatments with postpartum women.
Groth, S. W. and Kearney, M. H. (2009)	Diverse women's beliefs about weight gain in pregnancy. Journal of midwifery & women's health 54(6): 452-457.	Qualitative study	49 low income women from mixed racial and ethnic origins in the US, who birthed within last 1year were interviewed.  Mixed methods content analysis.	Women are concerned about pregnancy related weight gain, but not clear about appropriate GWG. Focus on women's behaviours effect on the infant. Excessive GWG not recognized as detrimental to infants. Overweight women tend to gain more than recommended. Women had a false sense that they would return to pre pregnancy weight if given enough time, even with excessive GWG.	Need to explore racial or ethnic specific behaviours that promote or influence GWG.
Gunderson, E. P. & Abrams, B. (2000)	Epidemiology of gestational weight gain and body weight changes after pregnancy. <i>Epidemiologic reviews</i> , 22, 261-74.	Systematic Literature Review	13 studies examined giving valid estimates of pregnancy related weight changes among adult women.	Study design issues prevalent from population groups, to weight measurement, self-reporting and small sample sizes.  GWG as primary and most important determinant of weight change from preconception to postpartum.  Single birth results in 2-3kg higher average body weight and increases future risk of becoming overweight	No studies have explored lifestyle alterations associated with GWG, child rearing and postpartum weight changes. Studies should evaluate risk factors such as parity, lactation, maternal age, SES.
Gunderson, E. P. (2009).	Childbearing and Obesity in Women: Weight Before, During, and After Pregnancy. Obstetrics and Gynaecology Clinics of North America 36(2): 317-	Literature Review	Missed studies, with cohort and longitudinal studies	Excessive GWG contributes to higher postpartum body weight. High BMI before first pregnancy has implications for long-term persistent weight changes.	Studies to explore whether there are altered lifestyle habits and specific influences that contribute to increased weight status postpartum. Factors such as primi-parity, sleep duration, age at first menarche, young age at birth.
Guelinckx, I., Devlieger, R., Beckers, K. & Vansant, G. (2008)	Maternal obesity: pregnancy complications, gestational weight gain and nutrition. <i>Obesity Reviews</i> , 9.	Review of evidence and interventions focussed on overweight and obese women	Several observational studies and 7 intervention trials reviewed	Evidence for a causal relationship between pre- pregnancy BMI and obstetric complications. Majority HCPs consider their training on weight management as inadequate or non-existent.	Studies on optimal GWG in obese and overweight women, strategies to optimise GWG, healthy eating behaviour and physical activity during pregnancy.

Gutierrez, Y. M. (1999).	Cultural factors affecting diet and pregnancy outcome of Mexican American adolescents. <i>Journal of Adolescent Health</i> 25(3): 227-237	Descriptive exploratory follow up study	46 American- Mexican adolescents, 13- 18years, primigravida	Acculturation affects nutritional knowledge, attitudes about GWG. High education affects nutrition knowledge. Dependence on family for support	Need for nutrition interventions emphasizing food quality and understanding food labels
Harris, H. E. & Ellison, G. T. H. (1997)	Do the changes in energy balance that occur during pregnancy predispose parous women to obesity? <i>Nutrition Research Reviews</i> , 10, 57-81	Systematic Literature Review	71 longitudinal studies involving	Higher body weight after pregnancy than before: 0.4-3kg Methodological inaccuracies in PWR measurements: Using early pregnancy measurements as baseline for PWR measurements as they over or under estimate PWR.	Women not given sufficient time postpartum to lose weight, less than 9months
Harris, H. E., Ellison, G. T. H., Richter, L. M., Wet, T. D. & Levin, J. (1998)	Are overweight women at increased risk of obesity following pregnancy? British Journal of Nutrition, 79.	Cross-sectional study using a Longitudinal birth cohort	627 South African non- pregnant mothers with high prevalence of obesity	Overweight women are at greater risk of weight gain generally.  Little evidence that to suggest that they are at increased risk for maternal obesity.  High BMI associated with smoking, age and social support. Buffering effect of social support accepting of women's high weight status	Explore areas of social support and cultural aspects and how they influence weight status following pregnancy.
Hinton, P. S. & Olson, C. M. (2001)	Postpartum exercise and food intake: the importance of behavior-specific self-efficacy. <i>J Am Diet Assoc</i> , 101, 1430-7.	Prospective cohort (observational)	498 prenatal women followed for 1year	Higher exercise self-efficacy associated with more frequent exercise at 1year postpartum Food intake self-efficacy, body satisfaction and drive for thinness associated with decreased food intake postpartum.  Body dissatisfaction appeared to increase food intake	
Hodgkinson, E., Smith. M.D, and Wittkowski, A. (2014)	Women's experiences of their pregnancy and postpatum body image: A systematic review and meta-synthesis. <i>BMC Pregnancy and Childbirth, 14.1</i>	Systematic review and Meta- synthesis	17 articles including a total of 487 women, reviewed using PRISMA guidelines.	Body image as a product of socially constructed ideals. Pregnancy excuses women from conforming to the slender ideal. Body dissatisfaction present in PP. Pregnancy brings about a renegotiation of identity from the self sexually attractive woman, towards a mothering identity.	Further studies to explore problematic attitudes in motherhood transition. HCPs to support women with healthy lifestyle advice.
Johnson, S., Burrows, A., et al. (2004)	Does my bump look big in this?' The meaning of bodily changes for first-time mothers-to-be." <u>Journal of Health Psychology</u> 9(3): 361-374.	Qualitative study using IPA	Explores the meaning and implications of body changes. 6 UK women at 33-39weeks of gestation, in their first pregnancy.	Pregnancy transgressing the ideal feminine body. The ways in which women position themselves and are seen impacts on their behaviour limiting their empowerment. Women's' bodies as socio-culturally constructed	

Johnston, E. M. (1991)	Weight changes during pregnancy and the postpartum period.  Progress in food & nutrition science, 15, 117-57.	Literature Review	Guidelines and journal articles.	GWG similar among adolescents and adult women. Each successive birth adds 1kg body weight above that due to age	Little evidence about role of breastfeeding in postpartum weight loss
Kac, G., M. H. Benicio, G. Velasquez-Melendez and J. G. Valente (2004a)	Nine months postpartum weight retention predictors for Brazilian women. <i>Public Health Nutrition</i> , 7, 621-628.	Prospective cohort study	266 Brazilian women of childbearing age. Followed up at 0.5, 2, 6 and 9months postpartum	Factors associated with PWR were low SES like education level, income; older age, high prepregnancy weight, and high GWG.	Interventions in pregnancy and early postpartum required to address maternal obesity.
Kac, G., M. H. Benicio, G. Velasquez- Melendez, J. G. Valente and C. J. Struchiner (2004b)	Gestational weight gain and prepregnancy weight influence postpartum weight retention in a cohort of brazilian women. <i>J Nutr,</i> 134, 661-6.	Prospective cohort study	208 Brazilian women followed up to 9month postpartum	35% of each Kg GWG was retained at 9month postpartum. Increasing pre-pregnancy BMI associated with higher PWR. GWG as most important predictor of PWR. Lower age (at first pregnancy) associated with higher PWR.	
Lev-Ran, A. (2001)	Human obesity: an evolutionary approach to understanding our bulging waistline. <i>Diabetes Metabolism - Research and Reviews,</i> 17.	Review	Review of published evidence from an evolutionary approach	Fat distribution is as important as BMI.  It is much easier to gain weight than to lose it.  Prevention and treatment of obesity should be at an early age, interventions individualised.	Large scale studies to incorporate waist circumference and WHR on measures of relative risk Studies to explore if there are irreversible metabolic changes after weight gain.
Linné, Y., Barkeling, B. & Rössner, S. (2002)	Long-term weight development after pregnancy. <i>Obesity Reviews</i> , 3.	Literature Review and primary research of follow up study up to 1year	Using the SPAWN study of 1,423 Swedish women	Majority of women have sustained weight retention even after 1 year postnatal. Predictors for sustained weight retention are not well understood, but include; physiological and behavioural	Need to explore the changes in physiology and psychology compounds women's experience in pregnancy and postpartum.
Linné, Y., Dye, L., Barkeling, B. & Rossner, S. (2003)	Weight development over time in parous womenthe SPAWN study15 years follow-up. <i>Int J Obes Relat Metab Disord</i> , 27, 1516-22.	15 year cohort: Longitudinal study	1,423 Swedish women before, during , 1year after pregnancy and 15yr follow up (563 women at 15yr follow up)	Pregnancy as risk factor for weight gain. Pregnancy changes in food and lifestyle may remain in postpartum and precipitate future weight problems	Important to understand the multifaceted changes that occur during and following pregnancy that contribute to overweight development
National Institute for Health and Clinical Excellence (2010).	Dietary interventions and physical activity interventions for weight management before, during and after pregnancy. Deaprtment of	UK Department of Health, Public Health Guidance.	Public Health Interventions Advisory Committee developed the recommendations based on a Review of	There are no evidence based UK guidelines on recommended weight gain ranges during pregnancy.  To help women lose weight before they become pregnant if overweight or obese.	Research should look into behaviours such as smoking, drinking, breastfeeding and their influence on PW management.

	Health. London. NICE Public Health guidance 27.		Evidence, Economic modelling, Expert Advice, Stakeholder comments and fieldwork.	Supporting women after childbirth regarding weight management.  To offer women and their babies opportunity to take part in physical or recreational activities.	Focus needed for psychological and emotional issues linked to weight. Qualitative evaluation of interventions
Maher, J. and Saugeres, L. (2007).	To be or not to be a mother? Women negotiating cultural representations of mothering. Journal of Sociology 43(1): 5-21.	Qualitative study using interviews	100 Australian women: 58 with children 42 without children	Ideals of good mothering impacted on all women.	Need for research on disparate discourses around contemporary mothering. Systematic examination of how different groups of women respond to cultural and social aspects of mothering is needed
Mamun, A. A., Kinarivala, M., O'Callaghan, M. J., Williams, G. M., Najman, J. M. & Callaway, L. K. (2010)	Associations of excess weight gain during pregnancy with long-term maternal overweight and obesity: evidence from 21 y postpartum follow-up. <i>American Journal of Clinical Nutrition</i> , 91, 1336-1341.	Cohort- 21 year follow up	2,055 Australian women	Women that gained excessive weight during pregnancy had increased changes of being overweight or obese 21 years after the index pregnancy	Had no dietary data, and suggests that similar cohorts should collect dietary data to see whether it has effect on postpartum weight retention
Messina, J., Johnson, M., Campbell, F., Hock, E. E., Guillaume, L., Duenas, A., Rawdin, A., and Goyder, E., and Chilcott, J. (2010)	Systematic review of weight management interventions after childbirth. NICE Centre for Public Health Excellence. UK. ScHARR Public Health Collaborating Centre	Systematic review	Total of 7 studies: 5 RCTs from the USA involving a total of 278 participants; and 2 non- randomised studies from the USA and Finland with a total of 105 participants	Diet and physical activity were major components in RCTs, counselling, support, mentoring, advice about how to manage weight offered in the trials.  Mixed evidence on effective weight loss interventions  Weight management interventions had no negative effect on breastfeeding outcomes.  All RCTs and NRS were non UK, mostly USA, findings may not be fully applicable to a UK population due to difference in healthcare systems, policies and social contexts.	More intervention studies for GWG and PWR management. More evidence needed exploring external factors, providing women with support and mentoring women on effective weight management postpartum
Miller, T. (2007).	Is this what motherhood is all about? Weaving experiences and discourse through transition to first-time motherhood." Gender & Society 21(3): 337-358.	Longitudinal qualitative study	17 white women in the UK, followed for one year to first time motherhood, 7-8 months pregnant, 6weeks and 8-9 months postnatal	Medical discourse as predominant Doing things right, "good mothering" discourse premised over others Birth experiences can act as discursive turning points	Collective voices of women to be heard through researching dominant discourses

Mehta, U. J., Siega-Riz, A. M., et al. (2011)	Effect of Body Image on Pregnancy Weight Gain. <i>Maternal and Child</i> <i>Health Journal</i> 15(3): 324-332.	longitudinal prospective cohort study	1,192 women in PIN study in the US	Women who started overweight, higher risk of excessive GWG. Low income risk of inadequate GWG, Lower education, excessive GWG Complex relationship of body image and GWG Body dissatisfaction increases GWG outside guidelines	Qualitative studies needed to examine body image and GWG among obese, low income and low education
Nelson, A. M. (2003)	Transition to motherhood." <i>JOGNN</i> - Journal of Obstetric, Gynecologic, & Neonatal Nursing 32(4): 465-477.	Meta-synthesis of qualitative studies	9 qualitative studies from North America and Australia. Involving a total of 145 women.	Women overwhelmed and unprepared to deal with transition New mothers feel insecure about parenting abilities Social Engagement is the basic process in maternal transition	
Ohlin, A. and S. Rossner (1994)	Trends in eating patterns, physical activity and socio-demographic factors in relation to postpartum body weight development. <i>Br J Nutr</i> 71(4): 457-470.	Prospective cohort study	1,423 from start of pregnancy to 1 yr postpartum  To identify risk factors for PWR	Pregnancy dietary information did not influence 1 year PWR.  Women's lifestyle (especially exercise) after 6 months postpartum was the greatest predictor of PWR	Unclear whether dietary information to women given in postpartum is more effective vs pregnancy information
Olson, C. M. (2005)	Tracking of food choices across the transition to motherhood. <i>Journal of Nutrition Education &amp; Behavior</i> 37(3): 129-136.	Prospective cohort study	360 women in the US followed from mid pregnancy, at 6 months, 1 and 2 years postpartum. Used the Bassett Mothers Health Project	Transition to motherhood brings about a positive change in some food choice and behaviours.  Positive changes marked in first time mothers.  General increase in food consumption during pregnancy which reduced in postpartum but not up to the pre-pregnancy level.  Food behaviours change over the life course.	Longitudinal studies needed to continue aspects of the life course perspective to examine food choice behaviour.
Østbye, T., Krause, K. M., Lovelady, C. A., Morey, M. C., Bastian, I. A., Peterson, B. L., Swamy, G. K., Brouwer, R. J. N. & McBride, C. M. (2009)	Active Mothers Postpartum.  American Journal of Preventive  Medicine, 37.	Randomised controlled behavioural intervention trial	450 women in the US with BMI >= 25kg/m2 enrolled 6weeks postpartum, followed up to 2 years postpartum	Predisposing factors and teachable moment influence mediators necessary for accelerating weight loss.  Black women heavier than white Depression more common in black respondents. Limited vigorous physical activity in both groups	Explore different intervention strategies for minority groups.
Patel, P., Lee, J., et al. (2005)	Concerns about body shape and weight in the postpartum period and their relation to women's self-identification. <i>Journal of Reproductive and Infant Psychology</i> 23(4): 347-364.	Comparative qualitative study	21 postnatal women; 6 with eating disorders, 9 at risk, and a 6 in comparison group.	Women with eating disorders perceived the external world as very critical of their eating habits and residual weight gain.  Women in comparison group were more accepting of prioritising baby's feeding over their own needs (weight gain).	Postnatal period was not specified, as its duration may influence findings.

Ramachenderan, J., Bradford, J. & Mclean, M. (2008)	Maternal obesity and pregnancy complications: a review. <i>Australian &amp; New Zealand Journal of Obstetrics &amp; Gynaecology</i> , 48, 228-35.	Literature Review	Various studies on complications and conditions	Obese pregnant women pose: Maternal, Foetal, Intrapartum, and Anaesthetic complications Higher NICU admission Women that are obese prior to pregnancy are more likely to have excessive GWG	Women and HCPs should recognise that obesity requires modifications to the management of pregnancy. Research for optimum approach to minimise risk in pregnant obese women.
Reifsnider, E. & Gill, S. L. (2006)	Nutrition for the Childbearing Years.  Journal of Obstetric, Gynecologic, &  Neonatal Nursing, 29, 43-55.	Literature review	Articles from journals and government reports published after 1990.	GWG affects a woman's future risk of obesity. Weight loss is related to breastfeeding style. Information on GWG, Nutrition and Activity is important	
Setse, R., Grogan, R., et al. (2008)	Weight loss programs for urban- based, postpartum African- American women: perceived barriers and preferred components. Matern Child Health J 12(1): 119- 127.	Qualitative study using Focus groups	22 pregnant African- American women in 04 FGs.	Women had limited knowledge of effective weight loss strategies. Women prefer PP weight loss services that include childcare and combine general and individual components. Strong support from family or significant other was critical for weight loss programs to improve motivation and commitment.	Qualitative studies to explore effect of nutrition, body image and media portrays on women's weight status.
Shrewsbury, V. A., Robb, K. A., Power, C. & Wardle, J. (2009)	Socioeconomic Differences in Weight Retention, Weight-related Attitudes and Practices in Postpartum Women. <i>Maternal and Child Health Journal</i> , 13, 231-240.	Primary research, postal questionnaire	954 UK women in postpartum	Higher PWR among the lower SES by education. No difference in GWG and body dissatisfaction. More frequent weight monitoring among the higher SES women	Further studies in SES and PWR needed. Psycho-behavioural factors operating to curb PWR among higher SES women
Siega-Riz, A. M., Herring, A. H., Carrier, K., Evenson, K. R., Dole, N. & Deierlein, A. (2010)	Sociodemographic, perinatal, behavioral, and psychosocial predictors of weight retention at 3 and 12 months postpartum. <i>Obesity</i> (Silver Spring), 18, 1996-2003.	Prospective pregnancy cohort.	688 pregnant women followed into PP at 3 and 12 months.	High PWR was influenced by: high pre- pregnancy BMI, GWG, limited sleep hours at night, maternal ow education, younger maternal age and unemployment. Lack of successful intervention studies to help women lose weight PP.	Further research in changing lifestyle factors like; sleep duration, infant hospitalisation, intervention studies for reducing PWR.
Siega-Riz and Laraia, (2006)	The Implications of Maternal Overweight and Obesity on the Course of Pregnancy and Birth Outcomes. Maternal and Child Health Journal, 10.	Review of evidence	Overview and update of evidence on weight prevention studies prior to pregnancy	Low income women have higher risk of obesity yet at risk of food insecurity.  Black women twice as likely to be obese than white counterparts. Women beginning pregnancy at a higher BMI have excess GWG, and keep it after birth.  Women retain weight with each successive pregnancy than non-pregnant	Research to integrate social, behavioural, cultural and biological factors influencing obesity. Identify best practice of obesity prevention and optimal weight maintenance. Research into optimal time and how to intervene to

				GWG, food intake and exercise frequency associated with weight change up to 1year postpartum.	optimise women's reproductive health
Siega-Riz, A. M., M. Viswanathan, MK. Moos, A. Deierlein, S. Mumford, J. Knaack, P. Thieda, L. J. Lux and K. N. Lohr (2009)	A systematic review of outcomes of maternal weight gain according to the Institute of Medicine recommendations: birthweight, fetal growth, and postpartum weight retention. <i>American Journal of Obstetrics and Gynecology</i> 201(4): 339.e331-314.	Systematic Review	35 studies met the criteria and were included with diverse study designs	Women who follow the IOM guidelines are likely to have good birth outcomes and less weight needed to be lost postpartum. Women with GWG above IOM guidelines had higher PWR. Black women gain more weight than white women.	Need for assessment of confounding factors and better definition of gestational weight
Schmitt, N. M., Nicholson, W. K. & Schmitt, J. (2007)	The association of pregnancy and the development of obesity - results of a systematic review and meta-analysis on the natural history of postpartum weight retention. <i>Int J Obes (Lond),</i> 31, 1642-51.	Meta-analysis systematic review	25 studies describing 21 cohorts.  16 studies used for the meta-analysis.	Average PWR decreased until 1 year PP and increase after. Propose measurement of PP weight to be up to 1year Women with excessive PWR are at risk for later obesity. Environmental and lifestyle factors more likely to explain why women gain weight after 1 year postpartum	Measurement of PWR proposed for a limited period (up to 12 or 18 months postpartum).  Exploring lifestyle related reasons for weight changes.
Scholl, T. O., Hediger, M. L., Schall, J. I., Ances, I. G. & Smith, W. K. (1995)	Gestational weight gain, pregnancy outcome, and postpartum weight retention. <i>Obstetrics &amp; gynecology</i> , 86, 423.	Prospective study	274 low income minority women in the US, followed from 20weeks pregnancy then 4-6 weeks and 6months postpartum. Using the Camden Study data	Excessive GWG contributes to postpartum maternal overweight status.  Minority women with excessive GWG retain higher weights postpartum Younger mothers (teenagers) gained excessive GWG and subsequently higher PWR.	Research into behavioural factors that may influence GWG during pregnancy.
Smith, S. A., T. Hulsey and W. Goodnight (2008)	Effects of obesity on pregnancy.  JOGNN - Journal of Obstetric,  Gynecologic, & Neonatal Nursing  37(2): 176-184.	Literature Review	54 articles included in the review based on scientific merit and research outcomes	Obese pregnant women at risk of diabetes, hypertension, heart disease, cancers. Obesity is the root cause of adverse pregnancy outcomes such as foetal macrosomia, very low birthweight, preterm birth, birth defects, poor foetal growth, etc. Mass media heightened women's anxieties about body image. Body image is important to women during and after pregnancy.	No effective long-term interventions to prevent or control maternal obesity. Limited pregnancy and postpartum interventions to address GWG and PWR
Straube, S., Voigt, M., Briese, V. & Schneider, K. T. (2008)	Weight gain in pregnancy according to maternal height and weight. <i>J Perinat Med</i> , 36, 405-12.	Retrospective cohort study	2,281,487 German perinatal women. Data at two time points;	Pregnancy BMI is not a good predictor of maternal obesity.	

Swann, R. A., Von Holle, A., et al. (2009).	Attitudes toward weight gain during pregnancy: results from the Norwegian mother and child cohort study (MoBa). Int J Eat Disord 42(5):	Using secondary data  Prospective cohort study	weight at beginning and at end of pregnancy  35,929 mothers followed from 18months gestation, explored eating	Use of Weight for height adjusted for gestational age is suggested as more appropriate.  During this early pregnancy; presence of eating disorder increased worry about gestational weight gain. Women without eating disorders had higher worry from their own gestation	Eating disorders were self- reported, which would introduce bias
Swinburn, B. A., I.	Diet, nutrition and the prevention	Literature Review	disorders and weight gain attitudes. Studies worldwide	weight gain.  Evidence for protective factors against obesity:	Studies to define mechanisms
Caterson, J. C. Seidell and W. P. T. James (2004).	of excess weight gain and obesity.  Public Health Nutrition 7(1A): 123- 146.		highest ranking for quality as RCTs.	regular physical activity, high intake of fibre, and some evidence on breastfeeding	by which low SES and other factors promote overweight and obesity.
Tanentsapf, I., B. L. Heitmann and A. R. Adegboye (2011).	Systematic review of clinical trials on dietary interventions to prevent excessive weight gain during pregnancy among normal weight, overweight and obese women. BMC Pregnancy and Childbirth 11(1)	Systematic Literature Review and Meta- analysis	13 studies including 10 RCTs and 3 quasi- controlled trials; Total 1,432 normal weight, overweight and obese participants	Dietary interventions reduce both GWG and long-term PWR at 6months. Limited evidence for benefits on infant and maternal health.  Dietary interventions for overweight /obese women need to be more intensive	No common standard of baseline weight measurements. Research with larger sample sizes required to explore maternal and foetal benefits and effect of interventions.
Thornton, P. L., Kieffer, E. C., et al. (2006)	Weight, Diet, and Physical Activity-Related Beliefs and Practices Among Pregnant and Postpartum Latino Women: The Role of Social Support. Maternal and Child Health Journal 10(1).	Qualitative study	Dyads of 5 pregnant and 5 postpartum Latina women, and 10 people who influenced them	Husbands were primary source of support. Barriers to healthy practices were absence of mothers, or female relatives, or friends to provide advice and companionship Family oriented interventions necessary to promote and sustain healthy lifestyles.	
Tovar, A., Chasan- Taber, L., Bermudez, O. I., Hyatt, R. R. & Must, A. (2010)	Knowledge, Attitudes, and Beliefs Regarding Weight Gain During Pregnancy Among Hispanic Women. Maternal and Child Health Journal, 14, 938-949.	Qualitative pilot study	4 focus group groups with a total of 29 Puerto Rican women in the US.	Nutrition information was predominantly from nutritionists and family members but nor physicians.  Majority of overweight and obese women did not receive any GWG recommendations from their physicians  GWG advice inconsistent.  Lack of physical activity not seen as a major contributor to weight gain in pregnancy	To explore HCP guidance to women especially minority women. Research on attitudes during pregnancy for identifying modifiable risk factors. Research on attitudes in the postpartum for assessment of impact on weight retention
Vallianatos, H., Brennand, E. A., et al. (2006	Beliefs and practices of First Nation women about weight gain during pregnancy and lactation: implications for women's health."  The Canadian journal of nursing	Qualitative descriptive study	30 Interviews with Cree women from Quebec, Canada.	Women found it difficult to lose weight PP, due to lack of time, cultural beliefs about breastfeeding and dieting, lack of childcare or community supportive programs.	HCPs and researchers should examine health in social, political and historical contexts.

WILLIAMSON, C. S. (2006)	research = Revue canadienne de recherche en sciences infirmieres 38(1): 102-119.  Nutrition in pregnancy. Nutrition Bulletin, 31.	Briefing paper	Review and analysis of evidence around nutrition and pregnancy	Most women viewed GWG as normal, as long as health of baby and mother was fine. Individual family and community level factors contributed to weight management. Women's lifestyle choices are impacted on by socio-cultural factors. Difficulty in maintaining a healthy lifestyle is as a result of lack of domestic help. No official weight gain recommendations during pregnancy in the UK. Variations in weight gain during pregnancy Maternal nutrition important especially attaining a healthy body weight before conception Moderate exercise in pregnancy is good for	Research on women from specific ethnic groups in the UK regarding nutrition in pregnancy
				maternal and foetal outcomes	
Books and Reports					
Crawford, D. (2010)	Obesity epidemiology: From Aetiology Oxford University Press.	to Public Health Oxf	ord [U.K.]; New York,	Book	
Grogan, S. (2008)	Body Image: Understanding body diss Routledge.	atisfaction in men, w	romen, and children,	Book	Literature review and original articles
Gross, H. & Pattison, H. (2007)	Sanctioning Pregnancy: A Psychological Perspective on Paradoxes and culture of research, London, Routledge.			Book	
Miller, T. (2005)	Making Sense of Motherhood: A narrative approach, Cambridge Universit Press.			Book	
Phillips, A. (2010)	Gender and Culture. Cambidge, UK, Polity Press.			Book	
Ussher, J. M. (ed.) (2000)	Women's Health: Contemporary Inter- Psychological Society.		, Leicester: The British	Book	

## **Appendix 12: FG Analysis Extract**

Ideas	Initial themes, quotes, examples					
Emerging	Self-efficacy Self-efficacy					
themes	- Low self-efficacy to eat healthier					
	o mediated by work patterns, living alone, money fluctuations in a month, smoking					
	- Negative group influence- office snacking culture, social buying of snacks and acceptability of fast food as social event, easy temptation to snack while in a					
	group.	group.				
	- Positive group influence- eat healthier meals, regular eating habits, attempt to eat to fit in					
	Convenience and means					
	- Variation in weather and right time for warm or cold foods					
	, ,	and food treats or rewards				
What affects	L1- Staying at home,	S1= Going out with friends, like	S1: Family (grans) used to put some ready	L1: Food as a reward after a "really	S1= smoker, but	
your eating	and routine family	shopping, etc, tries to fit in routine	to warm cooked food for her= so got	good study sessiongo for a really	"my worst fear is	
	eating at 3pm!	eating times= 12pm	used to eat irrespective of staying alone	nice meal or chocolate"	that my weight	
	Concentrating on	??social expectations as " doesn't	A2- BF are a bad influence! Tend to eat	S1 agrees	will get straight	
	studies and need for	want to look weird when in social	what he eats, and he can just eat		up" because it	
	uninterrupted study	situation" but would never eat at	whatever he wants so there will be	Eating more when its freezing and	suppresses your	
	period	12pm when at home	biscuits lying about in the house and am	over Xmas- S1	appetite. So	
	C1- I eat healthier	L1: eating habits become more	just(too tempted so) I always eat! and		difficult to quit!	
	when my partner is	regular when out of the house??	like (too many) takeaways, things like	M3- agrees: "when its sunny and	??Other lifestyles	
	around as we plan all	Social influence from friends	that!	nice outside, I (eat) healthier, do	and heightened	
	our meals and they	?? convenience- she can buy food	C1- agrees:" my partner loves to eat	some exercise I don't want to do	fears following HP	
	are "bigger and	vs making it at home	out so we do eat out more often than I	anything healthy (in winter)	visits?	
	better"	S1: Will try to eat brevita breakfast	probably would want to"			
	L1 Disagrees:	biscuits in lectures	???Influence of men as not health or body	S3- in the winter, you want to eat	J3- agrees- my	
	I would just snack on	?? Wanting to be seen to eat but	image conscious?	big stews, loads of potatoes, really	mom, can't stand	
	junk when I lived on	asks "is that healthy to be eating	?? Self-efficacy??	warm foods and soupsin summer	food when she	
	my own. Working late	biscuits for breakfast every day?"	C1= Previous office had a snacking	maybe 2 ice creams! In winter, you	has had a cig- "it	
	while living on her	"There was a point where I was	culture with sandwich van at about 10am	have to eat constantly to keep	seems to get rid	
	own= no point in	eating a lot just to sort of prove a	"you end up kind of doing it because well,	warm!	of her appetite"	
	cooking re: " it's	point (to friends that she eats a lot	people are!"	12		
	going to take 20min,	but just her body)"- L1	S3- Yeah, I work in a bar and normally, we	J3- agrees	L3- My Dad used	
	have to wash up all	S3- Going out- you'll have like a	eat crisps during the break- I'll eat like 3	(warm winter foods)	to smoke but I	
	the pots and its	takeaway after having lots of	packets of crisps which is awful!	??warm foods vs treats	don't think it ever	
	already 9 o'clock"	sugary drinks or hangover				

		1	T		1
	Living alone affects	"I'll have waffles, beans, sausages,	L3- I used to work near McDonalds and it	M3- Yeah, fruit is more of a sunny	affected his
	especially veg buying	then pizza or any greasy food in	was easier to grab something just before I	weather choice (S3 agrees)	appetite!
	"I am not going to sit	the morning"	started work- kind of a routine		
	and go through a	J3- when am hangover, I totally	L1: Agrees to "social buying" of food		
	whole cauliflower on	love food! ??Hangover binges	where you end up eating what you don't		J3- The time food
	my own, you'd like a	M3- when you are busy, easy to	or wouldn't normally eat		takes to prepare
	bit, a little bit of	keep snacking or grab something	C1+S1: Don't have to conform but it's just		and also money is
	various vegetables,	(takeaway) on the go.	easy "someone says you want a KitKat, I		a big factor!- end
	but it's hard to buy	S3- agrees, yeah having exams- I	am going to the shops"- C1		of term, eating
	them!	just snack constantly	D1- agrees- "everyone (gets) a huge		less healthy food.
	S1 agrees: "I was	J3- Yeah, food tastes better when	coffee and toast from the café its really		
	buying a lot of	someone's made it	buttery, its sooo nice! And it's		
	soupits quick and	L3- If I am driving past a KFC and I	HOT!pretty much everyone has toit's a		
	easy, stick it in	see it, I quite fancy one and will go	social thing) "if you don't go and		
	microwave"	there. I never sit down, always	socialise from the front of the café, you		
	??I think that was the	eating on the go	just sit on your own in the room and		
	reason I was quite		think, I wish I had some toast!" It can be		
	slim		toast, chocolates,		
Contact with	Poor receipt of or acceptance of HP weight diagnosis and advice				
health	- Baffled by poor exa	amples from HP			
professionals	- Causes anger, depi	ression, stress, denial (due to personal	thoughts on look, peer or family thoughts bu	t also due to inadequate HP advice no	ot prescribing
in regard to	treatment or work	treatment or work plan)			
food and	S1: Upset re:	C1: Told obese, when size 14, and	L1: Daunting pressures on women weight	Hypocrisy from HPs as "nurse	S1: To confirm HP
weight issues	overweight yet size	needed to lose weight: Unhappy,		telling you is all round larger	result, began
J	10!, got ill, "looked	but acceptance as always been	C1: Disheartening for HPs to say you are	lady"- S1	weighing herself,
	anorexic" but Doctor	told she was nearly obese	fat!	Joke if HP is chubby sitting there-	and was ok with
	told her weight was	NO challenge to HPs who are		C1. Take advice with pinch of salt	results (NOT fat)
	perfect!	chubby (C1, S1, L1)? Taboo?	S1: BMI not good measure, can be very	at HPs not healthy as well (do as I	?? Potential
	'	Strong NO! "It would be very rude"	distressing to patients	say not s I do)= chorus agreement	impact on
			"For me it was just a bit of a joke!"-	No advice: "they don't say here is a	depressed
			previous slim friend had been told the	diet sheet, have you thought	patients! Later
			same so became laughing issue in office	about doing this,they don't	thoughts of Gosh,
				seem to take it seriouslyit's kind	am really fat!- C1

# **Appendix 13: Extract for Analysis of Individual Interviews**

Step 1	Transcript	Step 2
Felt alright no sickness, until she	RT: Tell me about your pregnancy	Experience of
found out, Questioning reasons	Well, when I first found out I felt all right. But I am not sure, I don't know if it's all the folic acid I was taking. I've got a high	morning sickness
for the morning sickness	BMI so they put me on a high dosage of folic acid $-I$ think it was $4mg - and$ once I started taking that I just started feeling	High weight,
Has high BMI, put on 4g folic	sick and it was just like all day long and all night long. And then, um, I've not been sick for like five years; but then I started	intervention for
acid	being sick, um, like if I felt anything in the kitchen. Even my dog made me sick, the smell of my dog. Um, I couldn't open	baby, Folic acid.
?blames the high dose?	the fridge; I couldn't open the dustbin. (Laughs) <mark>It was just everything</mark> . Um, but then it just kind of eased off a bit. It was	
Morning sickness taking over,	only maybe for about a week, maybe two weeks that it was really bad. And then, um, it was sometimes if I woke up early.	
even though only short-lived	But now it seems to have completely stopped.	
Rationalising the morning	RT: Was this before you found out?	Rationalise
sickness experience= ??maybe in	Before I found out I was pregnant I didn't feel sick. So, <mark>I wonder if it, if it was because I knew that I was like bringing it on</mark>	experience of
the head = bringing it on	myself. (Laughs). And then it just happened. (Laughs). Yeah, it was a lovely surprise.	morning sickness.
myself?	M: You just mentioned that you have a high BMI, um, how much do you weigh?	
It just happened- a surprise	Yes. What's my weight?	
	M: Yes, or your BMI; whichever you know is okay.	
BMI 40.3,	Um, my BMI I think it was, at the start of the pregnancy I think it was 40 point something. (Laughs) I think it was 40.3 or	Very high BMI, a
Recognising in preg that weight	something. My weight was quite a lot really; I think it was 16 stone, I think it was 16 stone two [RT added= 102.9Kg] or	changed <mark>tense</mark> ,
was quite a lot	something like that at the start of the pregnancy.	WAS meaning it
	M: when did you start the folic acid?	doesn't matter
Started taking folic acid after	Um, <mark>I started taking some, just the normal dosage, as soon as I found out</mark> . But then when I went to the doctor, um, to the	now?
preg confirmation, on own	doctors they told me that I needed the higher amount. So, it was probably about five weeks that I started taking the high	Preg acceptance of
accord	amount of folic acid.	weight?
	M: Right, how did you find out exactly about your pregnancy?	
GP prescribed higher amount;	I was like just jokingly, because we've had quite a few scares – well not scares but thought that I was and then I wasn't –	
intervention	um, I was like, "Ooh, maybe I'm pregnant". And then my husband was like, " <mark>Oh you won't be; you never are</mark> ". And then,	
	um, I looked in my diary and I was like actually my period's a week late. And then we were like ooh, maybe I am. <mark>But we</mark>	
Expectation from partner to be	still didn't believe it so we did like three tests at home and, and they were all positive. We were like no, this can't be right.	
preg. ? were they trying? Or as a	We, we just couldn't believe it. (Laughs)	
result of marriage?	M: Um, how has how did it affect your kind of everyday routines and food and things like that?	
	Uh, um, at the start, um, <mark>it got quite bad and I had a bit of time off work because I just couldn't stomach working</mark> in an	
Taking time off work	open plan office with like kitchens and things. I couldn't stand the smell of anything so I was missing quite a bit of work	
Eating dry foods, taking whole	and seeing people. Um, so it really affected that for the few weeks of it; and then maybe the other week when I had the	
advice from GP about ginger	actual sickness. Um, in terms of food I was just eating like dry things. The doctor told me to try ginger biscuits; so ginger	
biscuits	biscuits in the bedroom, ginger biscuits in my car, ginger biscuits at work.	

### **Appendix 14: Extract from Initial Ideas to Create Themes**

- Food practices influenced by early adulthood experiences of dieting, or careless eating.
- Pregnancy a trigger for checking food intake moving towards more healthy options- Including more fruit, veg, meat, fish in diet
- Partners have a direct influence on food choices and motivation for eating habits
- Food aversions, morning sickness common but did not change move towards health eating
- Cravings diverse, and attributed to body needs
- Weight concerns, and monitoring appear to stop, replaced by more concerns regarding health of pregnancy/baby
- Women have history of "treat" eating- chocolate, sweet tooth, fizzy drinks, which changes in pregnancy

"I stopped calorie counting because I was about...for about three...was it about two weeks before I found out I had been trying to do like 1,500 calories a day because um I wanted to because I did that the year before and I lost...did I lose nearly...? I think I lost about a stone(6.4kg)" CP Line 51-54

"I was sort of conscious that I was trying to eat- trying to eat enough, but it was just so strange because normally I have to try to not eat too much, but I didn't...I just didn't want to eat. I just didn't want to eat and then, you know, after I ate something, like a proper dinner, like I went out and I had like roast pork and vegetables, I really didn't want to eat the meat and I thought, "I should eat it. I need to have protein." An hour later I was just really violently sick and it's almost like my body just didn't- didn't want it" **CP Line 58-64** 

"I probably did over eat in that- in that period, like maybe the first sort of six- six months um and I think I put weight" **CP Line 88-89** "it's just made me a lot more aware of how many...things like I tend to now weigh my rice and pasta, whereas before I just used to go...or I'd give...I used to always do a portion of 100 grams and now I do 75 except that now at the moment I'm doing 100 again because I'm really hungry and I'm pregnant and I think, "You know, I don't need to..." So I'm not going thinking... I'm really conscious of what I eat, but I'm also eating probably more biscuits and cake and fatty things than I would do if I wasn't pregnant because I'm sort of just...but I'm not eating, you know, takeaway every day or things like that" **CP Line 97-104** 

"I usually get um the chicken- a chicken kebab, which isn't that bad. It's like grilled chicken and salad and pitta bread. I don't really like- I don't really like really processed food" **CP Line 106-108** 

"and I've- and I've tried to be more- more careful, but I think because I'm like so tired um and because it's cold and things you just kind of think, "Oh, you know, it's easier to do that" but I'd sort of tend to eat all the fruit and vegetables as well and then have that" **CP Line 112-115**"I ate in terms of saturated fats because I read something about, you know, it passing straight through to the placenta. So I remember I wouldn't let myself have fish and chips last time, whereas this time I have had chips, but um I think I just ate because people just kept saying, "You know, you can eat for two" whereas now I know that's...now they say, "Actually it's only the last trimester then you could only have 200 extra calories"

CP Line 213-217

"sometimes I would just eat what I want- when I wanted like in the daytime and I'm still doing that now because if I'm hungry then I'll eat and I'd try to eat more... some nights I don't necessarily have dinner when my husband and my daughter have dinner, I might have more of a snack thing because I've eaten enough in the day and I sort of maybe spread it out into smaller things, but we did... I think because I'd got her, we did still continue to eat together all the time, but I struggled to cook and...whereas normally I always used to cook so... I'm trying to remember what... I think my mum- my mum did quite a bit of batch cooking and left some things for me and then other times we would have like pasta and tinned

Stopped calorie counting when she confirmed preg.

= ??? Inhibitions taken away or ff quidelines??

Bad sickness and food aversion in early preg

CP- Attempts to eat healthy foods preq

Watching food intake >10y, but not now due to preg

Rationalising increased food intake

Over eating first 6mo? AND not caring because preg

Indulging, eating not calorie counting anymore

Tried to go back into shape after 1st child

Social surrounding encouraging higher eating- available food,

and reduced inhibitions

Reduced sickness with already prep food- no need to think about it

Aware about good things in a diet- seeks information

tuna and tinned sweetcorn that my husband would do when he came in or beans on toast or something. So we probably didn't eat um as complicated foods, but we'd still try to get the three food groups um there" **CP Line 400-412** 

"I felt like I got my cooking mojo back and I was making these jams and chutneys and things and it was just nice to- to be able to handle food and to want...and then like it was my husband's birthday at the end of October and I cooked a steak and that was the first time and I cooked a chicken and that was the first time like in six months that I'd cooked something like that meaty because I just couldn't see it before" **CP Line 422-**

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"he's not greedy so I always think maybe I should just eat what he eats, ...but um I think I had bad eating habits when I was a teenager. Um I used to just eat like a whole packet of biscuits or something because all that...when we were growing up everything was a treat and I didn't want that to be like that for my daughter. So every time I...when I got my own money then I would buy crisps and fizzy drinks and, you know, sugary things and eat a lot of it. So I worked really hard to- to change that um and he's really happy like..." CP Line 437-443

"I went off the- I went off meat for a long time, but that's- that's okay again now. Um I've been eating more kiwis because I've been trying to for like the vitamin C. Um when I was sick I found it just really hard to drink anything. I went off tea as well, but that's all...I'm just pretty much eating-eating everything now except that I do...I am having more...craving more chocolate and things" CP Line 451-455

"I think because your metabolism's faster when your pregnant I seemed to be able to get away with a little bit of it, but normally I really like dark chocolate, but at the moment I don't like it, it tastes quite bitter. So I think my taste...it almost feels like my tastes have changed a little bit" CP Line 463-467

"I didn't eat properly because I think I was...I wasn't calorie counting, but I was thinking, "I've got to be careful" and so now I'm eating the cakes and the chocolate, but I wasn't then and I was really like being...trying to be careful. Then when I went for my booking in they measured me and they said I was five foot eight and my BMI was 28 and I told the midwife and she was like, "You're absolutely fine, you don't need to worry" and everything" CP Line 549-554

Support from family- to cook when she couldn't due to sickness

Prefers to snack more than eating full meals

Felt good cooking again

Rationalising increased intake with faster metabolism

Re-assurance from MW when she asked about weight

# Appendix 15: Extract Showing grouping of Themes before beginning the Narrative

Main themes	Sub themes		
The pregnancy	Behaviours in pregnancy	Care, support and information	The pregnant body
experience	Physical activity level in preg	НСР	<ul><li>Emotional time = scary, tiring,</li></ul>
	- Highly active, continued in preg.	-Role entirely medical- looking for ill health	worrying
	- Never active, attempted exercise- walking	(others, need to be proactive)	Body image worry
	Being told about weight and effect on preg outcome (shock,	-Empathetic support regarding overweight	<ul> <li>Uncertainty regarding prof role</li> </ul>
	determination to be healthier)	- Support pp about weight gain, bf if on ward	• Felt right
	Obsessed with weight gain, not sure if too much or not	Previous experience- gives more independence	<ul> <li>Worry about wgt and baby</li> </ul>
	Not being told about weight- free not to worry	to make decisions.	outcomes
	Preg only tendencies:	Read more first preg than current	<ul> <li>Guilty, shock Early years weight</li> </ul>
	-N and MS = not eating much	<ul> <li>Prev preg teaching moment to handle ms, and</li> </ul>	before preg- since teenage years
	- Feeling free to eat as they want due to preg (disinhibition,	also food choice	<ul> <li>Body image insecurities, from family</li> </ul>
	freedom)		comments about weight status
	- Preg changed palate (going off food) but still making effort to	Family and friends	<ul><li>Preg weight seen differently=</li></ul>
	include the healthy foods	All round family support	Wanting to show off preg body not
	- Cutting out bad foods for preg- alcohol, soft cheeses	<ul> <li>Experience of preg, childcare, prof role</li> </ul>	as a FAT body
	- Increasing good foods for baby devt eg salmon, veg,	Internet and virtual friends	Preg as a public event
	- Generally increased snacking. No guilt Intemperance due to	As first point of consultation	- The preg body as for the
	preg acceptability of big body= struggle between comfort	<ul> <li>Use of google, forums and email service</li> </ul>	public- free to touch, comment,
	eating and personal desire to watch weight.	Virtual friends	advise
	<ul> <li>deal with weight later- for now no restrictions</li> </ul>	Books- from friends who have been through preg	
	<ul> <li>Regained food habits before preg, but also continued</li> </ul>		
	snacking		
	Not eating well due to being too tired, lack of time		
Being a new	A new mother Experience of the birth	Relationships	Body image as a mother
mother	Fulfilled choice	Mom feeling left out, not able to go out as	Body image:
	Delight when choice was ok, upset if not	usual, lack of sleep	- Insecure with body thinking people
	Birth as a natural process and not medicalised like when in	Restriction on intimate rlship due to CS	will say she is still preg
	hospital	- Support from partners and family to cope	- No time to think about body, more
	Negative experience difficult to adjust pp	- Feeling needed, making her grow to be	concerned with baby
	Long time to recover hence being unable to do much else	responsible= missing piece	Recognising changed body.
	Focus on baby's health and needs	- No HCP advice about weight mgt pp, only from	Postpartum plans
		parents encouraging bf	<ul> <li>Lack of time to start</li> </ul>

<ul> <li>Emotional time worry about bf, baby weight, and baby health</li> <li>Postpartum as a stressful period, fully tiring</li> <li>Massive change, taking away independence &amp; social life</li> <li>Motherhood a change in priorities, where the self takes second position= PP as a time of survival</li> <li>Pre-learned behaviours</li> <li>No routine to meals- frequently snacking whole day</li> <li>Treat culture to meals- add extra treat (crisps, chocolate bar, pudding)</li> <li>Family meals- older kids, so food as healthy and more set</li> </ul>	Goal to be healthy enough to show off baby than her body image/weight concerns	<ul> <li>Zeal to be more active</li> <li>Motivations- new jeans she wanted to fit back into</li> <li>Not sure how much weight to lose pp that is healthy- limiting effort</li> </ul>
meals.		