

**City Research Online** 

# City, University of London Institutional Repository

**Citation:** Holmes, Vivian (2023). Understanding the experience of group antenatal care for women with a raised body mass index: a multi-method study. (Unpublished Doctoral thesis, City, University of London)

This is the accepted version of the paper.

This version of the publication may differ from the final published version.

Permanent repository link: https://openaccess.city.ac.uk/id/eprint/33067/

Link to published version:

**Copyright:** City Research Online aims to make research outputs of City, University of London available to a wider audience. Copyright and Moral Rights remain with the author(s) and/or copyright holders. URLs from City Research Online may be freely distributed and linked to.

**Reuse:** Copies of full items can be used for personal research or study, educational, or not-for-profit purposes without prior permission or charge. Provided that the authors, title and full bibliographic details are credited, a hyperlink and/or URL is given for the original metadata page and the content is not changed in any way.

 City Research Online:
 http://openaccess.city.ac.uk/
 publications@city.ac.uk

# Understanding the experience of group antenatal care for women with a raised body mass index: a multi-method study

Vivian Holmes

This thesis has been submitted in fulfilment of the requirements of City, University of London, for the award of Doctor of Philosophy

Department of Health Services Research and Management

Centre for Maternal and Child Health Research

October 2023

## Contents

Declaration	9
Abstract	10
Acknowledgements	11
COVID-19 Impact Statement	
Glossary of Key Terms	
Acronyms	
List of tables	1/
Key to transcription	
Chapter 1 – Thesis aims and rationale, key concepts and definitions	
1.1 Introduction	18
1.2 Aims and Rationale	19
1.3 Research Gap	21
1.4 The Pregnancy Circles Trial	23
1.5 My background and interest	25
1.6 Key perspectives and theoretical frameworks	27
1.6.1 Strong objectivity	28
1.6.2 Critical Feminism	
1.6.3 Intersectionality	29
1.6.4 Cultural Safety	29
1.7 Research Questions and objectives	
1.8 Research approach	31
1.9 Language, terminologies and their implications	32
1.9.1 Fat	32
1.9.2 Obesity	33
1.9.3 BMI	34
1.9.4 High-Risk	35
1.9.5 Acronyms and medical language	36
1.10 Thesis Structure	

1.11 Chapter Summary	
Chapter 2 – Contextualising Obesity in the maternity landscape	40
2.1 Introduction	40
2.2 Obesity in a global context	41
2.3 Obesity in England	42
2.4 Obesity in pregnancy	43
2.5 Health behaviour interventions in pregnancy	44
2.6 Beyond a dominant narrative of obesity	47
2.7 Weight stigma	51
2.8 The role of the midwife in public health	54
2.9 Antenatal care	55
2.9.1 Antenatal care as a public health initiative	55
2.9.2 Antenatal care provision in the UK	57
2.10 Group Antenatal Care	59
2.11 Chapter Summary	63
Chapter 3 – Literature Review	64
3.1 Introduction	64
3.2 Existing systematic reviews of relevant research	65
3.3 Methods undertaken for a new thematic synthesis	72
3.3.1 Search strategy	73
3.3.2 Inclusion and Exclusion criteria	73
3.3.3 Quality Appraisal and study characteristics	75
3.3.4 Synthesis methods	76
3.4 Themes identified	78
3.4.1 Spectrum of disordered communication	79
3.4.2 Negotiating risk and stigma	81

3.4.3 Power inequality	82
3.4.4 Women want relational and collaborative care	84
3.5 Discussion of key findings	85
3.6. Strengths and Limitations	90
3.7. Conclusion	92
Chapter 4 – Methodology, Research Design and Methods	94
4.1. Introduction	
4.2. Research Design	94
4.3 Theoretical Frameworks	98
4.3.1 Strong Objectivity	
4.3.2 Critical feminism	
4.3.3 Cultural safety	
4.3.4 Intersectionality	
4.4 Overview of Methods	
4.4.1 Participant Observations	102
4.4.2 Semi structured interviews with midwives	104
4.4.3 Narrative interviews with women	105
4.5. Sampling and Recruitment	106
4.5.1 Participant Observations	106
4.5.2 Interviews with midwives	
4.5.3 Interviews with women	
4.6. Data Collection	110
4.6.1 Participant Observations	110
4.6.2 Semi structured interviews with midwives	110
4.6.3 Narrative interviews with women	111
4.7. Data Analysis	112
4.7.1 Participant Observations	

	4.7.2 Interviews with Midwives	112
	4.7.3 Interviews with women	113
	4.7.4 Analysis across data sets	114
4.8 Et	hical considerations	114
	4.8.1 Ethical approval	114
	4.8.2 Consent	115
	4.8.3 Renumeration	115
	4.8.4 Data management	
	4.8.5 Confidentiality	
	4.8.6 Researcher reflexivity	117
4.9. D	emographics of the women interviewed	119
	4.9.1 Participant demographics	119
	4.9.2 Mini biographies of the participants	120
4.10 0	Chapter summary	127
Chapter 5 – P	Pregnancy Circles as a site of tension	128
5.1 ln	troduction	128
5.2 W	eight stigma	131
	5.2.1 Anticipated and internalised weight stigma	
	5.2.2 Competitive comparison	135
5.3 No	ormalisation of pregnancy	140
	5.3.1 Peer support and experiential knowledge	140
	5.3.2 Midwife as facilitator	146
	5.3.3 Validation and triangulation about care experiences	148
5.4 Ri	sk and responsibility	151
	5.4.1 Medicalisation as priority	152
	5.4.2 Perceptions of specialised Pregnancy Circles	154
	5.4.3 Fragmented care	

5.5 Conclusion	162
5.6 Chapter Summary	163
Chapter 6 – The hospital as a site of danger	
6.1 Introduction	164
6.2 Expectations of birth choices and labour	167
6.2.1 Within the Pregnancy Circles	167
6.2.2 Outside of the Pregnancy Circles	174
6.3 COVID and the hospital	177
6.3.1 Perceptions of the hospital during the pandemic	
6.3.2 Medicalisation amplified	179
6.4 Interventionist care	
6.4.1 Birth preferences denied	
6.4.2 Maternal discomfort	
6.5 Birth Trauma	
6.5.1 Inadequate care	
6.5.2 Racialised experiences	191
6.6 Conclusion	195
6.7 Chapter Summary	
Chapter 7 – Good motherhood in a pandemic	
7.1 Introduction	
7.2 Isolation and seeking support	200
7.2.1 Lockdown	200
7.2.2 Support from Pregnancy Circles	203
7.2.3 Disrupted Circles and lack of support	
7.3 Forming good motherhood	209
7.3.1 Motherhood identity in the Pregnancy Circles	209
7.3.2 Infant feeding	211

7.4 The postpartum body	215
7.4.1 Postpartum diet	215
7.4.2 Body image	218
7.4.3 Postpartum weight management	220
7.5 Conclusion	225
7.6 Chapter Summary	227
Chapter 8 – Discussion	228
8.1 Introduction	228
8.2 Summary of key findings	228
8.3 Pregnancy Circles as a site of tension	230
8.3.1 Potential/anticipated weight stigma as a barrier to care	232
8.3.2 Risk mitigation and normality	233
8.3.3 Information exchange and dismantling power dynamics	234
8.3.4 Risk management within the Circles	235
8.3.5 Ambivalence about continuity of care	237
8.4 The hospital as a site of danger	238
8.4.1 Contextualising risk and choice	239
8.4.2 Unfulfilled potential of the GANC model	240
8.4.3 Interventions as risk embodied	242
8.4.4 The hospital as a site of infection	242
8.4.5 Medicalisation amplified during COVID	243
8.4.6 Poor hospital care experiences	244
8.4.7 Missing facets of GANC impact labour care	245
8.4.8 Navigating the "afterlife of slavery"	246
8.5 Good motherhood in a pandemic	247
8.5.1 Postnatal isolation and Pregnancy Circles support	247
8.5.2 Pregnancy Circles influencing motherhood identity	248

8.5.3 Breastfeeding and failing motherhood identity	249	
8.5.4 Disrupted routines and bodies	250	
8.5.5 Motivators and barriers to postpartum weight management	250	
8.6 Strengths and Limitations of the study	251	
8.7 Chapter Summary	254	
Chapter 9 – Conclusion	255	
9.1 Study Summary	255	
9.2 Contribution to knowledge	256	
9.3 Implications for maternity care provision, clinicians and policymakers	257	
9.4 Implications for education	258	
9.5 Unanswered questions and future research	259	
9.6 Final reflections	260	
Appendices	261	
Appendix 1. Database searches	261	
Appendix 2. PRISMA chart266		
Appendix 3. Qualitative studies exploring the antenatal care experiences of women		
with a raised BMI included within the literature review	267	
Appendix 4. Quality appraisal tool adapted from Downe and Walsh (2005)	277	
Appendix 5. Ethical Approval gained from NHS	280	
Appendix 6. Consent form	290	
Appendix 7. Participant Observation guide	291	
Appendix 8. Topic guides for interviews conducted	293	
References	295	

## Declaration

I, Vivian Holmes, confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis.

## Abstract

**Background:** Women with a BMI>30kg/m2 typically report poor experiences with standard antenatal care. Group antenatal care (GANC) has been shown to improve care experiences. Positive care experiences are associated with safer clinical outcomes. Little is known about how women with a raised BMI experience GANC. Utilising a critical feminist intersectional lens may help us understand whether facets of the GANC model improve these women's experiences of antenatal care.

**Methods:** A multi-method qualitative study was undertaken nested within a large trial testing a model of GANC (Pregnancy Circles) within the English NHS. Seven Pregnancy Circle sessions were observed. Twenty-two women with a BMI >30kg/m2 allocated to Pregnancy Circles in the trial were interviewed using a narrative approach. Semi-structured interviews were undertaken with eight midwives who facilitated Pregnancy Circles. Data were analysed thematically with narrative analysis overlaid on the women's interviews, utilising cultural safety as a theoretical framework.

**Findings:** Three meta-themes were developed- Pregnancy Circles as a site of tension, the hospital as a site of danger, and good motherhood in a pandemic. Facets of GANC such as peer support and relational continuity support women with a raised BMI to have a positive care experience. These facets normalised pregnancy, which mitigated the impact of increasing medicalisation when complications developed. In principle, midwives support GANC but in practice were deeply enmeshed in a risk-management paradigm and so found it difficult to utilise facets of the GANC model to support a personalised care approach for women with a raised BMI. Absence of GANC facets such as relational continuity and facilitative decision-making processes in the hospital setting contributed to a poor experience of labour and birth for women with a raised BMI. The COVID-19 pandemic aggravated this further. Facets such as peer support alleviated postnatal isolation during the pandemic and supported the transition to motherhood. Women cited various barriers to postpartum weight management but identified peer support as a strong motivator.

**Conclusion:** This was the first study to explore the experiences of women with a raised BMI receiving GANC qualitatively. Mapping a cultural safety paradigm onto GANC provision allows a radical reimagining of maternity care provision for women with a raised BMI as woman-centred, culturally safe and non-stigmatising. How safety is approached and delivered in maternity services requires reconfiguration.

## Acknowledgements

I am grateful to the University of East London, with whom I initially commenced my PhD candidacy, for granting me funding through an Excellence Studentship, which has allowed me to undertake this research. I am also grateful to City, University of London, who agreed to take over funding my studentship after I transferred my candidacy so that I could complete this work.

I am extremely grateful for my supervisory team. Thank you to Professor Angela Harden for her continued gentle guiding support throughout the whole process. Thanks to Professor Christine McCourt who kindly agreed to co-supervise me after I joined City. Her vast experience in maternal health research has challenged my work in ways I am still exploring. I am also grateful to Dr Anita Mehay for her early supervisory support in my first year. My supervisory team has supported me with godly patience through three pregnancies and has always endeavoured to give me the space to juggle many hats as researcher, midwife, and mother simultaneously.

Thank you to the wider REACH team for taking me under their wing – learning to work collaboratively in a big clinical trial has been an education!

Thanks to the wider academic community at both UEL and City, who supported me whilst I worked clinical shifts through a global pandemic, completed a short stint as a lecturer, juggled maternity leave twice, and experienced matrescence in all its tiring and beautiful wonder.

I am grateful to the midwives and women who agreed to let me observe their Circles. Thank you to the eight midwives who agreed to take time out of their busy schedules to take part in the interviews, despite working in extremely difficult circumstances during the pandemic. Thank you to the twenty-two women who very kindly took part in my research, many of whom were simultaneously engaged in mothering work whilst our interviews took place.

Thank you to my "village" - it would have been impossible to complete this work without all the support I received. Joe, Lottie, Jack, Jenny, Martin, Debbie, Mum and Dad – thank you for the precious days of childcare whilst I continued to work. Asil – thank you for your editorial eye. Miriam, Maura, Evette, Helen, Molly, Harriet, Felicity, Michael and Anna – thank you for your ongoing emotional support, especially when I thought I would never finish this work! Angela-thank you for all your wonderful midwifery care during my pregnancies, and for giving us a place to get away from it all, a little haven for us and the children.

I am most grateful to my husband, Sam, whose unwavering support throughout these difficult years has been unparalleled. This work would not have been completed were it not for your continuous love and dedication to our family. My gratitude and love for you knows no bounds. This thesis is dedicated to our children who arrived whilst I wrote this – Winifred, Mei and the one that was lost in between.



#### **COVID-19 Impact Statement**

This statement is provided for the aid and benefit of future readers to summarise the impact of the COVID-19 pandemic on the scope, methodology, and research activity associated with this thesis. The academic standards for a research degree awarded by City, University of London and for which this thesis is submitted remain the same regardless of this context.

**Title of the research project:** Understanding the experience of group antenatal care for women with a raised body mass index: a multi-method study

1. Summary of how the research project, scope or methodology has been revised because of COVID-19 restrictions

The methodological approach was adapted after some of the data collection had already taken place. Participant observations were completed in May 2019, prior to my maternity leave. The Pregnancy Circles trial was paused in March 2020, so women were no longer attending the circles in person. I had planned to collect both quantitative (trial outcome data) and qualitative data (narrative interviews). However, the pause on trial recruitment meant there would be a delay in collecting sufficient outcome data, and it was impossible to predict when the Pregnancy Circles would be recommenced. The research questions and data collection methods were then adapted to be solely qualitative. I also intended to conduct longitudinal narrative interviews with women at two different time points- in the third trimester and in the postnatal period, using a loosely structured topic guide for the antenatal interview and then use issues that emerged to inform the postnatal interview. As women were no longer receiving the intervention during this time, I could not interview women in the antenatal period. Instead, one postnatal interview was conducted at least 12 weeks after birth and up to a year after, as this would grant me a long enough recruitment period and by 12 weeks, women would have had some time to adjust after the newborn period. Hybrid data analysis techniques were introduced to maintain narrative integrity to the thesis, as less interviews were conducted in a narrative style.

2. Summary of how research activity and/or data collection was impacted because of COVID-19 restrictions, and how any initially planned activity would have fitted within the thesis narrative

In March 2020, I was waiting for ethical approval to be granted. I switched to remote working for my PhD but I was still on maternity leave from my job as a clinical midwife in the Trust I usually work in. I was aware that midwives were being asked to return to work early from maternity

leave to cover the shortfall in staff sickness/self isolation policy. I felt obliged to return to clinical practice if required to do so but was aware that recruiting an adequate number of participants would be difficult if I returned after a suspension in studies in September/October 2020, with ethical approval still pending. In addition, the research design was adapted as described above which necessitated significant changes to the patient information leaflet and topic guides. I was advised by the wider research team to wait for the initial ethical approval to be granted and then to resubmit substantial amendments to the Pregnancy Circles trial. My initial ethical approval was not granted until June 2020, and then resubmission was not granted until July 2020 which also contributed to a significant delay in recruitment.

3. Summary of actions or decisions taken to mitigate for the impact of data collection or research activity that was prevented by COVID-19

It was not permissible to interview people in person but to understand women's experiences of Pregnancy Circles, interviews were considered an essential data collection method in order to be able to answer the research questions. Therefore, interviews were conducted virtually. There were numerous benefits to this – it was cost-effective to do this and more time-efficient to conduct interviews in this way. I was able to be more flexible with my time and offer multiple reorganisations of interviews. In total I rearranged interviews 18 times for participants. A more rigorous recruitment strategy was discussed and followed to ensure that recruitment was not drawn out and that information power would be sufficient with the interviews undertaken. Even with a more proactive approach, recruitment for the interviews commenced in July 2020 and was not completed until June 2021.

4. Summary of how any planned work might have changed the thesis narrative, including new research questions that have arisen from adjusting the scope of the research project

Research questions were adapted to consider midwives experience of facilitating groups with women with a raised BMI. Although the narrative interviews with women are considered the primary data source for my research questions, the interviews with midwives can be considered a supportive dataset that expands understanding about the function and utility of the intervention and the interactions with actors within. Utilising hybrid data analysis techniques to enhance and protect the narrative integrity of the interviews was considered essential as fewer narrative interviews were conducted as originally planned. Considering the pregnancy continuum as a narrative itself, findings chapters have been separated into themes related to Pregnancy, Labour and Birth, and the Postpartum period.

## Glossary of key terms

The table below defines a list of key terms used throughout the thesis. Many of these key terms are medical in nature and therefore definitions have been included to clarify their importance and contextualise their use in the main body of the thesis.

Term	Definition
Postpartum	Blood loss equal to or over 500ml at the time of birth or after. Postpartum
haemorrhage	haemorrhage is closely linked with maternal morbidity and mortality.
Booking appointment	The initial appointment a woman will have with a midwife in pregnancy. The
	purpose is to obtain an accurate medical, social and psychological history, offer
	and complete necessary risk assessments, take a baseline of clinical
	measurements and complete referrals for additional care if required. This
	appointment dictates the care pathway a pregnant woman is commenced on.
Major obstetric	Blood loss equal to or over 1500ml at the time of birth or after. Major obstetric
haemorrhage	haemorrhage is closely linked with maternal morbidity and mortality.
Induction	A process by which to artificially start labour either mechanically or with
	medication. This is often a clinical decision to end the pregnancy when the
	intrauterine environment is no longer considered safer than extrauterine life.
Obstetric cholestasis	Also known as intrahepatic cholestasis of pregnancy. A pregnancy condition
	defined by itchy skin with abnormally high maternal bile acid concentrations.
	This condition is linked with stillbirth.
Caesarean Section	Major abdominal surgery undertaken under anaesthesia to deliver a foetus
	when it is considered unviable or undesirable to deliver vaginally. Caesarean
	sections are either considered 'elective' when the procedure is chosen at a time
	and date suitable to both parents and the service, or 'emergency' when the
	decision is taken shortly before the procedure takes place.
Term pregnancy	A pregnancy gestation of between 37 and 42 weeks. This period of time is when
	the foetus is considered neurologically and physiologically mature enough to
	exist outside of intrauterine life without support.
Preterm	A pregnancy gestation of between 24 and 37 weeks. This period of time is when
	the foetus is considered either neurologically or physiologically immature but
	viable. Depending on the gestation, the foetus may require intensive
	intervention to support the transition to extrauterine life. Prematurity is closely
	linked to neonatal morbidity and mortality and is the leading contributing factor
	of death in infants under the age of 5.
Gestational diabetes	A pregnancy condition defined by the development of abnormally high blood
	glucose levels in the absence of pre-existing diabetes prior to pregnancy. Poorly
	controlled gestational diabetes is linked with poor neonatal outcomes.

Table 1. Key terms and their definitions

Intra-uterine growth	A complication of pregnancy where the foetus does not grow as expected due
restriction	to maternal malnutrition or a chronically hypoxic uterine environment. This condition is closely linked to neonatal morbidity and mortality.
Midwifery-led unit	A labour and birth facility either located in a hospital or a separate (free-
initiatine, j ieu anit	standing) unit, whereby midwives are the lead practitioner for the care
	provision during labour and birth and assume responsibility for care decisions.
Consultant-led unit	A labour and birth facility located in a hospital where consultant obstetricians
	assume overall responsibility for decisions and care plans made during labour
	and birth. Midwives provide most of the care during labour and birth on these
	wards.
Theatres	A room in a hospital where surgical operations take place. Caesarean births
	happen here under anaesthesia.
Meconium	The first bowel movement of the baby. It may be passed during labour and can
	be considered a sign of hypoxic stress. Meconium aspiration is considered a
	potential complication when meconium is passed during labour and is
	associated with neonatal morbidity and mortality
Third degree tear	Injury to the perineum that includes the anal sphincter complex
Polyhydramnios	Excessive amniotic fluid. A complication of pregnancy often associated with
	gestational diabetes, genetic foetal abnormalities, or having a raised BMI.
Fibroid	A benign uterine tumour. Can cause bleeding in pregnancy as well as abdominal
	pain. Can cause labour complications if they cover the cervix.
Lockdown	A period of time dictated by the UK government during the COVID-19 pandemic
	when it became illegal to leave your home except for daily exercise and
	emergency situations. This was implemented to slow the spread of the virus.
Furlough	A government scheme that provided grants to employers in order to help them pay their staff through the lockdown periods, in order to reduce transmission rates of COVID-19.
Spontaneous Rupture	When the membranes around the baby break on their own without medical
of Membranes	intervention. Most of the time, active labour occurs within 24-48 hours of this event happening.
Cardiotocography	A machine that enables the continuous monitoring of the foetal heart. This is
	mostly used during labour, although this is sometimes used during pregnancy
	to monitor foetal wellbeing.
Retained placenta	A placenta that does not detach spontaneously or with the use of medication.
	This is a risk factor for haemorrhage and infection. The management of this
	complication is a manual removal of the placenta from the uterus.
Neonatal jaundice	A condition where the baby develops a yellowish hue to the skin due to the
	slow breakdown of bilirubin after birth. If untreated for a long time, this
	condition can cause a type of brain damage known as kernicterus.
Postpartum	A type of depression experienced after having a baby. A medical condition
Depression	characterised by strong persistent feelings of sadness, anxiety, lack of energy
	and in some cases, an inability to bond with the baby.

## Acronyms

The table below outlines acronyms that are used throughout the thesis.

### Table 2. Acronyms

Acronym	Phrase
BMI	Body Mass Index
CTG	Cardiotocography
GANC	Group Antenatal Care
GDM	Gestational Diabetes Mellitus
GWG	Gestational Weight Gain
HSIB	Healthcare Safety Investigation Branch
IOL	Induction of Labour
IUGR	Intra-uterine growth restriction
LMIC	Low- and Middle-Income countries
МОН	Major Obstetric Haemorrhage
МСОС	Midwifery-led Continuity of Care
NHS	National Health Service
NICE	National Institute for Clinical and Health Excellence
NICU	Neonatal Intensive Care Unit
NIHR	National Institute for Health and Care Research
NMC	Nursing and Midwifery Council
RCM	Royal College of Midwives
RCOG	Royal College of Obstetricians and Gynaecologists
PCOS	Polycystic Ovary Syndrome
PPD	Postpartum Depression
РРН	Postpartum Haemorrhage
SROM	Spontaneous Rupture of Membranes
VBAC	Vaginal birth after caesarean
WHO	World Health Organisation

### List of tables

Table 1. Key terms and their definitions

Table 2. Acronyms

Table 3. Summary of themes developed in the systematic review conducted by Smith and Lavender (2011)

Table 4. Summary of themes developed in the meta-ethnographic synthesis conducted by Jones and Jomeen's (2017)

Table 5. Summary of themes developed in Saw et at (2021) scoping review

Table 6. PEO framework

Table 7. Inclusion and exclusion criteria

Table 8. Codes, themes and indicative quotes

Table 9. Articles and themes

Table 10. Participant demographics

Table 11. Themes, subthemes and indicative quotes

Table 12. Themes, subthemes and indicative quotes

Table 13. Themes, subthemes and indicative quotes

## Key to transcription

Quotes from participants are set in size 11 font and formatted in block text away from the main body of text for readability. Text has been preserved as verbatim as much as possible. Very minor additions have been added to help the quotes make sense in their entirety.

"..." indicates a pause in the participants speech

"[text]" indicates an insertion by the researcher to help the text make sense or to protect anonymity where a participant has used potential identifying features, such as the name of the hospital or the names of their children

"(name)" indicates the participant who has been quoted

### Chapter 1 – Thesis aims and rationale, key concepts and definitions

#### 1.1 Introduction

This thesis is a critical exploration of the experiences of women with a raised body mass index (BMI) who received GANC during their pregnancy. For this thesis, the term 'women with a raised BMI' refers to women whose BMI is 30kg/m2 or above. Terminology used throughout this thesis is discussed later in this chapter. Antenatal care is provided to pregnant women by a skilled health professional to optimise health for both mother and baby during pregnancy. The components of antenatal care include risk identification, health education and promotion, and the prevention and/or management of pregnancy conditions or pre-existing health conditions (WHO, 2016). It is widely considered a key public health intervention that supports women's health during pregnancy (WHO, 2016).

In the UK, most antenatal care provision is delivered by midwives. A standard antenatal care pathway includes up to ten appointments, starting with the booking appointment, and ending with the 41-week appointment, if the woman has not yet given birth (NICE, 2021a). Two scans at 12 and 20 weeks gestation are offered in addition to the antenatal appointments. Antenatal appointments are conducted with one midwife and the appointment will contain various assessments, both clinical and non-clinical, to ascertain the wellbeing of the mother and the baby. The midwife will either be the lead professional for the pregnancy, or will be one of the practitioners in a shared-care pathway if a woman requires additional care outside of the midwife's remit, such as growth scans, or appointments with an obstetric doctor (NICE, 2021a). A recent national survey conducted by the Care Quality Commission (CQC) found that although most women report having a good experience of antenatal care, experiences of care have declined in the last 5 years (CQC, 2022). The most dramatic decline has been in the confidence and trust in how staff deliver antenatal care. While the COVID-19 pandemic has exacerbated this to some degree, there has been a steady deterioration in experiences of care since 2017.

GANC is a newer model of midwifery care whereby a group of 8-12 women of a similar gestation of pregnancy are cared for by the same two midwives throughout the antenatal period, therefore it can be considered a continuity of care model. Continuity of care describes a care model where women receive support and care from the same midwifery team throughout pregnancy. This model of care has been shown to improve clinical outcomes for women and babies, as well as improving care experiences (Sandall et al, 2016). Chapter 9 discusses continuity of care models in the context of the current maternity landscape. The group sessions replace standard antenatal appointments, and usually last around two hours, thereby increasing the overall amount of time women spend with care providers over the course of a pregnancy. The typical attributes of a usual antenatal appointment, such as clinical assessments, are supplemented with woman-led discussions, information sharing and peer support (Wiggins et al, 2020). This model of care was developed to address women's reports on poor care experiences. There is a growing body of evidence demonstrating that group care may be a suitable way of improving outcomes and satisfaction with care (Catling et al., 2015). This model of care and how it is hypothesised to improve care experiences is discussed in more detail in Chapter 2.

This thesis is a nested qualitative study within a larger randomised controlled trial that seeks to identify whether a bespoke package of GANC (called Pregnancy Circles) could be an effective and cost-effective way of providing antenatal care in the UK National Health Service (NHS). This introductory chapter provides an overview of the larger clinical trial that this study sits within and details the thesis aims, objectives and rationale. It highlights the current gaps in the literature and introduces the key concepts and theoretical frameworks, as well as the definitions and terminology used in the study. Researcher reflexivity and positionality is discussed and the chapters included in the thesis are outlined.

#### 1.2 Aims and rationale

There is an established body of literature that demonstrates that women with a raised BMI generally report a poor care experience during pregnancy, related to feeling stigmatised, experiencing gatekeeping of choices and available resources, having a poor relationship with

their healthcare providers as well as being subject to inadequate care (Jones and Jomeen, 2017; Smith and Lavender, 2011). This is discussed in more detail in the literature review in Chapter 3. In addition, this group of women are overrepresented in maternal mortality and morbidity statistics (Knight et al, 2022). As noted above, there is a growing body of research that demonstrates that group care can contribute to a positive experience of pregnancy and birth (Catling et al, 2015; Andersson, et al., 2013; Liu et al., 2017; Hunter et al., 2018a). A scoping review conducted by the World Health Organisation (WHO) identified that women desire and expect their experience of pregnancy to be positive (WHO, 2016). WHO (2016) links having a positive pregnancy experience with improving maternal outcomes by defining a positive pregnancy experience under four main parameters – maintaining both sociocultural and physical normality, sustaining a healthy pregnancy for mother and baby, having a positive labour and birth, and being well supported in their transition to motherhood. The recommendations advocate for woman-centred care, well-being of pregnant women and their families, as well as for positive perinatal outcomes. The report recognises the provision of midwifery continuity of care models, including GANC, as necessary health system interventions to impart a positive experience of care, as well as improve the quality of care provision.

Obesity is considered a growing problem for women of childbearing age. Approximately 21% of pregnant women in the UK have a BMI >30m2 (Public Health England, 2019). The most recent confidential enquiries report demonstrates that obesity in pregnancy is correlated with a higher incidence of maternal mortality (Knight et al, 2022). This report also highlights an association between women living in the most deprived areas and increased mortality rates. In addition, women from ethnic minority backgrounds are also overrepresented in the women who die (Knight et al, 2022). The report highlights a lack of co-ordinated care for these women, many of whom had additional or complex needs in pregnancy. Furthermore, most of the women who died did not attend the full schedule of antenatal care, which is a risk factor for increased maternal mortality (Knight et al, 2022).

Research on GANC is growing and demonstrating that it may have physical and social benefits for certain groups of women who either occupy marginalised identities or have characteristics that are associated with poorer maternal or neonatal outcomes. However, it is still unknown whether

GANC improves the pregnancy experience for women with a raised BMI. A distinct gap in the literature exists about the benefits (or otherwise) of GANC for women with a raised BMI. The research reported in this thesis aims to explore the potential of GANC in improving the care experiences of women with a raised BMI. It takes an intersectional approach and by doing so attempts to redress the lack of such an approach within research on obesity and pregnancy. By exploring what it means for women with a raised BMI whose reproductive experiences have been perhaps neglected by medical professionals, this thesis also investigates the role inhabited by midwives involved in providing antenatal care in a group model.

This work employs a critical feminist approach in discussing obesity and maternity care provision. This concept will be introduced later in this chapter as well as discussed more fully in Chapter 4. This includes criticality about the tools used to define risk in pregnancy, such as BMI, and how care provision is constructed around standardisation and risk status, as opposed to providing an individualised approach to care. Cultural safety has been utilised as a theoretical framework within this thesis. This concept is briefly introduced later in this chapter as well as in detail in Chapter 4. Cultural safety highlights how GANC approaches service provision in a very different way, and how the potential for compassionate, individualised care for women with a raised BMI within this model of care emerges. This has implications for challenging current working practices within the NHS as well as demonstrating that national recommendations for safety in pregnancy require a radical overhaul. A critical framework makes it possible to talk about the continuation of the authoritative practice of intervention for particular groups of women and enables a discussion about how women navigate spaces where their risk status is either embodied or challenged.

#### 1.3 Research gap

The literature reviewed for this thesis in Chapter three highlights that there is a significant body of research about the pregnancy experiences of women with a raised BMI who receive standard antenatal care. Many of the women report poor care experiences due to weight stigma, highly medicalised care, and inconsistent advice from fragmented care provision. Weight stigma has

been implicated in poorer clinical outcomes (Parker, 2017; Puhl and Heuer, 2010). Medicalised care is often fragmented as more healthcare professionals input into the antenatal care pathway, and poorly coordinated care is implicated in this process. Fragmented and uncoordinated care provision has been documented as a contributing factor in cases of maternal mortality (Knight et al, 2022). There is an urgent and ongoing need to prioritise individualised healthcare provision with a trusted practitioner in order to improve outcomes (Sandall et al, 2016). Many of the recommendations for care of women with a raised BMI indicate increased surveillant care with more interventions in the antenatal period, to ensure foetal wellbeing (NICE, 2010; Denison et al, 2018). There is little in the way of recommendation for the emotional, psychological, spiritual and mental wellbeing of the woman undergoing the pregnancy, and how best to support her beyond increased medical surveillance. Some of the core facets of GANC, such as supporting self-autonomy, peer support, and relational continuity, have been shown to improve women's experience of pregnancy, and in some cases, has been shown to improve certain clinical outcomes (Byerley and Haas, 2017). Not much is known, however, about the experiences of pregnant women with a raised BMI who may have other marginalised or intersectional identities. Furthermore, there is a paucity of studies that explore the experiences of women with a raised BMI who received GANC as part of their maternity care provision.

There are a few quantitative studies exploring the impact of GANC on gestational weight gain for women with a raised BMI (Byerley and Haas, 2017). These are discussed in detail in Chapter 2. However, there is, to our knowledge, currently no qualitative literature pertaining to women with a raised BMI and their experience of GANC. This represents a gap in the knowledge base about whether women with a raised BMI may find GANC beneficial for their experience of pregnancy. This thesis aims to address this gap with original research. In addition, ethnic minority and socially disadvantaged women are known to experience poor quality of antenatal care, and inequity of care provision is heavily implicated in adverse pregnancy outcomes (Lindquist et al., 2015; Knight et al., 2022). The intersection of obesity and other marginalised identities highlight a myriad of systemic bias that results in worse outcomes for women

(Hargrove, 2018). Moreover, women with marginalised identities are underrepresented in research (Lovell et al, 2023; Lawson and Marsh, 2017).

This study aims to explore the care experiences of women with a raised BMI who have been randomised to receive GANC during their pregnancy. As the eligible participants were recruited from the Pregnancy Circles trial, which is recruiting a diverse population from deprived and marginalised communities, a diverse sample for this study was expected. Therefore, this study will contribute much needed evidence on the experiences of women whose voices have been seldom heard within the literature. The experiences of women with a raised BMI are not being explored specifically in the Pregnancy Circles trial so this PhD thesis represents "added value" to the main trial outcomes. Some of the data (participant observations and interviews with midwives) that I collect were shared with the wider Pregnancy Circles team for work on the process evaluation of the main trial. The datasets were analysed differently by myself as my research questions and methodological approach differ from the main study.

#### 1.4 The Pregnancy Circles trial

The Pregnancy Circles trial is a randomised controlled trial (RCT) to evaluate the effectiveness and cost-effectiveness of a bespoke group-based model of antenatal care, called Pregnancy Circles, across several NHS settings across England, particularly those serving populations with higher levels of social deprivation and cultural, linguistic and ethnic diversity (Wiggins et al., 2020). The Pregnancy Circles trial is part of the larger NIHR funded REACH pregnancy programme hosted by Barts Health NHS Trust with City, University of London as the lead academic partner and UCL and Queen Mary, University of London as collaborating institutions. Within the Pregnancy Circles trial, women are randomised to either receiving standard care, as

per what is already provided in the recruiting NHS trust site, or to the intervention, Pregnancy Circles (GANC). A Pregnancy Circle is made up of between eight and twelve women who attend the session together along with the two same midwives who facilitate each session, thereby providing continuity of care. A third "buddy" midwife is recommended in order to cover periods of unforeseen absences or planned annual leave so that continuity of care across the midwifery team is maintained. Midwives facilitating the Pregnancy Circles receive bespoke training on how to facilitate GANC and are given a facilitator's manual to help them structure the sessions. The sessions are two hours long, compared to standard antenatal appointments, which can vary in length between 15-30 minutes. All routine antenatal assessments are undertaken during the group session. As well as increasing the total amount of time spent with a health professional, the groups also involve additional information giving and peer support (Wiggins et al., 2020). The first Circle session takes place around sixteen weeks gestation and the intervention follows the usual antenatal pathway of care within the UK for primiparous women (NICE, 2021A). The exception to this is the booking appointment and the potential 41-week appointment. If required, the 41-week appointment is carried out by the facilitating midwives in the Circle, but this is performed as an individual one-to-one appointment rather than as a group session (Sawtell et al, 2023). The booking appointment is carried out as per the recruiting site's usual protocol and women are recruited to the study either at this appointment, which usually happens in the first trimester or at their dating scan, colloquially known as the 12-week scan. During randomisation, women are matched in the same Circle within a month of each other's due date. Pregnant women are eligible for inclusion to the trial if they are over sixteen years old, are part of the geographical area that is covered by the team delivering the intervention, have an estimated delivery date that aligns with those of the proposed group, and do not have a documented learning disability (Wiggins et al, 2020). Women are not excluded based on their "risk status" - women who have pre-existing complexities, such as having a raised BMI, are considered eligible for participation in the study. One further eligibility criterion may be employed during the recruitment period but may not be relevant for every trust – the pilot study demonstrated that managing multiple language needs in the Pregnancy Circle was difficult for facilitators and for this reason, the facilitators can decide to limit the number of different languages spoken within a Circle where interpreter support is needed. Once recruiters have reached the maximum amount of language needs in any one Circle, any subsequent pregnant woman who meets all other inclusion criteria but requires interpreter support for a language different from those already included in a Circle would be excluded (Wiggins et al, 2020).

Typically, there are 8 antenatal sessions mapped across pregnancy as part of the intervention, and one postnatal session planned 4-6 weeks after the latest expected due date of the women who are randomised to the Circle. The four primary outcomes measured focus on a "healthy baby" composite- the incidence of term birth, incidence of healthy birth weight for gestation, no admission to a neonatal unit and incidence of live births. Secondary outcomes include but are not limited to the incidence of spontaneous vaginal birth, maternal satisfaction and psychological well-being, care provider satisfaction, as well as health economic factors (Wiggins et al., 2020). The Pregnancy Circles trial aims to recruit 2190 women and has so far involved the maternity services in 14 NHS Trusts. Recruitment and in person intervention activity was paused in March 2020 due to the COVID-19 pandemic. Recruitment and in-person intervention activities resumed in May 2022. The work undertaken for this PhD is considered a nested study within the main Pregnancy Circles trial and I have been embedded within the research team.

#### 1.5 My background and interest

I am a clinical midwife by background and have been since 2014. Prior to becoming a midwife, I had a long-standing interest in women's health, having undertaken a bachelor's degree and master's degree in Anthropology. These degrees allowed me to approach women's health with a level of criticality that continues to inform my current work and midwifery practice. In many ways, I consider my midwifery praxis as a form of applied medical anthropology.

In considering maternal fatness as it is currently situated in medical literature (in that it is significantly pathologised), within myself I feel a marked resistance to this dominant narrative. I have previously explored fatness, body image, stigma and reproductive issues through an anthropological lens and find the nature of BMI-related risk categorisation reductive and unsatisfactory for the purpose of caring for women in a holistic way. The use of 'objective' tools such as BMI within healthcare engender a narrow task focus and risk management orientation to care provision that I find often at odds with the current discourse of individualised care, discussed further in Chapter 2.

As a clinical midwife I have been privy to and most likely have enacted forms of weight discrimination against pregnant women. I mean that in the sense that I am aware of guidelines and hospital protocols that restrict the choices of women with a raised BMI, and have found it difficult to advocate for these women myself. Whilst attempting to champion their right to choices, I have experienced larger systemic coercion through multidisciplinary working. This has been mostly on consultant-led units where attempting to support choice has been met with requests to introduce intervention earlier than guidelines dictate, and certainly much before we would offer them to women with a "normal" BMI. I found that working this way over a long period of time was affecting my practice- I was becoming more institutionalised and accepting of intervention and medicalisation, unable to meet women's needs in a holistic way. In addition, I found the overwhelming acceptance and repetition of stigmatising rhetoric from other healthcare professionals about "obese" women in our care difficult to listen to.

I am a fat woman. I have always been a fat woman, having been a fat child. My weight has fluctuated over the years, and I have engaged in some form of weight management (to varying degrees of success) for most of my adult life. I have experienced weight stigma in different types of setting – both professionally and personally. For a number of years in my early adulthood, I was very much engaged in the "good fatty" narrative, where I felt compelled to be performative about my health behaviours, in order to demonstrate my commitment to the pursuit of thinness, and to a lesser degree, health. I am at a point in my life where I approach fatness with neutrality (as much as this is possible), and very much align my identity with that of fat liberation. I continue to struggle with my self-worth and sense of self with regards to my body but I suspect there are deeper layers regarding my womanhood and identity that are very pertinent to me, but perhaps less so to my positionality and interest in this work. I have found my professional identity as a midwife often transcends my fatness, where I am expected to agree and uncritically accept the dominant rhetoric about obesity.

I reflected often on the pervasiveness of the biomedical language used to describe fat women's bodies and how little space it left to understand the experience of living in such a body. I thought (and continue to think) about being an actor within an institution that ideologically exists to support and help people with their healthcare needs but realistically does not meet

people where their health is. I wondered whether women with a raised BMI thought I was kind, empathetic and whether I had advocated for them sufficiently. As a community midwife, I became even more cognisant of how early gatekeeping and expectation management happens for women with a raised BMI, and how much I was complicitly engaged in this work. I began to consider women in my care who occupied multiple characteristics, or marginalities- at the time I wasn't aware of intersectionality as a concept but had seen enough in my clinical practice to know that a lot of biomedical literature did not and could not really encompass the complexity of lived experience. As a community midwife, I became deeply unsatisfied with how I was providing care- formulaic and task-oriented care in a time-efficient manner. In this role I began to start thinking more deeply about how the current system of antenatal care provision could be improved, and this continues to inform my questioning and exploration around this topic. I wanted to conduct my own research around women's experiences of maternity care in the UK and came across an opportunity to undertake a nested PhD study within a larger RCT exploring GANC in the NHS. I was intrigued to understand whether group care could be an alternative to what was already offered in the NHS. I developed a research proposal around the experiences of women with a raised BMI who had been randomised to the intervention arm of the trial and commenced my Ph.D. in the autumn of 2018, with a scholarship from the University of East London. My primary supervisor, Professor Angela Harden, was appointed to a new role at City, University of London in July 2020 and I transferred to City with her during this time. City kindly agreed to honour my prior funding agreement with University of East London. My prior experiences and studies have led to the approach I have taken in my research topic and questions. These are outlined in more detail in the next section.

### 1.6 Key perspectives and theoretical frameworks

Below I briefly introduce the main theoretical frameworks and key concepts used throughout the thesis that frame my epistemological approach and give deeper meaning to the analysis of the data. These are described in further detail in Chapter four.

#### *1.6.1. Strong objectivity*

Throughout the thesis, I will be utilising the concept of "strong objectivity", coined by Sandra Harding (1991). Harding asserts that a researcher cannot remove their bias because their life experiences will always influence their world view and research. She argues that to strive for scientific objectivity and researcher neutrality actually produces "weak objectivity". In comparison, she argues that researcher reflexivity and how the researcher sits within their research creates a type of "stronger" objectivity that researchers who claim to be neutral in knowledge production. The concept of strong objectivity is grounded within feminist theory and is particularly well suited to explore the lived experiences of women. In particular, I felt that Harding's approach aligned with my research aims and objectives, where the lived experience of marginalised women can be amplified within another stigmatising/stigmatised identity of obesity.

#### 1.6.2 Critical Feminism

A feminist epistemology prioritises knowledge production from the perspective of women, acknowledging that situated knowledge is central in this work (Anderson, 2005; Haraway, 1988). The concept of situated knowledge acknowledges the contextual influences on actors and their positionality on the impact of knowledge production. In this way, situated knowledge can be argued to provide a rich understanding of individual experiences (Haraway, 1988). This approach has applicability in qualitative research that seeks to amplify parallel discourses that challenge dominant narratives. In this thesis, I critically assess the concept of obesity as biological fact and the implications of the knowledge production and dissemination that has arisen from this discourse. Further to this approach is a situatedness within the body, where more recent feminist work illuminates women's collusions with patriarchal rhetoric whilst simultaneously resisting them (Bordo, 1993; Orbach, 2006). I felt that this approach would be particularly useful for attempting to understand whether women's embodied experience affected their perspectives on the care they received throughout pregnancy.

#### 1.6.3. Intersectionality

Intersectionality is a theoretical framework that explores how social and political identities, such as gender, ethnicity, race, class, and sexuality, interact and reveal discrimination or privilege (Crenshaw, 1991). This multidisciplinary approach to analyse identity and oppression challenges and rejects the 'single-axis framework' that is used to understand experiences of marginalised identities (Nash, 2008). For this thesis, this approach is central to understanding the experiences of women with a raised BMI as obesity is known to intersect with other marginalised identities, such as ethnicity and socioeconomic status. In the UK, the combination of these marginalities is known to increase the risk of mortality and morbidity (Knight et al, 2022). Within the context of maternity care provision, intersectionality provides a clear framework to understand how women with a raised BMI with other marginalities experience their pregnancies. In order to improve the representation of diversity in women's experiences, it must be understood that sexism, racism and classism are interconnected. Therefore, analyses that focus on a singular axis of marginalisation arguably run the risk of having poor transferability and reliability (Rayment-Jones et al, 2019).

#### 1.6.4 Cultural safety

A novel approach in improving equitable healthcare for marginalised communities has been the development of a concept of cultural safety (Curtis et al., 2019; Wong, Gishen & Lokugamage, 2021). There are various definitions and understandings of cultural safety and how best to achieve this within an institution. This thesis uses the definition developed by Curtis and colleagues (2019) as a framework in this thesis. Following this definition, I understand cultural safety as a critical consciousness of healthcare professionals and organisations where their biases, attitudes and assumptions that may affect the quality of care provided is acknowledged and addressed. These actors and institutions must be actively engaged in the processes of reflexivity and accountability for providing culturally safe care, as defined by the service users and their communities (Curtis et al., 2019). There are facets of GANC that align with the core tenets of cultural safety, such as improving self-autonomy, redressing didactic information-giving

with more facilitative midwifery practice as well as women-led discussions. Using cultural safety as a theoretical framework might have relevance for understanding the significance and power of group care for women with a raised BMI. This approach may also help healthcare providers and educators to envision and embed forms of knowledge that centre patient experience to improve outcomes and safety.

### 1.7 Research questions and objectives

The main research questions that this thesis attempts to answer are as follows:

- How do women with a raised BMI experience group antenatal care?
- How do intersecting identities have an impact on the way that women interact and make use of group antenatal care?
- What are midwives' experiences of group antenatal care facilitation for women with a raised BMI?

The research objectives for this thesis are as follows:

- Conduct a systematic literature review on women with a raised BMI and their experiences of standard antenatal care
- Observe Pregnancy Circles sessions in order to understand the group dynamics between the women and the midwives
- Conduct interviews with midwives who facilitated Pregnancy Circles in order to gain understanding of their experiences of caring for women with a raised BMI under this model of care
- Conduct interviews with women who were recruited to the intervention arm of the Pregnancy Circles trial in order to gain understanding of their experiences of the model of care
- Analyse the data and interpret the findings using a critical feminist approach, utilising an intersectional lens and a cultural safety framework

#### 1.8 Research approach

In my research I used a multi-method qualitative approach encompassing an in-depth interpretive analysis. Careful consideration of the research methods was undertaken before adopting a particular methodology. Initially there was a discussion about whether a mixed methods approach would be appropriate, whereby I would collect outcome data from the Pregnancy Circles trial as a complementary dataset addressing interrelated questions regarding women's experiences. Some of the research design was adapted in response to the COVID-19 pandemic. These changes have been outlined in the COVID impact statement. The main purpose of the study was to understand women's experiences of group antenatal care; therefore, it was necessary to adopt a methodological approach that would allow a deep understanding of their experiences. In addition, my research questions also sought to understand the experiences of midwives facilitating GANC to a specific group of women. The wider literature indicated that a qualitative approach would be best to answer my research questions, as this is more suited to exploring beliefs, experiences and perceptions.

Data were collected in three ways – participant observations, narrative interviews with women and semi-structured interviews with midwives. Observations of the group sessions enabled me to understand how the group sessions were conducted, what conversations took place over the course of each of the sessions, how midwives worked together in a different model of care, and how women and midwives interacted in group settings. The narrative interview structure allowed women to speak openly and deeply about their experiences of group care as well as other aspects of their pregnancy journey. A narrative approach helped to facilitate effective engagement with the participants regarding their pregnancy experiences. Semi-structured interviews with midwives were also conducted in order to understand the experiences of facilitating GANC for this group of women, as well as glean information about midwives views on including women with additional care needs, and any potential benefits or challenges of working in a novel way for this group of women. Interviews with midwives were not part of the original research design but rather a response to the limitations on my research design imposed by the COVID-19 pandemic. As it was no longer feasible to conduct longitudinal narrative interviews, there was a concern that the a richness of data would be lost. The decision to include interviews

with facilitating midwives was taken in order to contextualise the narrative interviews, with the hope that the juxtaposition of their experiences of facilitation would elicit a deeper analytical process that answered the research questions fully. The interviews with women are the largest data set, as the intention was to put the primary focus on their experiences with the other datasets providing complementary data to enrich the findings.

Thematic analysis is a commonly used framework within qualitative research, which enables the identification, analysis and reporting of themes within data. Braun and Clarke's (2006) comprehensive framework for thematic analysis is used for organising themes and making the data meaningful. Additionally, in the tradition of Riessman (2008), a narrative analysis has been overlaid in order to amplify the themes and create vignettes within each of the findings chapters. This adds a richer layer of description and contextualises the women's stories and their experiences further within the themes explored. In practicality, this means that the experiences of one or two women have been highlighted for each chapter, with examples from other women and midwives as supporting statements within each theme. This approach also considers Harding's (1991) position on situated knowledge, in that I have sought to amplify marginalised voices and recognise that their positionality offers a unique perspective on the experiences of women who have received GANC.

#### 1.9 Language, Terminologies and their implications

This section outlines and connects my positionality and perspective as a researcher with some of the language and terminology used throughout the thesis.

#### 1.9.1 Fat

Following the tradition of fat liberation scholarship, I reclaim the term "fat" as a neutral descriptor and therefore the use of this word throughout the thesis is within this particular context. Fat or fatness will not be used as an equivalent to obesity or BMI, but rather as a descriptor of bodily variation. However, being aware that prevailing weight stigma around that word is extremely prevalent and women may still be sensitive about the use of those words, I

avoided using them during the interviews so as not to disrupt the flow of the interview, or potentially risk ruining the rapport building during the interview. Some women did use these words in reference to themselves or others, and it was used almost exclusively in a negative way, reinforcing that fat/ness continues to be stigmatised and stigmatising. Bordo's (1993) work on how patriarchal structures are simultaneously resisted and re-enacted by women remains relevant to this particular observation in this thesis.

#### 1.9.2 Obesity

Throughout this body of work, I follow the footsteps of critical fat scholars whereby the term "obesity" is approached critically, and an awareness of the stigma attached to the word is evident throughout. However, "obesity" is used throughout in the background chapters in a wider discussion of the medicalisation of fatness, and this term is normalised in biomedical literature, and used regularly in national guidelines that healthcare professionals and NHS trusts use. Within this thesis, I use the term "obesity" when discussing biomedical literature. This means that going forth, the use of speech marks around the term is not used throughout.

The wider literature corpus indicates that women express an aversion to the term obesity because of its association with ill health, preferring to construct their identities to align with more socially acceptable embodiments (Ellis et al, 2014; Warin et al, 2008). This was reflected in my interviews with both women and midwives. The non-usage of the word "obese" by participants is explored in the main body of the thesis.

Given my situated context as a fat woman, I was aware that using this term uncritically risks marginalising the lived and embodied experience of women, by prioritising the dominant knowledge base around the intersection of identity and health. I was also aware that the use of this term might reduce participation through recruitment. Aware of the stigma associated with the word, I made a conscious decision to never use the word "obesity" with the participants to avoid any potential emotional trauma or embarrassment. This was particularly important as I wanted to ensure that I could build rapport with the participants, as per narrative interview tradition.

#### 1.9.3 BMI

Body Mass Index (BMI) is a mathematical ratio that measures the relationship between weight and height (weight in kilograms divided by height in metres squared). This is often applied by healthcare professionals as a quick, cheap and accessible tool to determine an approximate amount of body fat carried by an individual. Having a BMI > 30m2 is defined as obesity (WHO, 2020). Excessive body fat is recognised to have a negative impact on individual health. This tool is used widely throughout the NHS, usually as the only way of "diagnosing" obesity. This is somewhat complicated in pregnancy as weight gain is almost certainly inevitable, but there are not specific pregnancy-related ranges for BMI.

Throughout this thesis I refer to my participants and to this group of women in general as "women with a raised BMI". For the purpose of this thesis, the term "women with a raised BMI" will refer to women whose BMI at their booking appointment was ≥30kg/m<sup>2</sup>. I recognise that the term "raised BMI" perhaps could be perceived as problematic because the phrase assumes there is an average or norm from which you can be raised, thereby giving legitimacy to the tool used, and the implications or assumptions of health and health behaviours arising from having a raised BMI. However, it is used routinely in maternity care in the UK as a way of defining risk status and organising care provision throughout pregnancy and beyond. Therefore, women with a raised BMI have been and continue to be discretely categorised together as a distinct group of women, whereby obesity is considered a factor that poses a risk to their health and the health of their babies. Indeed, a national audit (MBRRACE) on maternal mortality and morbidity collects data on this group of women and reports on it annually.

Different grades of obesity are stratified according to BMI and as part of my research approach, I considered whether there was relevance in specifying the categorisation of obesity for these women's experiences within the development of themes and findings. I have included it in the demographic details in the methodology chapter, but throughout the analysis process, I could not find a way to make the categorisation meaningful in the wider context of the women's experiences. The women I interviewed had their care across six different Trusts, therefore there

was no standardisation of care according to the BMI status that I could discern. For example, there were some women with a BMI of 30 at booking who were referred to a consultant because of their BMI, but others were just referred for additional blood tests and remained solely under midwifery care. Some women with a higher BMI (35 or above) ended up becoming consultant-led during the course of their pregnancies, but this was because they developed other pregnancy conditions such as gestational diabetes. Some women who were not first-time mothers but had a raised BMI were not referred to a consultant at all. I felt any credence given to the stratification of obesity would potentially pull focus away from their experiences of GANC. For this reason, the stratification of obesity has been excluded from the analysis.

#### 1.9.4 High-risk

This term has been included here as a term both women and midwives used when discussing raised BMI. This is explored more within the main body of the thesis.

Women undergo a number of risk assessments in pregnancy, indeed it is considered a cornerstone of good and safe antenatal care (WHO, 2016). The Healthcare Safety Investigation Branch (HSIB), a professional body within the UK government's Department of Health and Social Care, note that risk assessment should be considered a dynamic process whereby a woman's risk profile may change over the course of the pregnancy (HSIB, 2023). HSIB (2023) recognise no singular definition of a "high-risk" pregnancy, or indeed a "low-risk" pregnancy. NICE (2021) in the UK defines a "high-risk" pregnancy as when the likelihood of an adverse maternal or neonatal outcome is more than that of the normal population. However, much of NICE guidance avoids using "high risk" as a term to define women or their pregnancies. Instead, there is a more nuanced approach acknowledging that complexity requires individualisation, and this is reflected in the recommendations for maternity care provision.

Risk management is considered a pillar of antenatal care, whereby early identification and appropriate referral by midwives to other healthcare professionals is considered necessary to optimise the health of the pregnancy. The categorisation of risk is formally embedded within maternity care provision, and this is reflected in the maternity tariff (funding to service per

patient), where "risk" is coded by the intensity of care provided, based on clinical and social characteristics, and previous pregnancies, where applicable (NHS England, 2020). For women with a raised BMI, their pregnancies are considered 'complicated by obesity', and national guidance recommends a shared care pathway whereby obstetricians, and possibly other healthcare professionals, can also input into their care (NICE, 2010; RCOG, 2018). By virtue of having multiple healthcare professionals' input into the pathway, therefore requiring additional appointments, and recommendations for intensive surveillance of the pregnancy through additional scans and tests, it may be that some of these pregnancies become medicalised. However, the medicalisation of pregnancy is often considered to contribute to a poor experience by women with a raised BMI (Lindhardt et al, 2013; Jarvie, 2017).

#### 1.9.5 Acronyms and medical language

Medical language and acronyms for medical terms are used throughout the thesis, and are prevalent in my field notes from the participant observations that were conducted. This reflects my background as a clinical midwife, where such terms make up the daily vernacular in my professional life. A glossary of terms and acronyms has been included at the beginning of the thesis for readability.

#### 1.10 Thesis structure

Including this first introductory chapter, this thesis contains nine chapters. The second chapter situates the problem of obesity within the broader scope of public health as well as more specifically the maternity landscape in the UK. This chapter also contains a critical discussion about the legitimacy of biomedical knowledge, the tools used to uphold such knowledge, and the implications for pregnancy and childbirth. This chapter also explores the role of public health, and in particular, antenatal care provision as it currently exists in the UK, as well as national recommendations around increasing the provision of continuity of care as well as individualised care in order to reduce health inequalities. This chapter highlights the dominant biomedical discourse that determines the content and recommendations of antenatal care policies in the UK

and considers whether the intense preoccupation with risk management should be prioritised over women's experiences of pregnancy. GANC is introduced in this chapter, and the literature around the observed and potential benefits of this model of care are discussed further. Whilst there is a growing body of evidence of the effectiveness of GANC, including studies specifically focused on women with a raised BMI, there is a lack of qualitative research on the experiences of this model of care for this particular group of women.

The third chapter systematically reviews the existing literature around the experiences of antenatal care by women who have a raised BMI, utilising an intersectional lens to critically approach the existing body of literature. The literature review critically analyses the effects of medicalised antenatal care provision on the overall experiences of women with a raised BMI, and considers whether the current care provision addresses the holistic needs of women with a raised BMI. The findings of the literature review highlight how GANC might improve the care experiences of women with a raised BMI.

Chapter four outlines and describes the methodological approach taken in conducting the research and considers my own situatedness within the research. The theoretical frameworks being used are discussed in more detail and the chapter also describes the qualitative research methods used. The sampling and recruitment approaches are discussed in detail, as well as my analytical approach and a small introduction to the structure of the subsequent findings chapters. In addition, participant biographies are included in this chapter, as a way of introducing and contextualising the participants and their stories in the following findings chapters.

Chapters five, six and seven present and discuss the findings of the research. With respect to the narrative tradition, the findings chapters each relate to a specific timepoint in matrescence, in a chronological order; chapter five relates the findings to pregnancy, chapter six focuses on labour and childbirth, and chapter seven explores the findings in relation to the postpartum period. In each of the findings chapters, cultural safety has been adopted as a theoretical framework in which to understand and explore the potential impact of Pregnancy Circles on women's experiences of pregnancy, birth and motherhood. However, a critical intersectional feminist lens has been adopted throughout the thesis and is evident throughout- in the consideration of the

background literature, the data collection and in the analysis of the data presented. Each of the findings chapters are centred around one meta-theme with correlating and interrelated themes.

Chapter five discusses themes related to the meta-theme, 'Pregnancy Circles as a site of tension'. This chapter explores women's experiences of GANC particularly in relation to other women and their interactions with their primary healthcare professional, the midwives facilitating the Circles. The key themes identified explore the impact of weight stigma, both real and anticipated, as well as examine the normalisation of pregnancy. This chapter also explores midwives experience of facilitation through consideration of clinical responsibility and the risk management paradigm of care provision.

Chapter six discusses themes related to the meta-theme, 'The hospital as a site of danger'. This chapter explores how women's expectations and experiences of labour and birth were shaped by their experience of group care. In addition, it considers the impact of the COVID-19 pandemic on these women's labour and birth experiences. The key themes identified explore expectations of care provision and how this varied across different clinical encounters, the prioritisation of interventionist care during labour and birth and traumatic birth experiences.

Chapter seven discusses themes related to the meta-theme, 'Good motherhood in a pandemic'. This chapter explores the interaction between the potential impact of Pregnancy Circles on women's perceptions of a 'good mother' identity in relation to the COVID-19 pandemic. The chapter details experiences of isolation especially as it related to the lockdown periods, seeking support from the Pregnancy Circles and elsewhere, and motherhood identity in relation to infant feeding, body image and postpartum bodies.

Chapter eight discusses the findings chapters in turn and in relation to the wider literature. This thesis references and extends the cultural safety framework in the context of GANC. Strengths and limitations of this study, and final reflections are also discussed in this chapter.

Chapter nine discusses conclusions from the research and situates the research within the wider existing literature. Recommendations for education, practice and research are also discussed in this chapter.

# 1.11 Chapter summary

This chapter has introduced the thesis aims and rationale, briefly described the key concepts and theories used and identified the gap in the literature that this thesis aims to contribute to. It has also outlined my own positionality in relation to the topic of interest (women with a raised BMI and their experience of antenatal care). The next chapter will now turn to discussing the wider literature on obesity, weight management and antenatal care.

# Chapter 2 - Contextualising obesity in the maternity landscape

#### 2.1 Introduction

Obesity in pregnancy is associated with adverse outcomes for mothers and babies, and as such, women with a BMI of over 30 are considered women with additional and complex needs in pregnancy. Much of the existing health literature prioritises the medical safety of such pregnancies which has led to the adoption of a national interventionist agenda to the exclusion of other considerations that may improve the pregnancy experience or outcomes for women with a raised BMI. To understand how best to support women with a raised BMI during their pregnancy journey, we first need to consider how a sociocultural understanding of fatness influences medical perspectives at the intersection of obesity and health, both at individual and population level.

This chapter will discuss how obesity has been problematised in a global context and will then look more closely at how obesity is conceptualised within an English societal context as well as through maternity policy. I will discuss why BMI as a measurement tool for individual health is problematic and why I am still using it for my research. It will move on to obesity in pregnancy, exploring the concept of risk categorization and its implications for women with a raised BMI and their experience of pregnancy. I will discuss how situating obesity as a solvable public health challenge that requires individual behaviour change has been demonstrated to not be effective for various reasons and renders the lived experiences of women with raised BMI invisible. This can be particularly problematic for women of colour and other marginalized identities who experience worse outcomes for themselves and their babies because they experience layers of stigma due to their intersecting identities (Jarvie, 2017). This will be explored further in later chapters. The interconnected nature of obesity with other marginalised identities requires examination with diverse and critical frameworks, such as intersectionality, in literature concerning obesity. How this might change healthcare practice, particularly within maternity care in discussed further in this chapter.

The chapter will then go on to address antenatal care as a globally accepted public health initiative proven to benefit women's health, and then explore English policy that mandates antenatal care provision, including various models of care that are currently offered within England. It will also explore the recommendations of the national maternity policy agendas "Better Births" and the 3-year delivery plan, discussing the expansion of continuity of care and personalised care as recognised national priorities to reduce health inequalities. It will also discuss GANC as a relatively unknown phenomenon in the UK and the possibilities of its benefits for women with a raised BMI.

## 2.2 Obesity in a global context

The World Health Organisation defines obesity as an "abnormal or excessive fat accumulation that presents a risk to health" (WHO, 2016). Obesity is predominantly diagnosed through a measurement known as body mass index (BMI). This is calculated by dividing an individual's weight in kilograms by the square of their height in metres (kg/m2) (WHO, 2020). Obesity is defined as having a BMI equal or greater than 30kg/m2. The number of adults living with obesity in the world has risen from two hundred million in 1995 to over six hundred and fifty million in 2016 (WHO, 2020). The prevalence of infant and childhood obesity is also increasing, and some predictions based on current trends suggest that by 2025, seventy million infants and children in the world will be overweight or obese (Wen et al., 2017). WHO (2020) estimate that 2.8 million people die each year as a result of overweight or obesity.

It is important to distinguish between obesity as a condition that can have health consequences, both on the individual and population level, and as a socially constructed view wherein obesity is coded as stigmatised and socially undesirable, standing in opposition to the healthy idealthinness (Gutin, 2018). Authors have pointed to the arbitrary cut-off points with BMI scales for identifying health risks and that it lacks cultural generalisability (Burkhauser and Cawley, 2008). The widespread use of BMI perhaps reflects its "gold standard" status as an empirical health measurement, giving weight to support its use in analytic models and provide confidence in the results (Timmermans and Berg, 2003). However, the concretism of BMI as objective and quantifiable reveals how statistical evidence in measuring and defining health has been prioritised over other forms of health knowledge (Gutin, 2018). This praxis is particularly prevalent in maternity care provision and continues to dominate interactions between healthcare providers and women wherein BMI alone can change the trajectory of how pregnancy is managed, the interventions offered, and the limitations in choices women face (NICE, 2021A). There has been a call to cease using BMI as a measure of individual health, as its use in healthcare settings is contributing to a lack of nuance regarding patient-centred care, where health concerns are automatically diagnosed as related to weight and/or obesity and are then subsequently not properly investigated (Women and Equalities Committee, 2021).

### 2.3 Obesity in England

In the UK, the prevalence of obesity has been steadily rising since the early 1990s (Agha and Agha, 2017). There is a large body of biomedical literature that associates obesity with increased risks of developing certain health conditions such as type two diabetes, hypertension, cardiovascular disease, certain cancers and premature death (Ramachenderan et al., 2008; NICE, 2010; Denison *et al.*, 2018). There is a relationship between those living in the most deprived neighbourhoods and the incidence of obesity. In England, the prevalence of obesity in the most deprived areas is 36%, compared to those living in affluent areas where the prevalence of obesity is 20% (Lifestyles Team NHS Digital, 2019).

Concern has been levied over childhood obesity rates in the UK, where nearly a third of children between the ages of two and fifteen are overweight or obese. From the poorest income groups, children aged five are twice as likely to be obese than their counterparts from higher income areas (Goisis et al., 2016). Women bear the brunt of public concern on childhood obesity, and ultimately the future health of society, as obesity in pregnancy is considered a contributing factor to childhood obesity (Lau et al., 2011). In addition, women are considered primarily responsible for early infant nutrition (Murphy, 1998). Authors have noted that mothers with a raised BMI are positioned as "risky" to their foetus/infant in the wider literature and this translates to wider government policy (Keenan and Stapleton, 2010). It has even been suggested

that women with a raised BMI can alter the intrauterine environment and potentially "programme" the foetus to develop diabetes and obesity later in life (Lau et al., 2011). The concern about obesity in the general population is also reflected in the pregnant population. This is discussed further below.

#### 2.4 Obesity in pregnancy

In the UK, obesity in pregnancy has doubled to almost 20% in the last thirty years (Denison et al., 2018). It is projected that by 2050, 50% of the female population in England will be obese (McPherson et al., 2007). Invariably, this raises further concerns about safeguarding the health of women and children during pregnancy. In the triennial national report on maternal deaths in the UK, obesity has been repeatedly and consistently identified as a risk factor for mortality in pregnancy, birth and postpartum (Knight et al, 2020; Knight et al, 2021; Knight et al, 2022). Within the NHS, BMI is the quickest and often only measurement used by healthcare professionals to identify individuals with obesity, and this practice continues in pregnancy. This is particularly significant for maternity care provision as antenatal care pathways are determined by risk factors, of which obesity is included (Denison et al., 2018). Within biomedical literature, obesity is widely accepted as increasing the risk of certain adverse outcomes for mothers and babies. Therefore, women with a raised BMI at their booking appointments are often categorised as having a risk factor requiring further surveillance and this may change the management of their pregnancy (Hunter et al., 2015; Denison et al., 2018). There are specific guidelines mandating recommended care for women with a raised BMI by both the National Institute for Clinical and Health Excellence (NICE) and the Royal College of Obstetricians and Gynaecologists (RCOG). This indicates that from a healthcare provision point of view, these women are considered a discrete group requiring additional care throughout pregnancy, labour and the postpartum period to reduce the risk of poor outcomes for both themselves and for their babies (NICE, 2010; Denison et al, 2018). In practice, this means women identified with a BMI of 30kg/m2 or above should be offered additional interventions in order to identify potential emerging pregnancy conditions, such as gestational diabetes or pre-eclampsia, and

ascertain foetal wellbeing, such as extra ultrasound scans, more frequent blood pressure monitoring, and glucose tolerance tests (Denison et al., 2018). However, the RCOG guidelines note that women with a raised BMI should be "integrated into all antenatal clinics", indicating that BMI alone is not a reason for consultant-led care (Denison et al, 2018).

Obesity in pregnancy has been associated with many adverse outcomes for both mothers and babies, including but not limited to postpartum haemorrhage, gestational diabetes, increased incidence of instrumental births, intra-uterine growth restriction, admission to NICU, and macrosomic babies (Heslehurst et al., 2008; Denison et al., 2018). However, these adverse outcomes are not exclusive to women with a BMI >30 and there is no consensus in the biomedical literature as to how much of an increased risk each complication poses or how confounding variables might affect risk status (Keenan and Stapleton, 2010).

# 2.5. Health behaviour interventions in pregnancy

The increasing rates of obesity in maternity care and its association with maternal mortality has prompted national recommendations for the development of health interventions to improve pregnancy outcomes for obese women (NICE, 2010; Thangaratinam et al., 2012). Professional bodies such as NICE and the RCOG acknowledge that pregnancy is an inappropriate time to lose weight, and that appropriate weight management is poorly understood and requires further research (NICE, 2010; Denison et al., 2018). However, the obesity management literature is vast and mostly dominated by intervention studies which are primarily centred around preventing "excessive" gestational weight gain. The parameters for "excessive" gestational weight gain have been exclusively defined by one large observational study carried out by the Institute of Medicine (2009) in the United States. The study demonstrated that stratified weight gain mapped to the standard BMI ranges resulted in better maternal and foetal outcomes (IOM, 2009). The study recommends that women with a BMI >30kg/m2 should only gain between 5 and 9kg of gestational weight in order to achieve these outcomes. There have been attempts to replicate the findings from the IOM cohort study, which have found that the evidence is stronger for certain outcomes, such as a reduction in caesarean section, when the IOM recommendations

have been adhered to (Rogozinska et al, 2019). However, researchers have noted that pregnant women rarely meet the IOM recommendations for gestational weight gain, especially women who begin pregnancy overweight or obese (Rogozinska et al, 2019; Goldstein et al, 2017). This may indicate that the IOM recommendations for gestational weight gain are unrealistic targets for optimising health in pregnancy. It is important to note that NICE (2010) does not endorse the IOM recommendations as the evidence base (retrospective population-based cohorts) was not considered robust enough to guide clinical practice in the UK. In the UK there are currently no formal evidence-based national guidelines that healthcare professionals can consult to advise women about what constitutes appropriate weight gain in pregnancy (NICE, 2010; Denison et al., 2018). Indeed, national guidelines recommend that women are supported to access trusted sources of information regarding diet and exercise rather than focus on weight management (NICE, 2010; Denison et al., 2018).

Lifestyle interventions during pregnancy have been recommended both nationally and internationally to reduce obesity in early childhood (WHO, 2020). This has led to efforts to frame pregnancy as a "teachable moment" for women to engage in healthy behaviours to improve outcomes for babies (Phelan, 2010). In the context of pregnancy, it is more than convenient to consider pregnancy as a teachable moment when considering the transition into motherhood where pregnancy behaviours (or lack thereof) are often seen as responsible for how women are conceptualised as "good" or "bad" mothers. Whether pregnancy can be considered a teachable moment relies on whether women understand, accept or resist their own risk categorisation during pregnancy, as well as their ability to access opportunities or motivations to change their behaviour (Rockliffe et al, 2021). This is particularly pertinent for pregnant women with a raised BMI who are subject to health advice that often focuses on managing their weight through diet and exercise (NICE, 2021A). What is evident is that the experiences of maternity care are being shaped by the prevalence and language of biomedical literature (Unnithan-Kumar, 2011). The singular consideration of obesity as a medical condition that requires rectification burdens not only women to understand their bodies as pathological that require correction, but also puts health professionals at risk of missing the holistic element of caregiving that invariably improves outcomes and experiences for their patients. Furthermore, the advocacy of obesity elimination

by means of weight loss intervention programmes without consideration of mental health, access to appropriate resources, local availability as well as personal barriers to health raises the possibility that well intentioned health promotion interventions can worsen health inequalities.

Yet, as noted above, the obesity management literature is dominated by intervention studies which are primarily centred around preventing excessive weight gain, mainly through restricted or controlled dietary intake and increased physical exercise (Thangaratinam et al., 2012). Two systematic reviews have been carried out examining the efficacy of dietary or lifestyle interventions aimed at pregnant women, and both have demonstrated there were no significant differences in outcomes between women who received dietary and lifestyle interventions and those who did not (Dodd et al., 2010; Oteng-Ntim et al., 2012). These systematic reviews demonstrate that behavioural change interventions aimed at pregnant women have limited practical application yet large randomised controlled trials focussed on these kinds of interventions continue to be commissioned and continually fail to demonstrate significant effective weight loss with improved health outcomes for mothers and babies (see Markovic *et al.*, 2015; Poston *et al.*, 2015; Olson *et al.*, 2018; Al Wattar et al., 2019).

Olander et al. (2015) sought to understand whether interventions to limit excessive weight gain in pregnancy utilised aspects of person-centred care and if so, whether they were effective. Person-centred care is associated with higher care satisfaction but whether it is useful to support women with obesity during pregnancy has not been established. Their systematic review found that although some aspects of person-centred care were employed by interventions to limit weight gain, none of the studies explicitly mention incorporating those tenets in their research design. Person-centred care aspects had to be inferred from the descriptions of the interventions by the review authors. They suggest that tailored health behaviour interventions may be more effective in changing behaviour and that further research is required to explore whether incorporating a person-centred care approach in maternity services and maternal health interventions improve outcomes (Olander et al., 2015). This review also highlights a criticism relevant to maternal obesity health interventions- namely that a person-centred approach is feasible and aligns with national and international guidelines that place the woman at the centre of her care (Olander et al., 2015).

Individually focused obesity management programmes whereby the primary aim is the reduction of obesity, often do not consider the social, emotional and economic barriers that contribute to the development of lifestyle related disease (Penney and Kirk, 2015). However, it is not known whether a person-centred approach will change how gestational weight intervention trials are designed in the future. Currently, obesity/weight management interventions and prevention programmes in pregnancy consistently fail to demonstrate effectiveness, thereby making it impossible for stakeholders and healthcare providers to economically justify local initiatives undertaken by NHS trusts (Padmanabhan et al., 2015). In practical terms, within the NHS, the lack of evidence on the effectiveness of prevention programmes represents missed opportunities to localise services that enable women with a raised BMI to experience equitable outcomes for themselves and their babies. This lack of consensus on obesity management and risk categorisation in pregnancy highlights broader issues around the dominant narrative of obesity and its practical application in healthcare services (Warin et al., 2008). I will explore this in the next section.

# 2.6 Beyond the dominant narrative of obesity

Due to the increasing prioritisation of obesity as an issue within public health policy, it is vital to understand competing obesity narratives (Saguy and Riley, 2005). Much of the dominant rhetoric surrounding obesity frames it as a global epidemic. Indeed, WHO (2020) ascertains that controlling the "globesity" epidemic is a vital part of their activities. Situating obesity as a solvable public health concern and an economic burden elevates concern and moral panic about individual health. It also exacerbates pre-existing cultural fears about fat bodies (Warin and Gunson, 2013; Parker, 2014; Unnithan-Kumar and Tremayne, 2011). Situating obesity within a risky behaviour framework emphasises an ideology that weight status should be controlled, and implies that those who live in larger bodies simply make poor choices about their health (Saguy and Riley, 2005). Framing obesity as a preventable or treatable illness suggests that obese individuals not actively engaged in weight loss are less deserving of tolerance and acceptance (Saguy and Riley, 2005). A public narrative that constructs fat people as failed citizens who are

lazy and simply neglect to take care of themselves emerges (Warin and Gunson, 2013). The visibility of fatness allows it to be a symbol of immorality, thereby legitimising the discrimination of fat people, who are constructed as failing to be responsible consumers (Gillborn et al, 2022). Moreso when we consider that such discourse is sanctioned within government policy (Gillborn et al, 2020). As researchers have noted, it is usually working-class and ethnic minority populations who are situated as 'disproportionately' obese as compared to other communities and therefore remain a threat to the nation's health (Herndon, 2005; Gillborn et al, 2022). This is particularly poignant given that the UK population health is subject to extreme inequality and deprivation and this disparity is also reflected in the pregnant population (Marmot et al, 2010; Knight et al, 2022). However, there is a growing critical body of work that resists the reflexive connection between poor health and fatness which may contribute to reconceptualising how health is approached and provisioned (Bordo, 2003; Gard and Wright, 2005).

Critical fat scholars maintain that medical institutions and funding bodies are embedded and invested in the generation of authoritative knowledge of "objective science", and it is this powerful medical gaze that fat people are subject to, both from a clinical and moral perspective (Warin and Gunson, 2013). While research and knowledge about obesity has been challenged, the dominant discourse about obesity as an inherent danger to human health has become established as a "regime of truth" (Foucault, 1988). The expectation that comes with that is healthcare professionals, medical literature and to a larger extent, society iterates this as a normative ideal that requires conformity in both social and cultural reproduction (Gillborn et al, 2022). Jordan (1997) argues that the creation and maintenance of authoritative knowledge is an ongoing social process that builds and reflects power relationships within a community of practice. She posits that the power of authoritative knowledge is not that it is objectively correct but that it is considered the most legitimate way of knowing within a hierarchy of information. Within the context of pregnancy and maternity services, this is particularly concerning because the pregnant woman and their innate, bodily and experiential knowledge is usually positioned at the bottom of this structured hierarchy (Jordan, 1997). Unnithan-Kumar (2011) suggests that in the context of maternal obesity, the challenge for public health remains concerned with how to address a population that does not identify with being a problem that requires a solution.

However, this point of view continues to position obesity as one of an individual crisis and as previously mentioned, interventions tend to individualise the "problem" of obesity rather than using a wider societal approach, which may help to mitigate the social determinants of health.

Whilst "obesity as danger" persists as a dominant discourse, there are some welcome shifts in this dominant narrative, in two contrasting ways. The first of these two lies in the body of work that contests the utility of using weight alone as a measure of health (Bacon & Aphramor, 2011; Flegal et al, 2005). The first argues that while obesity is recognised to be associated with morbidity such as cardiovascular disease, diabetes and cancer, there is a large variation of individual risk that cannot be explained simply by body mass alone (Bluher, 2020; Flegal et al, 2005). It can be argued that BMI is a technique of normalisation, wherein fat bodies fall outside of the range of normality, thus are constructed as deviant. Furthermore, there are widely acknowledged problems in solely using BMI to ascertain health risks associated with excess adipose tissue as the BMI measurement does not distinguish fat from other body mass such as bone and muscle. Furthermore, normal glucose and lipid metabolism levels with the absence of hypertension (high blood pressure) demonstrates what Bluher describes as "metabolically healthy obesity". In these circumstances, individuals would not see health benefits from attempting to lose weight. This challenges the most accepted and normalised notion of what constitutes the primary pursuit of health within medical literature for people living with obesityfirst, that weight loss is a pragmatic goal that will prolong life, and second, it is the primary way to improve health (Penney and Kirk, 2015). Flegal's (2005) study demonstrated that overweight was associated with a lower mortality than normal weight. This study was publicly and heavily criticised for its findings despite only using data sourced from the CDC. The vitriol from the scientific community at the time about the divergent findings demonstrates a particular narrative about obesity as a "regime of truth". She would later publish a systematic review and meta-analysis exploring the association of obesity with mortality rates (Flegal et al, 2013). Drawing on 97 studies and a sample of 2.88 million people, the review reflects similar findings from the 2005 study, where overweight people had a lower mortality rate compared to people of normal weight.

Gibbins et al. (2023) argue that while there are many associations between having a raised BMI and poor perinatal outcomes such as gestational diabetes, caesarean birth and macrosomic babies, there are limitations to these associations. They contend that BMI is a poor predictor of pregnancy outcomes, citing that odd ratios and risk ratios between BMI and adverse pregnancy outcomes are usually too small to achieve moderate discrimination between BMI ranges. This highlights an issue around much of the research around the risks of obesity in pregnancy – namely that much of the recommendations around the use of BMI in pregnancy, and the associated risks related to it, are based on observational studies that have not accounted for confounding variables or causal inference analysis (Gibbins et al., 2023). The authors argue that many women with a raised BMI will simply have normal, healthy pregnancies but that this is often not conveyed well to women, thereby unnecessarily heightening anxieties about weight in pregnancy.

One study has demonstrated that out of individuals categorised as "obese", over a third of them were metabolically healthy. Conversely, out of the individuals categorised as "normal weight", almost a quarter displayed features of abnormal metabolic function and a higher risk of cardiovascular dysfunction (Wildman et al., 2008). This indicates that while there might be some correlation between weight and metabolic health, the variations in the risks for metabolic and cardiovascular disease demonstrate that the health risks associated with obesity are not uniform. Furthermore, this demonstrates that it is necessary to personalise healthcare provision to ensure the best outcomes for individuals (Wildman et al., 2008; Bluher, 2020). This aligns with current national guidance and recommendations for maternity care that calls for individualised care, especially when women have risk factors that may complicate pregnancy (Knight et al, 2022; NICE, 2021A). This might be of particular benefit for pregnant women with a raised BMI, whose weight automatically mandates more intervention than the standard maternity provision. However, the personalised care approach still situates obesity as a public health concern that requires rectification (Parker, 2014).

Some authors argue that in understanding obesity, embedded power relations must be examined and deconstructed in order to empower those who have been marginalised by their pathologized and medicalised bodies (Warin and Gunson, 2013; Parker, 2014). The public health

focus on obesity culminates in a praxis within healthcare systems that unconsciously enacts a pervasive Westernised social and cultural understanding of health (Parker, 2014; Gard and Wright, 2005). These are bolstered by media and public discourses on obesity that frame it as an avoidable disease burden which then requires the facilitation and reorientation of healthcare to a narrow focus on controlling body weight within standardised parameters unfit for individualised care practice (Gard and Wright, 2005). There is also a growing number of feminist scholars whose own bodies provide a tool for reflexivity, in order to challenge and unpack the subjectivities and discursive framings of fatness. Some authors acknowledge competing convictions in their own bodies and in theorising fat embodiment, highlighting ongoing challenges and tensions in being critically engaged in a highly stigmatised identity (Bordo, 1993; Lee, 2020).

The concept of "health at every size" (HAES) has been proposed to address weight bias and stigmatisation for people living with obesity. More recently it has been considered a potential public health approach, beyond the prevailing attention on weight loss as a desired health outcome (Penney and Kirk, 2015). In a recent UK government report, a HAES approach was recommended as a replacement for using BMI within healthcare practices (Women and Equalities Committee, 2021). The three core concepts of HAES propose body acceptance, supporting intuitive eating and active embodiment. Within an HAES framework, it is possible to conceive of health promotion strategies for obesity whereby the primary objective is the development of a healthy lifestyle. This may result in measuring outcomes to evaluate success that are not limited to (or may entirely exclude) measuring body weight. However, it is unclear whether the HAES approach can reduce weight stigma and bias without further efforts to change societal norms and attitudes.

### 2.7 Weight stigma

Stigma is continuously produced and reproduced by individuals and structures, and often highlights power imbalances within relationships. Socially, stigma enforces a hierarchy that devalues certain kinds of people based on their social status and identity (Goffman, 1963). Whilst

the word "fat" is synonymous with adipose tissue, it also carries social, cultural and visual meanings that are socially constructed. Unnithan-Kumar (2011) invites us to question what cultural work is required by large-bodied pregnant women to confront the stigma attached to their condition. Westernised societies, obesity is culturally understood as crossing the "bodily and moral boundaries of personhood" (Warin et al., 2011). In the context of understanding obesity as a public health burden, there is a need to understand its racialized history within medical literature. Strings (2019) argues that racial scientific literature dating back to the eighteenth century aligns obesity with Blackness and ultimately, savagery. The Western cultural desire for slimness was heralded and bolstered by scientific literature as a way of eliciting social distinctions, marked by class and race. Fatness was considered evidence of racial inferiority during the Enlightenment era. She suggests that despite overwhelming evidence to the contrary, the contemporary concern about obesity is not about improving individual health, but rather reproducing a historical and cultural narrative of fat phobia whereby the body validates race, class and gender prejudice. By reducing the multidimensional phenomenon of health to personal responsibility and associating health with thinness, the work of white supremacy is enacted (Strings, 2019). She further argues that the original scale of the BMI measurement was based on white European men, therefore it is not fit for purpose when considering other populations, such as women or ethnic minorities.

There is evidence that weight bias ensues in all spheres of public life, such as in education, employment, social and healthcare settings (Puhl and Heuer, 2010; Puhl and King, 2013). More specifically, weight bias and stigma have a strong correlation to poorer health outcomes in several ways – poor mental health, compromised cardiovascular health or deliberate avoidance of healthcare due to discrimination (Ward and McPhail, 2019). One study compared weight discrimination with other forms of discrimination such as age, race and sex to determine whether they shared a similar association with the risk of mortality (Sutin et al, 2015). These associations were tested using data from two large longitudinal studies in the US known as the Health and Retirement Study (HRS) and Midlife in the US study (MIDUS). Completed questionnaires about everyday discrimination based on self-reported demographics such as race, age, sex and weight were analysed in relation to rates of death in both datasets. The authors

noted that weight discrimination was associated with an increase in mortality risk of nearly 60% (Sutin et al., 2015). This increased risk could not be accounted for by other physical or psychological risk factors. The authors also found that the association between mortality and weight discrimination was stronger than other attributes for discrimination, such as sex, ethnicity or age. The authors conclude that weight discrimination may be a risk factor for a shortened life expectancy. Other authors have indicated that framing obesity as a lifestyle choice ignores broader economic and social determinants (Egger and Dixon, 2014; Warin and Gunson, 2013). Critics have suggested that a move toward eliminating such discrimination is not simply to seek equity but an attempt to ensure that fat people are not compromised in their lives and in their health (Ward and McPhail, 2019).

Within the context of pregnancy, weight stigma may compound adverse outcomes for women with a raised BMI. These women often report a poor experience of antenatal care for a variety of reasons, including but not limited to, a lack of evidence-based information, poor communication about risk factors and management of conditions, and consistent exposure to practitioner discomfort around a stigmatizing subject, all of which may contribute to poorer outcomes and to a bad experience of pregnancy, labour and birth (Heslehurst et al., 2008; Warin et al., 2008; Smith and Lavender, 2011; Jones and Jomeen, 2017). This is particularly important as almost a third of women who die during pregnancy and in the postpartum period are categorised as obese during their pregnancy (Knight et al., 2022). In previous MBRRACE reports, there has been some consideration of obesity as a mortality risk as a factor of systemic bias, alongside ethnicity, deprivation, and other social and physical vulnerabilities (Knight et al., 2020). The report acknowledges that disadvantaged women are grossly over-represented amongst the women who die as a result of pregnancy. Black women are almost four times more likely to die than their White counterparts. Asian women are almost twice as likely to die compared to White women. Women living in the most deprived areas are two and a half times more likely to die than women living in the least deprived areas. The report recognizes that women with multiple risk factors such as ethnicity, age and BMI are more likely to die as a result of pregnancy and the care they receive during that time. This highlights an urgent need to utilize an intersectional lens when collecting knowledge around women's lived experiences of maternity care to understand

the "constellation of bias" that prevents health equity in maternity care provision (Knight et al., 2020).

# 2.8 The role of the midwife in public health

The usual ethos of midwifery care is to provide woman-centred care and to promote normal birth. The role of the midwife is also acknowledged to encompass public health, with a particular focus on reducing health inequalities (Hunter et al., 2015). The public health agenda of optimising physical health is reflected in an expanded midwifery role, highlighted by an increase in the complexities and sheer number of public health initiatives that have been incorporated into maternity care pathways (Hunter et al., 2015; Rayment-Jones et al., 2019). Within the UK, midwives are particularly well placed to support and encourage public health given that they have the most contact with women over the course of a pregnancy. Continued access to women gives midwives the opportunity to approach and enquire about different facets of health, such as smoking, diet and exercise, as well as ensure that referrals are made to other relevant healthcare services, such as dieticians and physiotherapists. However, due to a lack of specialised training and heavy focus on risk management, in the face of complicating factors such as obesity, midwives and other healthcare professionals often deem medicalisation to be the safest course of action (Kerrigan et al., 2015; Denison et al., 2018). Furthermore, systemic and organisational problems are barriers to discussing obesity management with women, which often contributes to women with a raised BMI dissatisfied with the care they receive and are factors in poor standards of antenatal care (Foster and Hirst, 2014; McCann et al., 2018). Women with a raised BMI are often subject to fragmented care as more specialists input into their antenatal care pathways to ensure medical safety of the pregnancy and appropriate provision of clinical care (Denison et al., 2018). Therefore, these women are much more likely to miss opportunities to benefit from continuity of care and carer, which is considered the gold standard of antenatal care provision in the UK, and has been shown to improve maternal and neonatal outcomes (Sandall et al., 2016). There is also an emerging body of literature from the UK that demonstrates when women with a raised BMI are cared for on midwifery-led units,

adverse outcomes are largely comparable to women with a lower BMI (Hollowell et al., 2014; Rowe et al., 2018). This demonstrates the potential power of midwifery-led care to provide similarly good outcomes for women with complex needs and additionally challenges a pervasive medical praxis that dictates larger pregnant bodies routinely require medicalisation in order to improve maternal and neonatal outcomes. Undoubtedly some women with a raised BMI will require medical care but this requires individualisation with their input and consent, and in cases where medical care is required, these women should not forgo standard midwifery care to receive it. This is particularly important because currently the national data being collected reflects distinct clinical outcomes that indicate the pathological nature of having a raised BMI. The most recent national maternity and perinatal audit on women with a raised BMI notes that these women who have previously undergone a caesarean birth are more likely to undergo an elective caesarean birth and less likely to attempt a vaginal birth but it remains unclear whether this is due to complications or whether clinicians have a lower threshold for intervention (Relph and NMPA Project team, 2021). Further data highlights higher risks for stillbirth, postpartum haemorrhage, emergency caesarean birth, and higher rates of admission to a neonatal unit. However, there is currently no available data on whether women with a raised BMI can access hydrotherapy in labour, can use midwifery-led birth centres or have access to mental health resources (Relph and NMPA Project team, 2021). This indicates clearly what national priorities are regarding women with a raised BMI and demonstrates that there is a clear hierarchy of safety needs considered regarding this group of women. Arguably, the cultural, psychological or emotional safety of this group of women using midwifery settings and interventions have not and continue to not be registered as necessary or useful data points in recommendations of care provision.

### 2.9 Antenatal care

#### 2.9.1 Antenatal care as a public health initiative

Antenatal care (ANC) is the provision of care by a healthcare professional to women during the course of a pregnancy. In the UK, the majority of healthcare professionals who offer this service

provision are midwives (ten Hoope-Bender et al., 2014). Key components of antenatal care include health education and health promotion, risk identification, and the prevention or management of pre-existing health concerns and/or pregnancy-related conditions (WHO, 2016). It is recognised globally as a key public health intervention that, when undertaken effectively, can promote and protect women's health during pregnancy, through the detection and treatment of pregnancy-related conditions and appropriate referral to specialist services and professionals (WHO, 2016). Additionally, indirect causes of maternal morbidity and mortality, such as HIV and suicide, contribute around a guarter of total maternal deaths. Therefore, antenatal care provision represents an opportunity to optimise women's health through integrated services and shared care between various healthcare professionals. Longitudinal studies have shown that access to good quality antenatal care also has subsequent benefits for women's and children's health beyond the pregnancy period (Raatikainen et al., 2007; Draper et al., 2018). Furthermore, the provision of antenatal care provision by countries and states demonstrates a commitment to international human rights law that state that women surviving and enjoying pregnancy and childbirth serves as a fundamental part of their human rights to life and dignity (WHO, 2016; Tuncalp et al., 2015). Conversely, poor outcomes such as premature births, low birth weight, and neonatal and maternal mortality have all been associated with poor engagement with antenatal care (Petrou et al., 2003; Raatikainen et al., 2007; Knight et al., 2020).

A scoping review conducted by WHO (2016) found that women prioritise a positive experience during pregnancy. This was defined by the following parameters; maintenance of physical and sociocultural norms, prevention and treatment of health condition thus ensuring a healthy pregnancy for both mother and baby, experiencing a good labour and birth, and experiencing motherhood positively. Evidence based strategies to improve maternity care include midwiferyled care as a priority (Edmonds et al., 2020). Midwifery-led care is associated with improving over fifty health-related outcomes in diverse public health areas such as tobacco cessation, sexual and reproductive health and early childhood development (Renfrew et al., 2014). These outcomes impacted by midwifery care are fundamental to global health initiatives such as WHO'S Global Strategy for Women's, Children's and Adolescent's Health 2016-2030, the

Sustainable Development Goals, and Universal Health Care Coverage by 2030 (WHO, 2015). In countries where there is a midwifery service provision, research has demonstrated that midwifery-led continuity of care models reduce the incidence of premature births, miscarriage, stillbirth and neonatal death for all women (Sandall et al., 2016; WHO, 2016). Furthermore, continuity of care has been shown to improve outcomes for ethnic minority women and women living in the most deprived areas (Rayment-Jones et al., 2015; Homer et al., 2017).

#### 2.9.2 Antenatal care provision in the UK

In the UK, pregnancy is recognised in policy and guidelines as a normal life event, and as a physiological process, with the view that interventions offered during pregnancy must have known benefits that are acceptable to women (NICE, 2021A). Currently, national maternity policies recognise midwives as a crucial contribution to the provision of high quality and safe maternity care. The guidance recognises that woman-centred care should be the normative practice during pregnancy, with emphasis on treating women and their families with dignity, respect and kindness and providing informed choice (NICE, 2021A; NHS England, 2023). A review commissioned by NHS England was conducted to identify evidence-based strategies that would improve pregnancy outcomes and experiences nationally (NHS England, 2016). Whilst the quality of maternity care, and neonatal and maternal outcomes have improved over the last decade, the review found significant variances of practice across the country and identified further opportunities to improve the safety of care.

The 'Better Births' report, which was the product of that review, advocates for maternity care provision that includes continuity of care and personalised caregiving, including informed choice to safeguard the health of women and children (NHS England 2016). 'Better Births' is a chief policy agenda for maternity services and, as a result, there has been a national drive to implement the recommendations of this report across the NHS through local maternity services, with a large focus on continuity of care as well as provision of individualised care. Midwifery-led continuity of care (mCOC) models are recognised as an intervention that can improve the quality

of antenatal care services where there is adequate midwifery provision (WHO, 2016). The UK government has set a target to halve rates of stillbirths, maternal and neonatal deaths and brain injuries occurring during or soon after birth and reducing preterm birth rates (O'Connor, 2016). Deprivation and ethnicity are both noted to be risk factors for poorer outcomes, particularly for babies (Draper et al., 2018; NHS England, 2023). A realist synthesis found that for women with social risk factors, their experiences of maternity care were enhanced by a continual and trusting relationship with a healthcare professional (Rayment-Jones et al., 2019). Relational continuity was particularly important to these women as they often perceived interactions with healthcare professionals to be one of surveillance rather than support. The authors of the review argued that it was crucial to apply an intersectional lens to research design and services as many women had multiple and overlapping risk factors that could be overlooked or disregarded when focusing on a single risk factor. Furthermore, mCOC models have demonstrated good success in achieving a positive and trusting relationship with women (WHO, 2016). This is bolstered by a strong body of evidence that demonstrates midwife-led continuity of carer improves the experience and outcomes of pregnant women, including lower rates of induction, augmentation of labour, continuous electronic monitoring of the foetus, obstetric analgesia, instrumental delivery and episiotomies (Waldenstrom and Turnbull, 1998; Sandall et al., 2016).

In addition, a more recent national health policy, known as the Three Year Delivery Plan, outlines priorities for maternity care in response to the recent reports highlighting a poor working culture across the NHS which has contributed to unacceptable outcomes for mothers and babies (NHS England, 2023; Kirkup, 2022). Of these recommendations, personalised care has been highlighted as a priority for improving care experiences of women. The report makes clear that personalised care plans must account for the holistic nature of health needs and support women's choice. The report also recognises that interrelated nature of personalised care with continuity of care, advising that mCOC models should continue with adequate and appropriate staffing.

#### 2.10 Group Antenatal Care

Group antenatal care (GANC) is recognised as a health system intervention that can improve the utilisation and quality of antenatal care, but this is dependent on a well-resourced infrastructure that can support this model of care (WHO, 2016). There is a growing body of evidence to demonstrate that GANC may be a suitable way of increasing the provision and flexibility of care continuity in the antenatal period and improving maternal and neonatal outcomes. Perhaps more importantly, women find this model of care contributes to a positive experience of pregnancy and birth (Catling et al., 2015; Andersson, et al., 2013; Liu et al., 2017; Hunter et al., 2018a). A Cochrane review has also been conducted on GANC. Only four trials were included for review and most of the studies were considered moderate strength evidence. Much of the evidence, however, came from one trial (Catling et al., 2015). The review found that GANC is acceptable to women, but no significant difference was found between routine antenatal care and GANC with regards to reducing preterm birth (the primary outcome measured), lower birth weight or breastfeeding rates. However, the authors noted that maternal satisfaction with care provision was higher in the group care cohort. The review recommends further research to determine whether GANC can reduce poor neonatal and maternal outcomes (Catling et al., 2015). There are more recent systematic reviews addressing a number of questions around GANC, such as a systematic review conducted in 2018 by Sharma and colleagues, which focussed solely on models of GANC in low- and middle-income countries (LMICs). The reviewers note that the purpose of the systematic review was to identify attributes that could increase the acceptability and effectiveness of GANC in LMICs (Sharma et al, 2018). Nine studies were found, and the authors also conducted interviews with key informants to identify common attributes for group care models that were consistent. The authors mapped both flexible and standard components for a "generic" model of group care that could be adapted and implemented in LMIC settings. The authors hypothesise that such models could increase antenatal care attendance and improve the quality of care provision in LMICs (Sharma et al, 2018). An updated systematic review on the effectiveness of group care on clinical outcomes is pending (Molligaj et al., forthcoming). A more recent systematic review focussing on midwives' experiences of facilitating GANC found that midwives' experiences of facilitating GANC was mostly positive.

Providers felt there were opportunities to deliver high quality care within a group care model (Lazar et al, 2021). However, the authors note that concerns about workload and the structural changes required to support the model warrant further investigation.

There is a smaller body of evidence that demonstrates GANC targeting specific groups of women, such as teenagers or smokers, is successful in increasing maternal satisfaction and improving outcomes such as self-efficacy, maternal empowerment, reducing incidence of preterm birth and low birth weight babies (Ickovics et al., 2007; Byerley and Haas, 2017; Liu et al., 2017). However, there is a distinct lack of research on GANC with an explicit intersectional lens. Current studies have not shown whether it can be an effective model of care for separate and distinct groups of women who may experience multiple vulnerabilities or occupy multiple identities therefore this remains a knowledge gap in the current literature.

A systematic review and meta-analysis exploring whether GANC could help women meet gestational weight goals was conducted (Kominiarek et al., 2019). Fourteen studies were included for review and the authors note that the meta-analysis demonstrated that there were no significant differences in gestational weight gain (GWG) between standard antenatal care and GANC. With one exception, all of the studies used a CenteringPregnancy<sup>™</sup> model of care. In this review, the authors make the case that excessive GWG is implicated in developing medical conditions that impact quality of life. Yet, they also recognise that one of the limitations of many of the studies they included in their review is the failure to address the psychosocial factors that may impact on gestational weight gain in the first instance (Kominiarek et al, 2019). Crucially the authors note that the studies included for review were poor to fair quality, which highlights the need for good quality research around this subject. For example, the authors note that many of the studies did not account for confounding factors such as race, gravidity and gestational age at the point of accessing antenatal care which they speculated could affect the relationship between GANC and GWG. Ultimately, this review highlights the difficulty of attempting to determine the efficacy of GANC on gestational weight gain due to small cohort sizes, the unclear definition of appropriate weight gain due to gestational age differences at the start and end of the intervention and poor definition of GWG in many of the studies involved (Kominiarek et al, 2019).

A systematic review focussed on GANC for high-risk women has identified a few quantitative studies that focus attention on women with a raised BMI and GANC (Byerley and Haas, 2017). Two of these studies were not identified in the Kominiarek et al (2019) review. Chwah et al. (2016) examined whether a specialised group care programme focused on weight intervention in pregnancy conducted in Australia improved outcomes for mothers and babies. The authors found no significant difference in birth outcomes, except that the intervention group had a higher instrumental delivery rate. Breastfeeding rates were higher in the intervention group. No significant difference was found between the groups for neonatal outcomes. The authors also noted that engagement with the intervention was poor, as has been observed with other health intervention studies targeting pregnant women with a raised BMI (Chwah et al., 2016; see Poston et al, 2015). The authors suggested that social stigma attached to specialist services for BMI may account for low enrolment and poor recruitment. The generalisability of the results is limited by the small sample size of the study and analysis was also limited due to incomplete data sets (Chwah et al, 2016). Kominiarek et al. (2017) explored the association between GANC and GWG amongst women eligible for Medicaid, using the Institute of Medicine's (IOM)(2009) definition of excessive GWG per BMI categorisation. This study, conducted in the US, found that GANC was associated with a higher gestational weight gain and exceeding the IOM's (2009) GWG recommendations for normal weight and overweight women. There was no difference found between the matched control group and the intervention group. Although the study included participants with diverse characteristics, the study was limited by the considerate difference in age, parity and risk status of the participants in the group prenatal care group and the control groups. Additionally, the small mean weight gain of 4lbs in overweight women has limited clinical significance (Kominiarek et al, 2017). A small quantitative study was conducted in Australia which embedded a weight management programme with a GANC setting (Raymond et al., 2014). The aim of the study was to deliver a programme of care to reduce excessive gestational weight gain in raised BMI women. The study used the IOM's (2009) parameters as country-specific guidelines do not exist. The authors found that 27% of women were able to maintain the weight to the IOM's guideline of appropriate weight gain in pregnancy. The authors surmise that this result is promising and compares favourably to other behaviour-led interventions. However, the study is

limited by the absence of a control group and the small sample size of eighty-two women. In addition, the compliance to the IOM's recommendations for GWG in this study is actually worse than other studies where women have received standard antenatal care (see Rogozinska et al, 2019; Goldstein et al, 2017), indicating that the relationship between GANC and appropriate GWG may be tenuous.

Crucially, these quantitative studies that examine the effect of GANC on women with a raised BMI frame the utility of this model solely in its potential to reduce GWG. None of these studies measured whether weight management was correlated to improved maternal or neonatal outcomes. Therefore, there is an implication that the pursuit of weight loss in and of itself during pregnancy is a desirable goal. This demonstrates the pervasive attitude towards "solving" obesity within medical research, even when it cannot be shown to benefit mother and baby. Whether attributes of a group antenatal programme such as peer support, access to wider social resources, promotion of women's empowerment, and additional time and relational continuity with a named midwife can benefit women with a raised BMI beyond weight management are not well understood. It is hypothesised that a group approach to antenatal care can empower women by supporting informed decision making and providing care tailored to their requirements, as well as support them to be more active in their care (Wiggins et al, 2020). As women are engaged in self-monitoring in this approach, there is a hope that their knowledge and confidence around clinical assessments will improve (Hunter et al, 2019). Relational continuity is known to improve women's experiences of care, as well as improve clinical outcomes (Sandall et al, 2016). More time with healthcare professionals and engaging in shared decision-making processes around care have also been shown to improve women's experience of care (Vedam et al, 2017). In addition, increased autonomy and wider choice are linked to feeling more in control during labour and birth, which can influence women's satisfaction with their birth experiences (Deherder et al, 2022). Higher satisfaction with birth experiences can impact women's wellbeing and how they bond with their babies in the postpartum period (Döblin et al, 2023).

# 2.11 Chapter Summary

This chapter has critically approached the problematisation of obesity both in a wider context and within the maternity landscape, with a particular focus on how lifestyle interventions in pregnancy targeting women with a raised BMI continue to demonstrate a lack of effectiveness of reducing gestational weight gain. This continues to individualise the problem of obesity, and indicates that obesity is the foremost issue that requires resolution in pregnancy. This chapter has argued that instead of focussing on managing weight in pregnancy, a more woman-centred approach with relational continuity may improve the care experiences of women with a raised BMI. A growing body of evidence on group care models indicate that this may be a way of improving care experiences for women with a raised BMI. The next chapter will review the current literature on standard antenatal care for women with a raised BMI, in order to understand what their current experiences of care are in the UK, and whether increasing the choice of provision may be beneficial for this group of women.

# Chapter 3 - Literature Review

#### 3.1 Introduction

As mentioned previously, the antenatal care experiences of women in the UK have been deteriorating since 2017 (CQC, 2022). The care experiences of pregnant women with a raised BMI must be understood before developing ways to improve care such as GANC. This chapter focuses on the existing body of literature on the maternity experiences of women with a raised BMI. The aim of this review is to highlight the pregnancy experiences of women with a raised BMI who are accessing standard antenatal care. This will ascertain whether there is a need to increase choice around antenatal care provision for this group of women to improve their pregnancy experiences. A thorough search of the literature revealed no previous qualitative research that has explored the experiences of women with a raised BMI engaged in GANC as a health intervention. Quantitative research exploring the relationship between weight management and GANC has been discussed in chapter 2 and demonstrates there is limited knowledge about the applicability of a group care model for women with a raised BMI beyond managing gestational weight gain. This represents a knowledge gap about this model and its potential effects for women with a raised BMI regarding improving their pregnancy experiences.

This chapter begins by analysing existing systematic and scoping reviews of the research on the maternity experiences of women with a raised BMI. The chapter raises challenges and limitations of the previous reviews before presenting my own literature review of research on this topic. Methods used in the review will be discussed in more detail later in this chapter but are briefly outlined here. To ensure that the literature review was robust, the standard principles of thematic synthesis as developed by Thomas and Harden (2008) were used throughout. A structured approach to searching and study selection was conducted which found sixteen articles suitable for review. A critical appraisal tool developed by Walsh and Downe (2005) for use in systematic reviews of qualitative research was used to assess the quality of the articles found. The NVIVO 12 software program was used to code the articles, and thematic analysis was used to develop themes. Four overarching analytical themes were found, and the findings are

discussed in detail below. A discussion of the themes found is linked to the wider literature and will conclude this chapter. Having identified the strengths and limitations of the previous research and the gaps in the current knowledge base, I demonstrate how the new research I am undertaking for my PhD will add value to the current literature and generate new knowledge.

### 3.2 Existing systematic reviews of relevant research

To date, there have been three attempts to systematically and rigorously bring together and synthesise the qualitative evidence around the maternity care experiences of women with a raised BMI, and these are summarised below.

Smith and Lavender (2011) conducted a meta-synthesis to explore the maternity experiences of pregnant women with BMI >30kg/m2. They begin by acknowledging maternal obesity as a key area for public health intervention because of its association with adverse maternal and foetal outcomes. They suggest that pregnancy represents a "teachable moment", whereby the frequency of care provision during pregnancy is an opportunity to intervene to reduce adult obesity and prevent inter-generational obesity. They identified a lack of evidence regarding interventions to improve the health of pregnant women with a BMI> 30kg/m2 and acknowledge that there are no formal training or guidelines for healthcare professionals for discussing obesity with women. The aim of this meta-synthesis was to create a body of knowledge that would enable future design and delivery of accessible maternity services for women with a BMI>30kg/m2. The authors utilized a quality appraisal tool developed by Walsh and Downe (2005) to critically appraise the available literature. Six studies were identified as suitable for review after this process. In total, Smith and Lavender (2011) developed and identified eight themes which were summarized into three cluster themes, as documented below in table 3.

Theme	Summary
Acceptability and	Being overweight as a woman in western society is stigmatizing. Stigma
inevitability of weight	is alleviated in pregnancy because gestational weight gain is expected,
gain in pregnancy	somewhat normalising obesity in pregnancy. Women report a tension
	between eating to ensure foetal health but also not gaining excessive
	weight in pregnancy.
Depersonalisation of	If and when obesity was discussed, the risks were over-emphasised and
care due to	this resulted in women feeling anxious about their babies health. These
medicalisation	feelings were compounded when healthcare professionals did not
	clearly communicate reasons for increased monitoring, further
	interventions or referrals, leading to a poor experience of care.
Healthy lifestyle benefits	Women are aware of the benefits of a healthy lifestyle and view
for self and baby	pregnancy as a time to adopt healthy behaviours. Many external and
	internal barriers were identified, including low confidence, low
	motivation, poor health in pregnancy, lack of information and advice
	from healthcare professionals and lack of access to resources.

Table 3. Summary of themes developed in the systematic review conducted by Smith and Lavender (2011)

The authors found that women accepted weight gain as unavoidable in pregnancy, and therefore were less motivated to change their habits during pregnancy, instead seeking support and motivation to access health interventions in the postnatal period. They also found that women experienced stigma in their encounters with healthcare professionals. Women understood that they were being implicated for the sole responsibility of creating risk to their babies by existing in a larger body. Women perceived medicalization as negative, and it was heavily associated with depersonalized care. Their synthesis suggests women prefer resources and support for the postnatal period, not during pregnancy. The authors note that only two of the papers included focused on the maternity experiences of overweight pregnant women as their primary aim (Nyman et al., 2010; Furber & McGowan, 2011). In each of the other studies, women's maternity experiences only comprised a small part of a larger study. The larger studies focused on women's beliefs about weight gain (Wiles 1998), women's views on physical activity (Weir et al., 2010), women's conception of body image change in pregnancy (Fox and Yamaguchi, 1997) and

women's conceptions of good motherhood in relation to big babies (Keenan and Stapleton, 2010). The authors argued that their findings are significant for policymakers and demonstrate the importance of centring the needs of women with a raised BMI when creating and implementing specific maternity care pathways (Smith and Lavender, 2011). Contradictory to their overall conclusion, they argue that pregnancy is an ideal time to introduce targeted intervention because women with pre-existing obesity perceive their weight as acceptable in pregnancy. This is even though they already acknowledge that there is limited evidence that demonstrates that health interventions in pregnancy are effective. They suggest that this in turn would improve satisfaction with maternity services and improve attendance and health. There has been a variance in findings regarding this point -a study by Dencker and colleagues (2016) found that in contrast, women were highly motivated in pregnancy to adopt healthy behaviours but require collaborative working relationships with midwives in order to feel supported to maintain these changes. The authors go on to recommend further training for healthcare professionals to ensure personalised care does not over-emphasise the issue of weight, but this finding is not supported by the evidence presented in the synthesis, indicating a conflation of the needs of women with a raised BMI with the demands of national policy and regulatory bodies.

Jones and Jomeen (2017) conducted a meta-ethnography which identified twelve studies suitable for review. Three of these studies (Nyman et al. 2010; Weir et al., 2010; Furber and McGowan 2011) overlap with the thematic synthesis conducted by Smith and Lavender (2011) (Nyman et al, 2010; Weir et al, 2010; Furber and McGowan 2011). Their review includes studies that specifically mention the pregnancy experience of women with a raised BMI in relation to their engagement with healthcare professionals. The authors note that their interests lay with how women's perceptions of weight status were negotiated between women and healthcare professionals. The authors developed and identified four themes in total, as documented below in table 4.

Theme	Summary
Initial	Women expect weight to be discussed during the initial appointment, but found
encounters	an absence of direct communication from healthcare professionals. However,
	actions were taken in relation to perceived risk of obesity in pregnancy without
	direct acknowledgement. Women found this offensive and embarrassing.
Negotiating	Women perceive risk as "doing something wrong" and ascribing risk status due to
risk	raised BMI is perceived as harm towards their babies. Having their risk status
	addressed inconsiderately left women feeling upset. Some women reject the
	concept of risk entirely.
Missing out	Women feel like their weight status denied them a normative experience of
	pregnancy. Women sensed that their consultations were different or that
	interventions singled out their weight status. This heightened the sense of being
	treated differently.
Positive	Women who had positive encounters with healthcare professionals regarding
intervention	weight status and management felt that they had better outcomes. For some
	women, acknowledgement of risks was important but preferable if this was done
	without judgement or blame.

Table 4. Summary of themes developed by Jones and Jomeen's (2017) meta-ethnographic synthesis

The authors conclude that many women with a raised BMI are dissatisfied with how their weight status and subsequent management is discussed and actioned during maternity encounters. However, they note that women are also dissatisfied when weight is not mentioned at all. The authors acknowledge that healthcare professionals have a difficult task in engaging women about weight management during pregnancy but to do so in a sensitive way that does not apportion blame on the woman. The studies demonstrated that healthcare professionals engaged in avoidance tactics to be more diplomatic, but the authors argue that the absence of clear discussions about weight denies women the opportunity of a normal pregnancy experience, and the over-emphasis of the risks of obesity in pregnancy leaves women feeling dissatisfied and disempowered to affect change and to have a positive pregnancy experience. As with Smith and Lavender (2011), the authors argue that the findings of the studies demonstrate that women are keen for lifestyle interventions during pregnancy and that if women were

empowered to access accurate advice and resources to take control and enact change, this could result in positive outcomes. The authors do not specify exactly what positive outcomes might occur, making this recommendation too broad and vague to be utilized well. The authors conclude that women need to perceive that they are in control for interventions to be effective and that further research is required to understand the needs of different groups of women to establish successful models of support including healthy lifestyle, diet and exercise for women during pregnancy (Jones and Jomeen, 2017). As with the recommendations set out in Smith and Lavender (2011), this approach rests on the assumptions that health behaviour change interventions within clinical practice is the only effective way to improve pregnancy outcomes for women with a raised BMI. However, as outlined in Chapter 2, there are systematic reviews that demonstrate that behaviour change interventions carried out in pregnancy are not proven to affect clinical outcomes (Dodd et al, 2010; Oteng-Ntim et al, 2012).

Alongside the two systematic reviews that have been published, there has also been a recent scoping review published that explored the experiences of women with a high BMI receiving antenatal care (Saw et al, 2021). Eight of the studies included for this review overlap with the two previous systematic reviews (Knight-Agrawal et al, 2016; Lavender and Smith, 2016; Lindhardt et al, 2013; Nyman et al, 2010; Mills et al, 2013; Heslehurst et al 2015; Furber and McGowan, 2011; Furness et al, 2011). However, unlike the other two reviews, articles were included if they contained experiences of women undergoing a particular health intervention (such as a weight management programme) at the time of their pregnancy. The review was conducted to inform development of a prospective qualitative study to explore the experiences of women who have received their antenatal care in a specific bariatric clinic (Saw et al, 2021). The authors included seventeen articles for review. Four major themes were developed from the critical analysis which are tabled below.

Theme	Summary
Inconsistent or absent	Women report not receiving information at all or inaccurate or
information regarding	inconsistent advice that over-emphasises potential negative outcomes
weight management	due to obesity. This heightened women's anxiety about their pregnancies
Stigma and	Conversations around weight were not perceived as supportive or
stereotyping with	practical but as encounters that further stigmatized them through
obesity	harmful assumptions and stereotyping.
Medicalisation and	Many women were subject to excessive scrutiny about their lifestyle or
depersonalized care	health behaviours, and had negative associations with increased
	surveillance, despite this being in line with gold-standard care practices.
A want for information	Women expressed a desire for weight management advice as they
and a need for change	reported pregnancy was a big motivator to change their behaviour.

Table 5. Summary of themes developed in Saw et at (2021) scoping review

The authors acknowledge that current guidelines may have contributed to inconsistent advice from healthcare workers. They observe that while current guidelines recommend that women do not diet in pregnancy, many women want to lose weight during pregnancy. However, they do not discuss the disconnect between women's desires and what current guidelines recommend, which may have compounded women's disappointment about the advice given (or lack thereof). The authors conclude that further education and training for healthcare professionals may help to improve respectful communication skills which in turn may improve women's experience of pregnancy encounters. The authors also highlight a tension between the "gold-standard practice" of routine increased surveillance for higher-risk pregnancies and women's dislike of surveillant care. They recommend that further research is undertaken to elicit a deeper understanding of the tension between women's desires and how best to achieve appropriate care for women. Unlike the two previous systematic reviews, the authors suggest that women need access to personalized care and suggest that this may be best facilitated through continuity of care. There are two inherent problems with the recommendations laid out in the previous reviews. Whilst sensitivity around communicating the risks of obesity has been recommended in all the reviews, an underlying issue emerges in that women with a raised BMI are still positioned as requiring to make efforts to take responsibility for obesity during pregnancy in the recommendations laid out. All three reviews recommend that weight management interventions may be useful for women in pregnancy. However, the current evidence does not support the use of weight management interventions to improve safety outcomes for mothers and babies. Systematic reviews of gestational weight management trials have identified that there is limited applicability to clinical practice given that these interventions do not appear to aid significant reduction in gestational weight gain or improve outcomes for mothers and babies (Campbell et al, 2011; Oteng-Ntim et al, 2012). Furthermore, these reviews highlight that the interventions trialled are not developed with input from women, which may explain why the interventions have not been shown to be effective. In addition, the scope of midwifery practice does not extend far into the postnatal period, thereby reducing the applicability for high quality postnatal education and advice for midwifery practice. Support from a wider multidisciplinary health team, such as health visitors and GPs could help women feel supported to make behaviour change choices in the puerperium. The second problem reflects a fundamental paradigm shift in the realization of high-quality maternity service provision. The reviews suggest that women are amenable to weight advice therefore weight management programmes could be implemented in the antenatal period. This links the improvement of women with a raised BMI's experiences of care almost exclusively to weight management, which could potentially increase the stigmatisation of these women and their pregnancies.

WHO (2016) recognise a human rights-based approach in the delivery of antenatal care, which promotes person-centred care and well-being, rather than just the prevention of mortality and morbidity. A scoping review was conducted to inform guidelines and what was found that overwhelmingly, women, from all types of resource setting, want and expect their antenatal care to result in a "positive pregnancy experience" (WHO, 2016). The facets by which this is achieved have already been discussed in Chapter 1. This approach is also legitimised through UK national

agendas such as Better Births and the Three Year Delivery Plan which have advocated for personalised care achieved through relational continuity with one or a small team of midwives throughout pregnancy (National Maternity Review, 2016; NHS England, 2023). The recommendations from the previous reviews do not consider how increasing women's choices around antenatal care provision may improve women's experiences of care, and how consideration of a more holistic approach using relational continuity and personalised care may encompass weight management or effective communication about optimising health behaviours. As discussed above, previous reviews of this literature are out of date and have a different focus to the aims of my thesis. Previous reviews do not take a critical approach to the concepts of obesity and BMI, nor do they apply an intersectional lens to better capture women's experiences. The next section outlines the methods undertaken for a new review of the qualitative research on the antenatal care experiences of women with a raised BMI.

# 3.3 Methods undertaken for a new thematic synthesis

In this section I review the primary qualitative studies I identified pertaining to the pregnancy experience and care provision of women with a raised BMI. Antenatal care provision can be varied depending on the country but generally is provided by midwives, obstetricians or a shared care pathway whereby a woman sees a variety of healthcare professionals during pregnancy. In order to understand whether increasing women's choice around antenatal care provision through GANC may be a beneficial model of care for women with a raised BMI, I felt it was important to understand the experiences of women with a raised BMI accessing the current provision of antenatal care to gain an understanding of their satisfaction levels, bodily autonomy, choices, and interactions with healthcare professionals that influence their experiences of women with a raised BMI were affected by receiving standard antenatal care. As the link between obesity and other marginalised identities has shown to worsen outcomes for women, it will be vital to see whether experiences of these women have been included in the available evidence and whether their experiences differ.

# 3.3.1 Search strategy

The search terms used in the search strategy are detailed below:

- High Body Mass Index OR Raised Body Mass Index OR Body Mass Index > 30 OR obes\* OR overweig\*
- 2. antenatal OR pregnan\* OR prenatal OR "maternity care" OR "midwifery care" OR midwi\*
- 3. experience\* OR view\* OR attitude\* OR explor\* OR understand\*

Database searches were conducted in February 2019 and then updated in June 2020 and March 2022. Databases for this review were selected after recommendations from a specialist librarian and supervisors. Six databases (CINAHL, Cochrane, Medline, MIDIRS, Psycinfo and SCOPUS) were searched and Google Scholar was also utilised to find further relevant abstracts and titles. Please see Appendix 1 for the tabulated results of database searches. As researchers have noted, electronic databases cannot be relied on solely to find all studies so hand searching, checking reference lists of relevant articles and emailing authors for further relevant titles were also employed in the search strategy (Thomas and Harden, 2008; Walsh and Downe, 2005). Grey literature was also searched. A PEO framework was utilised to develop the research question and generate appropriate search terms.

# Table 6. PEO framework

Population	Pregnant women with a raised body mass		
	index		
Exposure	Routine Antenatal care		
Outcome	Pregnancy experience		

# 3.3.2 Inclusion and exclusion criteria

The table below outlines the inclusion and exclusion criteria used as part of the search strategy.

<b>T</b> . I. I . <b>T</b>	1.1.1.1.1.1.1.1				
lahle /	Inclusion	and	exc	noisin	criteria
	merasion	ana	CAC	asion	CritCria

Inclusion criteria	Exclusion criteria		
English language papers	Non-English language papers		
• Antenatal care experiences of	Antenatal care experiences of		
women with BMI >30m/2	women with a BMI <30m/2		
Qualitative or mixed methods data	Quantitative data collection		
collection methods	methods		
	• Women's experience of a health		
	intervention in pregnancy		

Please see appendix 2 for the PRISMA flow chart indicating the search strategy as well as included and excluded studies. Studies were excluded if they did not have qualitative data pertaining to women's experience of routine maternity care experience. Full text articles were sought, and all articles were rechecked for relevance. After removing duplicates, abstracts, conference papers and irrelevant titles, sixteen articles were left for review. Ten studies (Nyman et al., 2010; Furber and McGowan 2011; Mills et al, 2013; Knight-Agarwal et al. 2016; Lindhardt et al, 2013; Keely et al, 2017; Keenan and Stapleton, 2010; Dinsdale et al, 2016; Dejoy et al, 2016; Atkinson and McNamara, 2016) overlap with the thematic syntheses already conducted by Smith and Lavender (2011) and Jones and Jomeen (2017), and with the scoping review conducted by Saw et al (2021). The other six studies included for review were published after the review conducted by Jones and Jomeen (2017) with the exception of McPhail et al (2016). Incidentally, this paper is the only one that was found through hand-searching reference lists which may account for why it is not present in the review conducted by Jones and Jomeen (2017). A total of eleven articles (Fox and Yamaguchi, 1997; Wiles, 1998; Weir et al., 2010; Lavender and Smith, 2016; Patel et al., 2013; Heslehurst et al., 2015; Heslehurst et al., 2017; Heslehurst et al, 2013; Holton et al, 2017; Atkinson et al, 2016; Furness et al, 2011) included in the previous reviews by Smith and Lavender (2011), Jones and Jomeen (2017) and Saw et al (2021) were excluded.

Some studies were excluded on the basis that women were reporting on their experience of a health intervention, rather than their maternity care experience and therefore it was not possible to distinguish whether their care experiences were from the health intervention or from routine antenatal care (Patel et al., 2013; Furness et al., 2011; Lavender and Smith, 2016; Heslehurst et al, 2015; Heslehurst et al, 2017; Atkinson et al, 2016). In one study, the maternity experience comprised solely of a novel health intervention that was being introduced and it was unclear whether women were receiving routine maternity care outside of the intervention (Heslehurst et al., 2015). Women with a normal BMI was included in one study and it was not possible to discern between the experiences of them and women with a raised BMI so this study was excluded (Holton et al, 2017). In some cases, the studies focussed on women's views on and beliefs about their bodies, weight gain in pregnancy or physical activity (Wiles, 1998; Weir et al., 2010; Fox and Yamaguchi, 1997).

### 3.3.3. Quality Appraisal and study characteristics

A quality appraisal tool developed by Walsh and Downe (2005) was utilised to aid critical appraisal of the studies included for review. Please see appendix 4 for the quality appraisal tool. The authors developed the quality appraisal tool through mapping common characteristics found in existing systematic frameworks. The quality appraisal tool contains seven dimensions to assess the quality of articles and within each criterion, there are several prompts for reviewers to utilize. The authors encourage the use of flexibility and imagination in the application of their framework (Walsh and Downe, 2005).

All of the studies included were conducted in high-income countries – one from Ireland (Atkinson and McNamara, 2017), seven from the UK (Furber and McGowan, 2011; Dinsdale et al., 2016; Jarvie, 2017; Keely et al., 2017; Cunningham et al, 2018; Norris et al, 2020; Keenan and Stapleton, 2010), three from Australia (Lee, 2020; Knight-Agarwal et al., 2016; Mills et al., 2013), one from the US (Dejoy et al., 2016), two from Denmark (Lindhardt et al., 2013; Lauridsen et al., 2018), one from Sweden (Nyman et al., 2010) and one from Canada (McPhail et al., 2016). All the included studies reported qualitative design and all used interviews as the data collection

method. Most of the articles explicitly describe women's interactions with midwives and their experience of midwifery care with the exception of four (Keely et al., 2017; Knight-Agarwal et al., 2016; Lee, 2020; Norris et al, 2020). Please see appendix 3 for the results of the critically appraisal process for each included study.

#### 3.3.4 Synthesis methods

In order to ensure that my synthesis preserved the context of the primary studies as well as generate abstract themes, I utilised methods developed by Thomas and Harden (2008). The articles were coded using NVIVO 12 'line by line' to develop a bank of codes. This process generated eighty-four codes in total at this stage. Codes were read through again, checked for similarities and then clustered together which resulted in twenty-four codes that could be grouped together to create six descriptive themes. They are as follows: advice, communication between women and healthcare professionals, identity, risk categorisation, care provision, and stigma. As noted in Thomas and Harden's (2008) seminal work, the transition from generating descriptive themes to synthesising analytical themes is subjective and difficult to describe. Four analytical themes were developed through abstraction, referring back to my research question and ensuring that the analytical themes were sufficiently abstract to explain the initial descriptive themes. The themes related to the antenatal care experiences of women with a raised BMI are surmised as follows: spectrum of disordered communication, negotiating risk and stigma, power inequality, and women want relational and collaborative care. Please see table 8 below for examples of codes, themes and quotes related to the overarching themes generated.

# Table 8. Codes, themes and indicative quotes

Examples of codes	Themes	Indicative Quotes
Inappropriate communication, lack of communication,	Spectrum of disordered	"you don't want a dead baby do you?"
collusion, inconsistent advice, desire for clear information, desire for postnatal advice	communication	"There has been no discussion at all about my weight, um, whether being overweight, or you know, the amount of weight I have put on in pregnancy."
Women don't identify as obese, challenging medicalization of fatness, comorbidity changes perception of obesity, over- emphasis of risks of obesity,	Negotiating Risk and Stigma	<ul> <li>"It's like, 'this [GDM] is pretty much your fault because you are overweight'. It all comes down to weight, not, 'Oh it could be just that your body doesn't sort out sugar enough'. I mean anybody could have it."</li> <li>"I just think there are people out there that are fatter than me. Like big, big people who are pregnant and waddling aboutand I think, 'If I'm obese, then they have got to be dead'."</li> </ul>
Power dynamics, fatness is medicalized, harmful assumptions, gatekeeping, intervention without consent	Power inequality	"They look at you and say 'you're overweight', bang you're in. They make assumptionsI think in some ways that is a little bit of discrimination you know?" "There was no sign of gestational diabetes in the 3-hour fasting test. But she decided to go ahead and indicate that I was a gestational diabeticI had to go to a high-risk OB in additional to my regular OB to be monitored for gestational diabetes."
Fragmented care, accessibility, inappropriate clinical equipment, personalized care is empowering, women want midwifery led care	Women want relational and collaborative care	"It was amazing to work with medical professionals who didn't judge me because of my size and really empowered me to believe in my body because they believed in it. That was the first time I had ever had a medical professional uplift me in that way."
		"The paper on the examination table does not go all the way to the edges of the table, so while the table is sufficient, I don't believe the paper is."

# 3.4 Themes identified

The table below maps the themes across each of the articles, demonstrating how each study contributed findings to the analytical themes developed.

# Table 9. Articles and themes

Articles	Theme 1: Spectrum of disordered communication	Theme 2: Negotiating risk and stigma	Theme 3: Power inequality	Theme 4: Women want relational and collaborative care
Atkinson and McNamara (2017)	$\checkmark$	$\checkmark$		
Cunningham et al (2018)	$\checkmark$	$\checkmark$		$\checkmark$
Dejoy et al. (2016)	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Dinsdale et al. (2016)	$\checkmark$	$\checkmark$		~
Furber and McGowan (2011)	$\checkmark$	$\checkmark$		
Jarvie (2017)	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Keely et al. (2017)		$\checkmark$		$\checkmark$
Keenan & Stapleton (2010)	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Knight-Agarwal et al. (2016)	$\checkmark$	$\checkmark$		
Lauridsen et al. (2018)	$\checkmark$	$\checkmark$	$\checkmark$	
Lee (2020)		$\checkmark$	$\checkmark$	$\checkmark$
Lindhardt et al. (2013)	$\checkmark$	$\checkmark$	$\checkmark$	
McPhail et al. (2016)	$\checkmark$	$\checkmark$	$\checkmark$	
Mills et al. (2013)	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Norris et al (2020)	$\checkmark$	$\checkmark$		
Nyman et al. (2010)		$\checkmark$	$\checkmark$	$\checkmark$

### 3.4.1 Spectrum of disordered communication

Across the studies reviewed, the most common issue experienced was the lack of appropriate communication around the risks of obesity during pregnancy. NICE (2021) guidelines state that maintaining good communication between healthcare professionals and women is paramount to ensuring woman-centred care. The literature suggests that this is not being achieved in practice. Atkinson and McNamara (2017) suggest that women and healthcare professionals engage in unconscious collusion, a behaviour whereby difficult or sensitive topics, such as obesity, are avoided to potentially reduce stigma or discomfort. Their study found that women were fully cognizant of their weight and expected conversations with midwives about it and were therefore surprised when such conversations did not happen. This was also echoed in Keely et al.'s (2017) study, where obesity-related risks were vaguely alluded to in the form of specific advice, such as wearing TED stockings, but were never spoken about outright. Women felt disrespected when they were referred to specialist obesity services without their knowledge (Lindhardt et al., 2013). Others felt embarrassed to be receiving care related to their BMI (Norris et al, 2020). Some women reported that obesity management in pregnancy was not discussed with them and consequently they were not aware they were receiving additional interventions beyond what is offered in the routine course of pregnancy (Dinsdale et al., 2016; Atkinson and McNamara, 2017; Lindhardt et al., 2013). This also posits uncomfortable and difficult questions about midwives' practice as this highlights the prioritization of interventionist care with the aim of achieving medical safety without the women's knowledge or consent, let alone ensuring their psychological or emotional safety around these issues.

For some women, the issue was not the lack of communication about the risks of obesity and subsequent obesity management but rather the over-emphasis of risk, both imagined and real. Some women were told by their healthcare professionals that their weight status was directly responsible for causing complications in their pregnancies (Jarvie, 2017; Furber and McGowan, 2011; Knight-Agarwal et al., 2016; Mills et al., 2013; Lindhardt et al., 2013). Inappropriate discussions about weight status were often initiated by healthcare professionals when they

perceived poor adherence to their advice about weight gain in pregnancy (Jarvie, 2017; Dejoy et al., 2016; Atkinson and McNamara, 2017; Lee, 2020). Women identified these interactions as stigmatizing because the comments had no potentially therapeutic purpose (Dejoy et al., 2016). In addition, interactions such as these highlight the unequal power dynamic within these types of relationships. Women were often told that they have "risky bodies" whose very existence threatens that of the foetus (McPhail et al., 2016; Dejoy et al., 2016; Jarvie, 2017; Lee, 2020; Norris et al, 2020; Keenan and Stapleton, 2010). Women appeared to internalize feelings of failure about their bodies when they were subject to constant reiteration about the unacceptability of their weight status (Knight-Agarwal et al., 2016).

Women observed that conversations about obesity were on either end of the spectrum of communication with their healthcare providers- either there was complete avoidance of discussion or repetitive over-emphasis of the risks of obesity (Mills et al., 2013). These studies demonstrate that pregnant women's encounters with healthcare professionals who overemphasise the risk of obesity often result in high levels of emotional distress (Jarvie, 2017; Cunningham et al, 2018). Women in several of the included studies recognised that communication about obesity and associated risks in pregnancy were necessary and often spoke of a desire for consistency of advice communicated sensitively and appropriately (Atkinson and McNamara, 2017; Dejoy et al., 2016; Furber and McGowan, 2011; Knight-Agarwal et al., 2016; Cunningham et al, 2018). Furthermore, while women in the studies were abundantly aware that being labelled as obese carries stigma, they were not averse to risk management in pregnancy and often welcomed advice to manage weight and introduce other lifestyle changes, either during pregnancy or in the postnatal period (Dinsdale et al. 2016; Laurisden et al., 2018). This demonstrates the continued need to improve the communication techniques of healthcare professionals to ensure conversations about risk are discussed openly and sensitively in order to improve the health of women and babies as well as improve the experiences of pregnancy for women with a raised BMI.

### 3.4.2. Negotiating risk and stigma

Some women identified themselves as healthy, in spite of their BMI status (Keely et al., 2017; Cunningham et al, 2018). The authors consider this an attempt to normalise their weight in order to relieve anxieties about their increased risk of poorer outcomes for themselves and their babies. However, some women acknowledged and reproduced stigmatising rhetoric associated with excess weight about other women whilst also simultaneously resisting the application of that narrative to themselves (Keely et al., 2017; Jarvie, 2017; Cunningham et al, 2018; Norris et al, 2020). Some women struggled with being stigmatised by friends and families which reinforced their own internalised stigma about their bodies (Keenan and Stapleton, 2010; Cunningham et al, 2018). For some women, this created hyper-awareness about the possibility of being further stigmatised by healthcare professionals which led to a tension about whether they wanted to receive information and advice about how to manage their weight or optimise their health in pregnancy (Cunningham et al, 2018; McPhail et al, 2016; Knight-Agarwal et al, 2016). This is reflected in other studies, demonstrating that external identification as "high risk" and "obese" does not necessarily correspond with how women self-identify, or indeed influence their behaviour (Jarvie 2017; Lauridsen et al., 2018; Dinsdale et al., 2016; Nyman et al., 2010).

Consistent reiteration of the risks of obesity in pregnancy by multiple healthcare professionals resulted in women internalising the idea that obesity and by extension, weight management, is a personal responsibility (Dejoy et al., 2016; Atkinson and McNamara, 2017; Dinsdale et al. 2016; Norris et al, 2020; Cunningham et al, 2018). For some women, this was also accompanied with assumptions about how they lived their lives, such as eating fast foods and not exercising. These assumptions were reflected in clinical appointments with healthcare professionals as well as socially with friends and family (Jarvie, 2017). In one instance, a doctor accused a woman of lying about her food intake and recommended that her husband manage her food diary in order to increase data reliability (Dejoy et al., 2016). This anecdote highlights an attitude within maternity care, whereby the anxieties held by healthcare professionals about risk, real or potential, are prioritised over the dignity and humanity of the women they are providing care for. For some women, the categorization of obesity as a risk factor in pregnancy compounded existing financial constraints, as they were now required to attend extra clinic and scan appointments (Jarvie,

2017). The extra costs related to parking, transportation and additional childcare in order to attend these appointments left some women unable to choose healthy eating and exercise classes that were recommended to them during their course of their pregnancy. Non-compliance to these recommendations resulted in reprimanding from both healthcare professionals as well as family members. Jarvie (2017) surmises that these women experienced layers of stigma due to their low socioeconomic status and weight status in pregnancy. Increased medicalization of pregnancy appears to contribute to women perceiving increased stigmatisation from healthcare professionals (Jarvie, 2017; Knight-Agarwal et al., 2016; Norris et al, 2020).

For women who had pre-existing conditions or developed complications, the nature of the relationship with their healthcare professionals changed to one of surveillance. Women reported hypervigilance from healthcare professionals about constant weighing and carrying out extra interventions (Atkinson and McNamara, 2017). For some women, additional appointments and interventions increased perceptions of stigmatization from healthcare professionals and women felt more under scrutiny (Knight-Agarwal et al., 2016; Jarvie 2017). However, some women found ways to navigate or challenge the medicalization of their pregnancies. One woman reported that her excess weight gain was intentional, as a way of defying her doctor's advice (Atkinson and McNamara, 2017). Another woman discussed vomiting after conducting a glucose tolerance test as a way of falsifying results (Jarvie 2017). Another simply expressed pride in having experienced an uncomplicated vaginal delivery, having been told it would not be possible because of obesity (Nyman et al., 2010).

### *3.4.3. Power inequality*

Women were acutely aware of the power dynamic within their relationships with healthcare providers. Women identified poor treatment often and were concerned that this would negatively affect the care they received (Nyman et al., 2010). Some women did not disclose specific concerns or problems because they thought their midwives did not have enough knowledge or interest. Some women did not question their caregivers at all because they believed the healthcare professional "knows best" (Nyman et al., 2010; Dejoy et al, 2016). Some women reported that incorrect assumptions were made and maintained about their habits, such

as eating junk food and lack of exercise. This led women to be less satisfied with their relationship with their healthcare professionals, and in turn, have a negative pregnancy experience (Dejoy et al., 2016; McPhail et al, 2016; Lee, 2020). Some women noted a deterioration in the relationship between themselves and their midwives when it was insinuated that their size hindered their abilities to provide for their babies, for example, that breastfeeding would be difficult (Lindhardt et al., 2013). While some women noted that overall, healthcare professionals were attempting a caring attitude, this was marred when receiving ambiguous advice from various sources (Lindhardt et al., 2013).

These examples demonstrate that risk assessment was often prioritised to the detriment of developing a trusting relationship with the woman. It was not made clear in any of the studies that any of the participants were receiving continuity of care and in some instances, women were seeing a variety of healthcare professionals and different midwives over the course of pregnancy, which led to women feeling unsupported and confused about conflicting advice (Lindhardt et al., 2013; Jarvie 2017). Deterioration in the midwife-mother relationship, usually precipitated by insensitive care, led to increasing ambivalence from women about attending all their antenatal appointments for fear of further stigmatisation (Dejoy et al., 2016; Jarvie, 2017). The deterioration in this relationship was exacerbated when women realised that there were no shared decision-making processes in the course of their pregnancy, due to being seen as "highrisk" (McPhail et al, 2016; Dejoy et al, 2016; Keenan and Stapleton, 2010; Lee, 2020; Furber and McGowan, 2011). For some women, their pregnancies were made more stressful by the realisation that midwifery care could be taken away because they were not seen to be compliant with interventions to monitor their pregnancies (McPhail et al, 2016). The lack of choice around their pregnancies for some women was cemented early on in the denial of midwifery-led care where women were routinely referred for obstetrician-led care without their consent (Mills et al, 2013; Dejoy et al, 2016).

Some women even considered foregoing antenatal care altogether and contemplated foregoing care altogether for their labour and birth. Other women noted that insensitive treatment during pregnancy would extend their abstention from other healthcare provisions beyond pregnancy, such as postnatal checks, and cervical smear checks (Dejoy et al., 2016). Yet some women

discussed having good relationships with their midwives, where they could discuss weight and lifestyle issues (Jarvie, 2017; Nyman et al., 2010). Jarvie (2017) notes that midwives act as "buffers", preparing and supporting women in advance in case weight was discussed at other appointments, to reduce stigmatisation. Some women who accessed midwifery care provision reported good pregnancy experiences, noting that their perception of their bodies and birth had been positively changed (Dejoy et al., 2016).

### 3.4.4 Women want relational and collaborative care

The theme of a desire for personalized care was evident throughout the literature. Many women complained that the care they received was fragmented and often depersonalized due to the focus on obesity management and pathways (Dinsdale et al. 2016; Dejoy et al., 2016). Some participants requested midwifery care in part to receive individualized care but found they had been transferred to obstetric care without discussion, even when there were no complicating factors (Dejoy et al., 2016). Medicalised care was often relayed to women as the safest course of action because of the assumption that complications would occur and with this was came the expectation that women would be passive and accepting of this type of care. However, many women found this paradigm of care disempowering (Furber and McGowan, 2011). In some instances, many women requested and sought midwifery-led antenatal care, as midwives were identified as being the most able to provide the personalized and individual care that was strongly desired (Mills et al., 2013). Relationships with midwives were also identified as a source of support and a "buffer" for stigmatizing behaviour from other healthcare professionals (Nyman et al., 2010; Jarvie, 2017).

Some women experienced severe material deprivation and faced serious problems related to appropriate housing and personal safety (Jarvie, 2017). Many of the participants in this study found that due to their financial constraints, they were not able to follow dietetic advice closely, demonstrating that standardized information about diet and exercise was not always necessarily a priority in the context of these more acute issues. Furthermore, these women identified that the standard recommendations were not realistic given their personal financial circumstances and expressed a need for collaborative care with a trusted healthcare professional that

recognized and addressed their individual lived experiences (Jarvie, 2017). While women accepted that more intervention might be required for their pregnancies due to their higher weight, they questioned the necessity of conducting those interventions at hospitals, expressing a preference for more of their care to be carried out in the community with their named midwives (Jarvie, 2017). Women perceived their community midwives as being effective support for them. In countries where midwifery-based care is not the norm for "high-risk" pregnancies, women still reported that they valued relational continuity with their main healthcare professional (Lee, 2020; McPhail et al, 2016).

Women also spoke of the desire to be seen as an individual, with their behaviours and own bodily knowledge acknowledged by the healthcare professionals caring for them (Dinsdale et al., 2016). Sensitivity and personalized care may increase satisfaction with care as well as have positive clinical implications (Dejoy et al., 2016). Keely et al. (2017) conclude that it is essential that healthcare professionals engage women in non-stigmatising relationships to discuss issues and provide public health support in a sensitive way, through the development of a relationshipcentred approach to pregnancy care, focused on individual needs and concerns rather than a risk-focused approach to the pregnancy.

# 3.5 Discussion of key findings

This section will discuss the key findings from the four themes in more detail and link the themes back to the wider literature.

Almost all the studies identified communication issues between women and their healthcare professionals. Communication issues appeared at both ends of the spectrum with regards to discussing weight in pregnancy where either the risks of obesity were not conveyed to women at all, or the risks were overemphasised to the exclusion of other pregnancy concerns. The effects of this may be compounded due to lack of relational continuity with one lead healthcare professional. Women with a raised BMI may be more exposed to fragmented care as they are considered to have additional or complex needs in pregnancy, requiring additional input from

other healthcare professionals (Denison et al, 2018). In addition, frequent reiteration of the risks of obesity in pregnancy emphasise a weight-centric approach to health, rather than a womancentred approach (Griffiths et al, 2023). Continuity of care models where the midwife remains responsible for care co-ordination in more complex pregnancies could alleviate concerns around inappropriate or excessive discussions around the risks of obesity by multiple healthcare professionals.

Women were aware of the tension of being able to communicate risks regarding weight status in pregnancy sensitively but were disappointed when weight was not discussed at all. Current NICE guidelines require healthcare professionals to gauge a woman's preferences and values (NICE, 2021A). However, others have noted that antenatal appointments can be dominated by clinical framing and discussions of risk, which can obscure woman-centred experience (Nicholls et al., 2021). Utilising language appropriately is a crucial component in reducing stigma in difficult or sensitive conversations. Healthcare professionals risk delivering vague or incorrect public health messages by using ambiguous language or avoiding the topic altogether. As previously discussed in Chapter 2, the associated risks of BMI and adverse outcomes in pregnancy are mostly based on observational studies and omit the fact that many women with a raised BMI will have healthy pregnancies (Gibbins et al, 2023). Gibbins et al (2023) suggest that risk should be communicated in a way where women with a raised BMI understand that most risk factors have weak associations with the outcome and often are poor predictors of pregnancy outcomes. In addition, the high likelihood of a healthy pregnancy should be emphasised, even in the presence of risk factors.

In the context of pregnancy, weight management is often complicated by women's conceptions of themselves and their identity. Many of women identified themselves as healthy or normal despite being categorised as "obese" by healthcare providers. This has been reflected in other works indicating that women with a raised BMI do not identify as a problem requiring resolution (Unnithan-Kumar, 2011). Warin et al. (2011) argue that women knowingly resist and reject the medicalised definition of "obesity" because of its medical association with disease and death, and its societal association with self-indulgence, laziness and deviance. In the context of pregnancy, larger bodies perceived as being both at risk, and risky to the foetus, this rejection

takes on a deeper meaning. Pregnant women's refusal of being defined as obese can also be seen as a rejection of a "bad motherhood" status (Warin and Gunson, 2013). For women in these studies, normalising their weight in pregnancy enabled them to feel less anxious about their increased risk of poorer outcomes, indicating that this may be a reflexive measure in response to being stigmatised about their weight in pregnancy. In addition, it allowed them to transcend normative ideas about bigger bodies (Keely et al., 2017; Dinsdale et al., 2016; Lauridsen et al., 2018). This disparity between the clinical diagnosis of obesity and women's selfidentification of their selves and bodies has been highlighted elsewhere (Warin et al., 2011; Cordell and Ronai, 1999; De Brun et al, 2014). The disparity in self-identification and external identification of obesity poses a challenge to healthcare professionals, often working within healthcare systems that favour biomedical knowledge over other knowledge bases. Within the specific context of obesity management, midwives may feel compelled to follow a risk-oriented approach to care provision but often this is at odds with a woman-centred approach (Knox et al, 2018; Griffiths et al, 2023).

However, the intersection of mothering, identity and obesity is crucial for healthcare practitioners to understand, in so much that reproducing certain discourses around the necessity of managing weight, exercising more and dieting might be disempowering for women when these instructions do not align with their own understanding of the correlation between weight and health specifically in pregnancy, and crucially, how this affects their conceptions of "good motherhood" (Warin et al., 2011). Healthcare practitioners need to consider whether pregnancy really is a "teachable moment". While authors have noted that women report foetal wellbeing is a highly motivating factor to implement change in pregnancy (Olander et al, 2015), it also appears that women often are not compliant with health intervention programmes in pregnancy and cite many pregnancy-specific and pragmatic barriers to engagement (Poston et al, 2015; Olander and Atkinson, 2013). In addition, authors have also noted that consideration of gender roles is required when implementing health interventions in pregnancy. Namely women continue to be the primary caregivers to children therefore health interventions adopted during pregnancy may need to account for adapting family routines in order for women to be compliant in that intervention (Lauridsen et al, 2018).

A few of the studies identified that Western cultural ideas of body shape and size dominated women's conception of obesity as stigmatising (Nyman et al., 2010; Mills et al., 2013). Almost all of the studies indicated that women's experiences of weight stigma were also based on cultural, social or familial norms as well as within medical encounters. Orbach (2006) notes that a Western cultural norm for thinness continues to prevail, mostly in the guise of health. For some participants who were from cultures where larger bodies were revered and normalised, the women demonstrated ambivalence about their size. None of the studies identified that their participants reproduce stigmatising rhetoric based on Western cultural ideals of the body and thinness, indicating a possible homogeneity in sampling and recruitment. This highlights a need for diversity in participant sampling when attempting to understand the breadth of women's experiences of maternity care.

Women were patently aware of the unequal power dynamic with their healthcare providers. The inequality in power made women feel that their care would be affected if they spoke out. Much of the power inequality related to the weight given to different knowledge bases. Some women were aware of the power their healthcare professionals held in defining their health using a biomedical paradigm, rather than by their lived experience. Being defined as "high risk" by their healthcare professional because of weight status could limit women's decision-making processes such as access to midwifery care (McPhail et al., 2016). Jordan's (1997) work on women in labour highlighted that biomedical knowledge is often maintained at the top of the information hierarchy, which legitimises the power inequality between a woman and the healthcare professional, in that the healthcare professional is considered to be in possession of the most legitimate form of knowledge in the context of that interaction, and this governs the interaction. Women implied that the power inequality within these relationships contributed to a poorer care experience. Whilst many of the women in these studies were White, power inequality in healthcare provider relationships have been implicated in widening health inequalities for marginalised women (Rayment-Jones et al, 2019; Wong, Gishen & Lokugamage, 2021). Other authors have argued for decolonising medical practice and embracing medical pluralism to dismantle uneven power dynamics between providers and patients (Wong, Gishen & Lockugamage, 2021). Relational care through a mCOC model may also help to deconstruct

unequal power dynamics between a woman and her midwife, as this model of care promotes collaborative working practices between a woman and her healthcare providers (Sandall et al, 2016). Where an appropriate intervention or other options become available, the power dynamic between the midwife and mother shifts, as the mother becomes the decision maker and driver for change (Jones and Jomeen, 2017).

Midwives were identified as a source of support and a "buffer" for stigmatizing behaviour from other healthcare professionals (Nyman et al., 2010; Jarvie, 2017). However, women noted that midwives were not exempt from making harmful assumptions about health behaviours and overemphasising the risks of obesity, which increased their ambivalence towards the relationship. Researchers have noted that a failure to develop a trusting relationship with women can shift the relationship from attentive to surveillant (Rayment-Jones et al., 2019). In the context of obesity, researchers have noted that midwives find it challenging to care for this group of women due to inadequate resources and confusing guidelines (Schmied et al, 2011; Murray-Davis et al, 2022). Weight stigma has been cited as a reason that midwives find it difficult to effectively communicate the risks of obesity (Christenson et al, 2018; Schmied et al, 2011. This was reflected in some of the studies here where women observed their midwives were embarrassed to raise the issue, even though women expected conversations about weight management (Cunningham et al, 2018; Norris et al, 2020; Lauridsen et al, 2018). However, women consistently spoke of the desire to be acknowledged beyond the classification of obesity (Dinsdale et al., 2016; Mills et al., 2013; Jarvie 2017). Healthcare practitioners often conflated the risks of obesity with the certainty of poor outcomes therefore women experienced increased medicalization of their pregnancies, which worsened women's experiences of care (Dejoy et al., 2016; Furber and McGowan, 2011). Relational continuity may reduce what women perceive as inappropriate communication about risks and help foster a sense of woman-centred care by focussing on the holistic aspects of her care needs, which may very well encompass weight management discussions. This has been found elsewhere in the wider body of literature on positive midwife-mother relationships (see Sandall et al., 2016; Hunter, 2006).

Some of the women in these studies demonstrated resistance to social and cultural expectations to engage in self-monitoring and self-regulating of their health behaviours to reduce risk to

themselves and their babies. This has been found elsewhere in the literature (Lupton, 1999). Others have noted that attempting to elicit women's preferences and values can be challenging for healthcare practitioners but failure to do so strips women of their autonomy in the decisionmaking process (Nicholls et al., 2021). This may have the unfortunate consequence of increasing the risks of poorer outcomes for these women as lack of routine antenatal care is associated with adverse maternal and neonatal outcomes (Petrou et al., 2003; Knight et al, 2022). Furthermore, the prevalence of authoritative biomedical knowledge within clinical practice denies women the chance to understand and experience pregnancy holistically and enforces a hierarchical relationship between women and their primary care providers (Jordan, 1997). Personalized care and relational continuity may increase satisfaction with care as well as have positive clinical implications, which currently aligns with national maternity policy strategy for maternity care in the UK (National Maternity Review, 2016; NHS England, 2023).

# 3.6. Strengths and Limitations

It is not entirely necessary to locate every available study if all concepts or themes have been exhausted with initial findings, and conceptual saturation is a feasible and appropriate aim when planning a search strategy (Thomas and Harden, 2008). This approach was considered in the development of this review. The majority of the studies demonstrated some level of researcher reflexivity, discussion of variant themes, evidence of researcher immersion within the data, and how consensus was reached amongst the researchers. Limitations of the studies were acknowledged by every study except one (Nyman et al., 2010). For several of the studies the transparency of the research process was clear, thereby increasing trustworthiness of the work (Jarvie, 2017; Dinsdale et al., 2016; Mills et al., 2013; Nyman et al., 2010; Knight-Agarwal et al., 2016; Dejoy et al., 2016; Norris et al, 2020). This review has been strengthened using an appropriate critical appraisal tool to assess the quality of articles reviewed and by using systematic methods for thematic synthesis, as outlined by Thomas and Harden (2008). In addition, it synthesises the relevant literature to date and utilises an intersectional feminist lens to critique and identify gaps in the knowledge base.

Many of the studies identified the homogeneity of their samples as a limitation, specifically that racial and ethnic diversity was lacking (Dejoy et al., 2016; Keely et al., 2017; McPhail et al. 2016; Jarvie 2017; Knight-Agarwal et al. 2016; Nyman et al. 2010). Please see Appendix 3 where details of the characteristics of the samples in the studies have been included in the critical appraisal. Yet some studies specifically excluded women who did not speak the native language, thereby potentially increasing bias and reducing diversity amongst their sample. This was not addressed by any of the studies as a limitation (see Nyman et al., 2010; Furber and McGowan, 2011; Lindhardt et al., 2013; Dinsdale et al., 2016; Cunningham et al, 2018). Most of the recommendations called for further research that included more diverse demographics to elicit a better understanding of the social representation of obesity.

An intersectional lens is crucial to understanding and challenging processes of privilege, marginalisation and discrimination that exist within healthcare systems that lead to poor outcomes for certain women and babies (Rayment-Jone et al., 2019). Many of these studies considered obesity as the singular lens into women's lived experience of their pregnancy. Jarvie's (2017) work stood alone amongst the articles reviewed in acknowledging a clear link between deprivation and obesity and how this impacted women's experience of maternity care. Lee (2020) acknowledged her multiple identities, but from the perspective of privilege, which she found impacted her interactions with healthcare professionals. She theorises that the care she received was less disrespectful because it was known to healthcare professionals that she had a doctorate degree and therefore was assumed to have a high intelligence level. McPhail et al. (2016) allude to the intersection of obesity with working class status and race, highlighting harmful assumptions by healthcare professionals about the kind of women most likely to mismanage their risk status in pregnancy (McPhail et al., 2016). Pre-existing longstanding assumptions made by healthcare professionals about marginalized groups of women who access maternity services have been found elsewhere in the literature (McCourt and Pearce, 2000).

None of the studies reviewed discussed whether women had access to a midwifery continuity of care model. As previously mentioned in chapter one, several authors have demonstrated that having relational continuity with healthcare professionals has been shown to have a positive effect on women's experience of pregnancy as well as clinical outcome (Hunter, 2006; Sandall et

al., 2016; Saultz and Albedaiwi, 2004; Saultz and Lochner, 2005). This was also a recommendation following the review by Saw et al (2021). Globally, midwives are recognised as best placed to provide this level of care for women (WHO, 2016). This is also reflected in current UK national maternity policy (National Maternity Review, 2016; NHS England, 2023). This is particularly prudent for women of colour, who often experience worse outcomes for themselves and their babies and experience a greater disparity in expectation and experience of care than their white counterparts (Knight et al., 2020; Rayment et al., 2019; McCourt and Pearce, 2000).

### 3.7 Conclusion

In this literature review, I have explored the current evidence regarding the antenatal care experiences of women with a raised BMI. Four themes developed upon reviewing the literature are as follows: spectrum of disordered communication, negotiating risk and stigma, power inequality, women want relational and collaborative care. Appraising the current evidence with reference to the wider literature base has identified gaps in the evidence base regarding women with a raised BMI and their experiences of antenatal care.

This literature review demonstrates that women with a raised BMI who access standard antenatal care overall have a poor maternity care experience. Much of this is due to weight stigma and a narrow focus on medical safety rather than focussing on individualised care that centre women's holistic experience of pregnancy. While the studies included in the review reported in this chapter highlight the vital interrelatedness of stigma with maternity care outcomes, across almost all the studies obesity is situated as a public health concern that required action or resolution. Some of the recommendations were derived from this situated context, with consistent recommendations about encouraging women to adopt health behaviours to improve outcomes. However, systematic reviews have consistently shown limited success in pregnancy interventions for women with a raised BMI (Oteng-Ntim et al, 2012; Dodd et al, 2010). There is a clear need to expand the field of research that critically approaches "obesity" whilst exploring the experiences of women with a raised BMI navigating interactions and decision-making processes within antenatal care provision. There is also a clear need to

explore alternative antenatal care provision to understand whether facets of these models can improve the maternity care experience for women with a raised BMI. This PhD study represents an opportunity to add to the knowledge base on maternity care provision as experienced by women with a raised BMI by exploring whether GANC has the potential to improve their care experiences. I will discuss how this may be achieved further in the next chapter by outlining the methods used in order to obtain and analyse the relevant data, and the theoretical frameworks used to govern the data analysis.

# Chapter 4 – Methodology, Research Design and Methods

## 4.1 Introduction

This chapter outlines the epistemological underpinnings of my research and details specific research design and methods choices. Deciding on the methodology and appropriate methods was an ongoing and iterative process which has helped me to understand various methodological approaches, and which best suited my research questions. This chapter starts by considering the rationale for a multi-method qualitative design. I then describe the theoretical approaches adopted in this study before discussing the use of each data collection methodparticipant observations, semi-structured interviews, and in-depth semi-structured narrative interviews. The methodological approach adopted with each method is described. Details of how the research design, recruitment strategy and sampling were adapted because of the pandemic have been discussed in the COVID-19 impact statement appended to the front of the thesis. Sampling techniques and the recruitment strategy are then described. Study aims and rationale are outlined and then the process of ethical approval for the project is discussed. I move on to explain data analysis of the different datasets and how the datasets were synthesised to create themes and meta-themes. The chapter concludes by summarising ethical considerations as well as outlining participant demographics. Mini biographies of the women who agreed to be interviewed have been provided.

## 4.2 Research Design

The literature review in the previous chapter identified gaps and limitations in the current evidence base around the maternity experience of women with a raised BMI. In particular, the literature highlights the dominance of white, middle-class women's experience of maternity care. Very little is known about the experience of women with a raised BMI with pre-existing marginalised identities, and even less is known about GANC and whether it can be beneficial for women with a raised BMI, beyond the focus of weight management. It has been suggested that pregnancy and the puerperium is a significant time for many women in relation to their identity, body image and weight change and these can have implications for their health, as well as their babies (Johnson, 2002; Warin et al., 2008). I am particularly interested in how women with a raised BMI navigate pregnancy and interactions with healthcare professionals, and whether facets of GANC support or hinders this. Much of the research to date positions services and interventions for women with a raised BMI as supporting them to adopt of health behaviours, despite there being little evidence of clinical effectiveness. This also assumes that women with a raised BMI are not already engaged in healthy behaviours prior to pregnancy. This position supports a cultural legacy of medical safety prioritisation often to the exclusion of other needs. The Pregnancy Circles trial explores other ways of supporting women to have healthy pregnancies through facets such as peer support, self-autonomy, and a comprehensive contextdependent antenatal education (Wiggins et al, 2020). Therefore, this represents a rare opportunity to engage with women with a raised BMI regarding their experiences of a novel pregnancy intervention that is not focussed on weight management. Qualitative research is concerned with exploring the meaning of phenomena and qualitative researchers seek to understand the entirety of an experience (Aveyard, 2011). The research study was qualitative in design as this was the most appropriate way to seek understanding of how women with a raised BMI made sense of their lived experience of pregnancy whilst receiving GANC.

A primarily narrative approach focusing on women's experiences in GANC was utilised, but I used different qualitative methods to explore key areas of interest. I collected data through participant observations of the intervention (Pregnancy Circles), semi-structured interviews with midwives facilitating the intervention, and narrative interviews with women who have received the intervention. Data collected from the participant observations informed the creation of the topic guides for interviews with women and midwives and allowed me to observe interactions between women and midwives, as well as observe interactions within the group dynamic. Interviews with midwives contributed a different perspective on the experience of the intervention. I was particularly interested in exploring the benefits and challenges in accommodating and caring for women with a raised BMI using this model of care. Interviews with women highlighted their lived experiences of pregnancy and of GANC.

I combined various research methods as I intended to explore the interplay between lived experiences of women as well as evaluate the functions of a health intervention that has a political and social context of its own. Morse (2009) advocates for the use of a mixed methods approach for qualitative inquiry alone. She argues that supplementary components that are conducted simultaneously or sequentially can better address a single enquiry that cannot be answered by one method alone. Further to her argument, using various methods can increase the depth and scope of analysis as datasets may overlap but more likely would inform or facilitate understanding of another facet (Morse, 2010). However, she argues that utilising multimethods approach sometimes requires researchers to analyse the data sets separately because the data are from various sources and require various levels of abstraction and synthesis. This hybrid analysis approach was adopted as some of the thematic analysis from the participant observations informed the creation of the topic guides for the interviews with women and midwives. This was also chosen for pragmatic reasons as I took maternity leave shortly after conducting the participant observations, so analysis of the various datasets took place asynchronously. Once themes were developed from each data collection method separately, the themes were mapped for relevance and similarity, and eventually synthesised to develop the final meta themes.

Data saturation is often used in qualitative research as the prevailing concept of determining the sample size of a study (Malterud et al., 2016). This has had particular sway with proponents of thematic analysis, defined as the point at which no new themes or codes "emerge" from the data. However, the concept of data saturation is closely linked to grounded theory methodology and as such, is often used haphazardly by qualitative researchers, demonstrating poor transparency in their methods (Braun and Clarke; 2021). Information power has been suggested as a more appropriate model of determining sample size for qualitative study, utilising five impactful items that will affect the sample size- study aim, sample specificity, established theory use, dialogue quality and analysis strategy (Malterud et al., 2016). I used information power to determine my overall sample size for interviews with midwives and women, and this was done iteratively throughout as I commenced analysis whilst carrying out some of the interviews. With the midwife interviews, it became apparent that similar themes were arising in the interviews

and of particular significance to me was the absence of speaking about women with a raised BMI in our dialogue. This accentuated and confirmed some themes that I had developed from the participant observations previously. Utilising critical feminist theory, I established that midwives were uncomfortable discussing and reflecting on situated contexts, such as care of women with a raised BMI within a group setting. They frequently spoke about women in a more general sense and alluded to care being the same regardless of shape and size. Initially I found this discouraging and considered that my questions were too generic and perhaps that midwives were misinterpreting my questions but over time and speaking with more midwives, I concluded that this was a relevant finding in and of itself and that this satisfied the criteria for both dialogue quality and study aim. I felt information power was achieved despite the fact this topic was not raised as I had expected.

For the interviews with women, I found it more challenging to determine sample size through information power. Initially this was reluctance on my part to include women who had their Circles interrupted. It soon became apparent that I would not be able to speak to enough eligible women who had completed the full programme of GANC, and I would not achieve data adequacy with this sample specificity. Invariably many of the participants wanted to discuss COVID–19 as a disruptive presence in their lives, either in the provision of maternity services, or in the loss of the anticipated postnatal period. It became a challenge for me to discern clearly how to answer my research questions without COVID becoming a confounding factor. I felt more interviews were required as the dialogue quality became less relevant for my study aims. During the interviews, it became apparent that for two of the women, although they had been recruited to Pregnancy Circles, did not attend a single Circle. Their interviews would have less relevance than the other women's so I continued to recruit, although I retained their interviews in the sample as they still provided relevant understanding of the antenatal care experience of women with a raised BMI who had been offered group care.

# 4.3 Theoretical frameworks

### *4.3.1. Strong objectivity*

I used Harding's (1991) concept of "strong objectivity" to frame my epistemological approach to the various datasets. Her work is grounded within feminist theory and can be considered appropriate to explore the lived experiences of women. Her work focussed on the contrast of scientific objectivity as she posited that researcher bias is an integral part of data collection, shaping knowledge creation through the researcher's lens (Harding, 1991). Her approach favours three central claims; that knowledge is socially situated, marginalised groups have an advantage in spotting biases that dominant groups cannot see because of their own influence and power, and that knowledge production should be through marginalised perspectives (Harding, 1992). Furthermore, this approach values researcher reflexivity and positionality and argues that this creates "stronger objectivity" than researchers claiming neutrality (Saukko, 2003). Harding's framework also argues for rigorous and systematic methods including critical evaluation, collection and assessing of different perspectives, especially those who are marginalised, which creates research that is more scientifically comprehensive and allows the researcher to make conclusions that encompass political and ethical implications (Harding, 1991; Saukko, 2003). Harding's work aligns with what Riessman (1993) recognises as the circularity of an epistemological position that favours the researcher's reflexivity and personal values thereby situating the researcher within the construction and development of the work.

### 4.3.2. Critical Feminism

Anderson (2005) writes that a feminist epistemology seeks to produce knowledge from a woman's perspective and that the concept of situated knowledge is central to feminist epistemology. Haraway's (1988) theory of "situated knowledges" suggests that knowledge is contextual because it is produced by positioned actors working in various locations through differing relationships. What can be known and the way it can be known is subject to the situation and the perspective of the knower. Situated knowledge may be considered more limited than theoretical objectivity but provides a richer and deeper understanding of individual experiences (Haraway, 1988). However, she advocates that situated knowledge is about

communities, rather than isolated individuals. Furthermore, she provides a critique of positivism, in demonstrating that a rhetoric of truth is often used to delegitimise embodied accounts of marginalised people's experiences. The concept of situated knowledge is particularly poignant for the discourse on obesity particularly in westernized cultures where "biological fact" symbolizes the possession of a particular form of knowledge and therefore is posited and legitimised as truth (Warin et al., 2011). This work has been expanded by Jordan (1997) in her seminal work on authoritative knowledge and is particularly meaningful for maternal health researchers and birth professionals. Jordan (1997) argues that medical knowledge supersedes and delegitimises other potentially relevant sources of knowledge. In the context of Jordan's work, women's 'innate knowledge' of their bodies during labour were problematised by the staff caring for them. Her work highlighted the ongoing tension between women consciously accepting medical knowledge as authoritative yet simultaneously experiencing their bodies instinctively resisting the need to submit to authoritative knowledge that was being enacted by healthcare professionals. Bordo (1993) argues for the situatedness of the body, for what she refers to as "the authority of our own experiences". A departure from early feminist critiques that sought to classify binaries of oppressor/oppressed or victimizer/victim, Bordo's work follows a newer feminist perspective that seeks to highlight the tensions of women's collusions with patriarchal cultures whilst simultaneously resisting them. This has been observed in the wider literature (Atkinson and McNamara, 2017). Therefore, I felt that this approach would be particularly useful in understanding interactions between midwives facilitating group care and women accessing care through this model.

### 4.3.3 Cultural safety

There is a growing recognition that cultural safety is a key feature of equitable healthcare, shifting away from concepts of cultural competency or cultural awareness (Curtis et al, 2019; Wong, Gishen & Lokugamage, 2021). Presuming biomedical knowledge to be acultural has led to an absolution of responsibility and recognition in the role healthcare systems and institutions have played in perpetuating systematic marginalisation of Black and ethnic minority populations alongside other groups that have also been traditionally sidelined (Wong, Gishen & Lokugamage,

2021). Furthermore, within medical research culture, quantitative research is considered more rigorous than qualitative research, which has led to the prioritisation of objective knowledge production to the neglect of subjectivised knowledge such as lived experience.

The key difference between concepts of cultural awareness and cultural competency and that of cultural safety is the notion of power. In this way, cultural safety can be understood as a paradigm shift, away from knowledge and towards power. Unlike cultural competency or awareness, cultural safety shifts focus away from the individual but towards healthcare providers and healthcare institutions (Wong, Gishen & Lokugamage, 2021). Cultural safety highlights the power differentials within society and the job of the healthcare professional is to reflect on interpersonal power differences and how the transfer of power can facilitate appropriate care for marginalised individuals using healthcare resources. Cultural safety acknowledges that there are barriers to clinical efficacy that arise from the inherent power imbalance between healthcare providers and their clients. Cultural safety aims to achieve better care through five basic tenetsbeing aware of differences, utilising decolonisation, consideration of power within relationships, reflective practice implementation, and allowing the individual receiving care to determine whether the clinical encounter was safe (Curtis et al, 2019). In the context of maternity care provision, there are elements of cultural safety that align with core midwifery philosophy and praxis- woman-centred care, respecting difference, shared decision-making processes and reflective practice. Within the context of public health, achieving equity in healthcare remains a core interest to midwives and the health service (NHS England, 2023). In addition, there are facets of GANC, such as personalised care, relational continuity, collaborative and facilitative dynamics, that can potentially support the core tenets of cultural safety. As women with a raised BMI are often problematised in medical literature, with medical safety being highly prioritised to the exclusion of women's desires and needs, using cultural safety as a theoretical framework might have relevance for understanding the significance and power of GANC for women with a raised BMI. This approach may also help healthcare providers and educators to envision and embed forms of knowledge that centre patient experience to improve outcomes and safety.

### 4.3.4 Intersectionality

Intersectionality, a term coined by legal professor Kimberle Crenshaw, is a theoretical framework that explores how an individual's social and political identities, such as gender, ethnicity, race, class, and sexuality, interact and create different modes of discrimination or privilege (Crenshaw, 1991). This notion has gained prominence within feminist and critical race studies, having been dubbed "the most important theoretical contribution" to women's studies (McCall, 2005). It is considered a multidisciplinary approach for analysing the experiences of identity and oppression. It challenges and rejects the 'single-axis framework' that is often used in studies that investigate and reveal the experiences of marginalised identities (Nash, 2008). This is particularly useful when considering the lives of women with a raised BMI during pregnancy as obesity intersects with other marginalised identities, such as ethnicity and socioeconomic status, and when seen together, this increases the risk of maternal mortality and morbidity (Knight et al, 2018).

Increasingly, intersectionality is emerging as an analytical tool for healthcare research and public policy, especially that which aims to understand and respond to health inequalities (Hankivsky and Cormier, 2010). An intersectional lens is particularly appropriate when attempting to make sense of the power relations between multiple actors operating across different levels of a healthcare system because intersectionality demands focus on understanding the interactions of multiple factors or social categories, rather than considering each one in isolation. Therefore, an intersectional approach can help promote understanding of the drivers of inequalities within healthcare systems and the population served. Within the context of maternity care, intersectionality provides a clear framework to understand how women with multiple identities experience their pregnancies. If the purpose is to understand the diversity of women's experiences, it must be understood that sexism, racism and classism are interconnected and therefore analyses that focus on a singular axis of marginalisation risk poor transferability and reliability (Rayment-Jones et al, 2019).

# 4.4 Overview of methods

#### 4.4.1. Participant observations

Participant observations can be utilised to increase the validity of a study by adding layers of meaning and depth to the context of the focus of study (DeWalt and DeWalt, 2010). In conducting participant observations, I hoped to observe relationship-building between the midwives and the women, the use of peer support by the women as well as decision-making around risks and information gathering between women and midwives. In relation to women with a raised BMI, I was particularly interested to observe conversations about behaviour change and perceptions of their bodies in pregnancy. The existing literature on the maternity care experiences of women with a raised BMI highlight factors such as incorrect equipment size, difficulties in auscultating the foetal heart and communication difficulties as increasing the likelihood of a poor experience. I was also interested to see whether some of these issues were found in the group dynamic and if so, how the midwives and women dealt with this.

Prior to undertaking participant observations, I was aware that I would be embodying multiple identities that would align with women in the Pregnancy Circles sessions. As a current practicing midwife, I am familiar with routine maternity care provision therefore this gave me an advantage in undertaking observations, in that I was aware of what was omitted, specific clinical care that is offered at various antenatal appointments, what was considered normal or requiring further investigation and/or referral, and conversations that could be reasonably expected during pregnancy and at each session. Equally, as a pregnant woman having my first baby, I was undergoing maternity care provision of my own so I could deeply empathise with the women in the Pregnancy Circles, and would often consider their fears, concerns, and curiosities about pregnancy and beyond. I am also a fat woman, and my own pregnancy was defined as "high risk" because of my BMI. Therefore, I had personal as well as professional insight into the experience of referrals, extra interventions, and additional surveillance during pregnancy.

I decided that my identity as a researcher took precedent over the other identities in this particular context. I did not disclose that I was a midwife to the women in the Circles for a

number of reasons. I did not want to undermine the developing relationships between the women and the midwives as the mother-midwife relationship is one of trust (Kirkham, 2010). I, therefore, did not want to appear as though I was undermining their knowledge or authority when I was there specifically in a research capacity. In keeping with my regulatory body's code of conduct, it is also important to note that I was not registered to practice at this NHS trust or region of England, therefore I could not give advice or counsel these women in a professional manner (NMC, 2019). There are variances in practice and guidelines between various NHS trusts therefore by not disclosing my profession, I did not risk women looking to me as a source of information about trust-specific policies and practices (for example, I do not know what gestation a woman with gestational diabetes might be offered an induction at this trust, although I do at my own trust). This meant that I reduced the risk of compromised/compromising care to these women because I was not offering advice or recommendations outside of my professional remit.

During the course of the participant observations, I transitioned from the second to the third trimester of pregnancy. No doubt the corporeality of my pregnancy contributed towards the construction of my identity as a mother (Church, 2019). This mandated my approach to conducting the participant observations, in that I positioned myself as observer-as-participant (Kawulich, 2005). Upon arrival, I identified myself as a researcher to reduce confusion to either the midwives or the women as to whether I was a participant in the trial. This was particularly useful for the earlier sessions where women were still getting to know each other. On at least one occasion, some of the women assumed I was a participant in their group but had simply not attended the first few sessions. Women were given an opportunity to decline participation within the participant observations prior to the start of each session. If the consensus was that if one person was not happy to participate and be observed, I would not observe the session and would attempt to observe another. Fortunately for every session I attended, I was able to observe in its entirety. My intention was to engage in passive participation of the Circles, in that I would observe the event and take notes without being immersed in the situation (Siegel, 2018). However, this was not always possible to maintain as some midwives were keen to involve me in some of the activities, especially when there were less women present than anticipated. In these

situations, I would adopt moderate participation interchangeably but then revert to passive participation when appropriate to do so. Although I sat in the Circle for all of the observations, I did not take part in discussions as much as possible and did not join in discussions or activities as there were often multiple things happening at the same time (one-on-one time in the corner, repeat blood pressure readings, Circle time) and I felt that taking part in the Circle exclusively would mean that I would miss out on what was happening in the room elsewhere. However, sitting in the Circle was advantageous for multiple reasons – it was often placed in the middle of the room so I would have a good vantage point of the whole room and of the different activities taking place simultaneously. I was also able to see clearly what was happening in the Circle, including the direction and flow of conversation.

### 4.4.2. Semi-structured interviews with midwives

Semi-structured interviews are a common data collection method used in qualitative research (DeJonckheere and Vaughn, 2019). Data is collected through the creation of a dialogue between the researcher and the participant. The research is guided by a topic guide or interview schedule, which will contain follow up questions and prompts to enable the researcher to probe more and allow the participant to explore their thoughts and feelings about a specific topic (DeJonckheere and Vaughn, 2019). This is a particularly suitable data collection method in health research as a tool to understand the thoughts and experiences of individuals.

GANC has been shown to increase job satisfaction amongst midwives and help midwives develop good relationships with the women they cared for (Hunter et al., 2018a; Lazar et al, 2021). Interviews with midwives who facilitated Pregnancy Circles gave an insight into their communication strategies for discussing potentially sensitive topics in group settings, the practical applicability of GANC for mixed risk women and exploring some of the challenges of caring for women with diverse needs. In addition, the interviews explored midwives' perceptions of acceptability and feasibility of GANC and identified potential factors that might support or hinder the effectiveness of the model for women with a raised BMI. As mentioned previously, my original research design did not include interviews with midwives but instead was developed as a responsive measure to the limitations imposed by the COVID-19 pandemic.

### 4.4.3. Narrative interviews with women

Narrative interviews are a data collection method that prioritises a relational mode of interviewing over the typical effort to fragment lived experience into thematic categories as found in semi-structured interviews (Riessman, 2008; Kartch, 2018). Narrative interviews allow the participant to narrate their experience rather than emphasizing a question-answer format as seen in semi-structured interviews. The roles of the researcher and participant are reconceptualized in this way and shifts from interview-interviewee to narrator-listener (Kartch, 2018). This type of data collection was particularly suited to my research questions as I sought to understand the lived experience of my participants who have been recruited to a midwifery-led antenatal care intervention. As with the interviews with midwives, the interviews with women are also guided by a topic guide although the style of interviewing varied – women were encouraged to narrate their experience, with little interruption from the researcher. I prompted when asked to do so and when it felt necessary during the interview. I remain keenly aware of the challenges that arise from attempting to conduct narrative interviews. Squire et al (2014) highlight that a common problem that can arise through narratives is the reinforcement of social exclusion of marginalised individuals. Researchers risk romanticising their participants' stories which can lead to overlooking omissions due to failures of memory and seeking to be seen as socially desirable. I attempted to mitigate this through consistent supervision and immersing myself in the data by listening back to the interviews multiple times and reading through the interview transcripts. I also took notes and reflected on my interviewing style which evolved during the period of recruitment. The narrative interviews were the largest dataset and to make sense of women's experiences, they encompass the primary focus of my enquiry, whilst the semi-structured interviews and the participant observations can be understood to be complementary datasets.

### 4.5 Sampling and Recruitment

### 4.5.1 Participant Observations

More than one in five women in the UK have a BMI >30kg/m2 during pregnancy (Denison et al., 2018). I anticipated that many, if not all the Circles observed would have at least one pregnant woman with a raised BMI. I chose one site in London to conduct participant observations. During the time that participant observations were taken (February to May 2019), there were three sites that were actively participating in the trial. I chose a site that was already well established, had high recruitment to the Circles, and was running the most Circles at that time. This choice was partly in anticipation of being able to observe a variety of sessions, midwives, and participants. The site was also chosen for practical reasons, as I needed a site that I could travel to regularly and easily during my third trimester, and this site was in the same city I was based in. It became apparent to the research team that this site ran a specialist antenatal clinic, known as "Pregnancy Plus", for women with a raised BMI because of the local population served. Through discussions with one of the midwives who runs this clinic, we were reassured those women with a raised BMI were not being excluded from participating in the Pregnancy Circles trial and that the clinic was an "add-on" service rather than a whole pathway. Therefore, I was confident that I would be observing women with a raised BMI participating in Pregnancy Circles because of the population served and that collecting this form of data would be useful for my analysis. The Pregnancy Circles research team recognised and acknowledged that undertaking observations at this site would be an opportunity for reciprocity, in that the researchers would be able to provide synchronous feedback to the facilitating midwives and troubleshoot aspects of the model that they found challenging or required slight modifications.

Observations were conducted between February 2019 to May 2019. I had originally intended to observe 9 sessions, ideally every session of the Pregnancy Circles programme. Seven sessions, with six different Circle groups, in total were observed. I made every effort to observe a variety of sessions and Circles to see variance in midwifery practice, participant demographics and determine model fidelity in the trial and its effects on the women. I was unable to observe

session eight or nine of a pregnancy Circle as I was limited by the time constraint of my own pregnancy. The facilitating midwives were contacted ahead of sessions and asked whether they would be happy for a researcher to come and observe the Circles. The team leader was also contacted and informed that I would be observing Circles once confirmed with the facilitating midwives.

#### 4.5.2 Interviews with midwives

Unlike the participant observations, which were conducted at one site, my intention was to interview midwives delivering the Pregnancy Circles across a variety of participating sites. The purpose of this was to illuminate variances in practices that would not tie midwives' experiences of providing GANC to a particular localised context or a specific set of hospital guidelines and policies. I had anticipated interviewing between five and ten midwives in total to understand their perspective on facilitating group care and how this influences the care given to women with a raised BMI. Suitable midwives were identified through the Pregnancy Circles trial. The details of facilitating midwives who had undergone the bespoke training package to deliver Pregnancy Circles were kept on a spreadsheet on a secure online drive which was regularly in use by the Pregnancy Circles research team. Recruitment started in August 2020 and was completed in September 2021. Thirty-seven midwives were approached from nine different participating sites. Ten midwives agreed to be interviewed. One could not be interviewed as she did not respond to any further follow up emails once she had agreed. Another one could not be interviewed as it transpired that she had not facilitated any Circles, as her planned Circles had been cancelled due to the COVID-19 pandemic. Eight midwives from six participating sites were interviewed in total. Midwives were emailed first and then followed up with a phone call. Recruitment was challenging as many midwives were redeployed over the last year due to COVID-19 pandemic and were therefore less responsive as anticipated. I sought to be extremely flexible in obtaining time to interview midwives- I would rearrange interviews as and when midwives required changes. On occasion, when midwives did not attend their interviews, I would follow up with emails and rearrange at another date and time suitable for them. Notably, all except one midwife requested to be interviewed during their work hours. Two midwives asked to be interviewed together, the rest were interviewed individually. Each midwife was given a number

(Midwife 1, Midwife 2 etc) to protect their identity. None of the midwives recruited to be interviewed were observed during the participant observations.

## 4.5.3 Interviews with women

The inclusion and exclusion criteria are as follows and aligns with the Pregnancy Circles trial protocol, with one exception- the exclusion of women with a BMI < 30kg/m2.

## Inclusion criteria

- Women who registered for antenatal care with one of the participating NHS sites in the Pregnancy Circles trial with a booking BMI ≥ 30m2
- Women who were randomised to the intervention arm of the Pregnancy Circles trial

## Exclusion criteria

- Women registered for antenatal care at non-participating NHS sites
- Women randomised to standard care as part of the Pregnancy Circles trial
- Women with a BMI < 30m2 at booking
- Women who decline to take part
- Women under 16 years of age at the time of recruitment
- Women with a documented learning disability
- Women who experience a foetal demise during their pregnancy

As mentioned in Chapter one, BMI is the primary tool used within the NHS to identify pregnant women with obesity, which defines them as "high risk" (Denison et al., 2018). Eligible participants were identified and sourced through the Pregnancy Circles trial dataset. BMI was included on the baseline data collection form used in the Pregnancy Circles trial. Liaising with other researchers working on the trial led to the creation of a potential list of eligible women to recruit. Gaining access to the PCTU (Pragmatic Clinical Trials Unit) REDCAP database through permissions granted by our trial manager and the database manager allowed me to purposively sample women through their demographic data, to ensure that a diverse range of women were being approached to participate to reflect the populations of the hospitals and to capture a range of statuses and identities. Ethnicity and IMD were two characteristics used to identify women for my study as these are two characteristics that are overrepresented in women who die as a result of pregnancy and childbirth, and where there is the most overlap with BMI (Knight et al., 2020).

Fifty-four women were identified as potential recruits for this study from baseline data forms and the Pregnancy Circles REDCAP database. Nine women were excluded from participation for the following reasons- five were not approached because although they had been recruited, their first Circle session and all subsequent sessions had been cancelled because of lockdown, meaning they did not receive any of the group care model. Another three were approached and through the initial conversations, it became clear they did not attend a single session prior to the Circles being cancelled due to lockdown. One woman was approached and through the initial conversation, it became apparent that she had actually been randomised to standard care and was therefore not eligible. The research team was informed of the error and her baseline data were amended. Forty-five women were invited to take part in this study. Thirteen women did not respond. Three women declined to take part. Two women did not respond to my email invitation and could not be contacted further as their phone numbers were not in use. Twentyseven women agreed to take part. Two did not turn up for interview and then did not respond to my calls or texts to rearrange the interview. Two withdrew their consent prior to the interview. One had her interview rearranged four times and she did not turn up at any of the agreed times and dates. In total, twenty-two women were interviewed.

Recruitment commenced in June 2020 and was completed in August 2021. As recruitment to Pregnancy Circles was paused in March 2020, as per national HRA guidelines for active trials during COVID-19 pandemic, the pool of eligible women to sample from was reduced. The recruitment period was longer than anticipated and so the recruitment strategy was maximised where possible. Initially, women were contacted first by email and then followed up with one telephone call and invited to take part in the trial, with patient information leaflets made available to them and a 24-hour period in which to decide whether they would like to take part. Initially, if I did not receive a response either by email or on the first call, I did not follow up again. Considering the normal challenges of new motherhood with the additional challenges of the COVID-19 pandemic, I recognised that flexibility was key with increasing recruitment to the study. Additionally, when speaking to some of the earliest recruited women on the phone after

no answer via email, some informed me that they were overwhelmed with new motherhood to respond, others informed me that they had not checked their email since the baby was born. I refocused my efforts with calling women rather than using email as I found participants to be more responsive. I would call women up to three times, leaving at least a day between calls and also leave a text message explaining the study and leaving my contact details. If there was no response after three calls and a text, I considered that non-response was indicative of disinterest in participating in my study. In addition, I rescheduled interviews as many times as women requested, if they were not able to attend for whatever reason- in some cases, interviews were rearranged up to four times. I encouraged women to have their babies with them during the interviews as this increased their enthusiasm to participate and many of them were primary caregivers to their children and were not able to sequester themselves away for interviews. None of the women interviewed were participants during the Pregnancy Circle sessions that I observed.

## 4.6 Data Collection

#### 4.6.1 Participant observations

Written notes were taken at the time of the observations in a notebook and then transcribed and reordered onto a Word document on a computer later. Observations were carried out using the observation guide from the Pregnancy Circles trial, with additional consideration for women with a raised BMI. The observation guide is semi-structured, with a few considered aims. The first participant observation was carried out with my secondary supervisor at the time, Dr Anita Mehay, and after the session was over, we compared notes and discussed my observation techniques and reflected on how best to collect data in this format. Observations of participant interaction, inter-relational communication and model fidelity feature prominently within the guide. Please see appendix 7 for a copy of the observation guide.

## 4.6.2 Semi-structured interviews with midwives

Interviews with midwives took place online as per HRA recommendations, as mentioned above. Semi-structured interviews are considered appropriate for health research and are commonly

employed by healthcare professionals for their research (Jamshed, 2014). Topic guides were informed from the findings of the participant observations and were used as they allowed for an effective and systematic process of data collection and assists in keeping interviews focussed (DiCicco-Bloom and Crabtree, 2006). Please see appendix 8 for the topic guides. The topic guide for midwives was adapted from the pre-existing topic guide already in use for the qualitative process evaluation work in the Pregnancy Circles trial. Interviews commenced in August 2020 and were completed in September 2021. Recruitment was challenging, and this was partly due to midwives' availability, long term sickness, and redeployment during the pandemic. To this end, recruitment was paused between October 2020 and February 2021. As lockdown rules were eased, recruitment was restarted again. Interviews took place in a virtual meeting space where we could see each other's faces and they were recorded with a voice recorder. This allowed me to concentrate on the interview content, maintain rapport with the participant, and ensure "verbatim" transcript of the interview, instead of relying on written notes, which are considered less reliable (Jamshed, 2014). This was particularly important as the interviews were not conducted face to face and it was more difficult to build rapport with participants, especially with ongoing challenges with internet connectivity. Length of interviews varied from eighteen minutes to seventy-five minutes.

### 4.6.3 Narrative interviews with women

Interviews started in July 2020 and took place online, as per HRA recommendations during this period to cease all face-to-face contact with participants. The topic guide for interviews with women follows a narrative structure. The questions are open-ended and follow the chronology of a pregnancy journey (conception, antenatal, labour, birth, and postnatal) although participants discussed aspects of their pregnancy, labour, birth and postnatal period in random orders. Each participant was interviewed once in the postnatal period, at least three months after birth. Women were advised to find somewhere private and quiet so they could speak freely and to increase the chances of a good audio recording. Women were also informed that recordings could be paused at any time and the interview interrupted if required to do so. Many of the interviews were interrupted by children and some of the sound quality was compromised

by this. Interviews were recorded using an audio recording device. The length of interviews varied between twenty-six minutes and seventy-seven minutes. As with the interviews with the midwives, there were ongoing challenges with internet connectivity with many of the participants and this did affect the sound quality and playback value of the interviews. In all the interviews, I requested that videos were kept on so that I could see their faces and thereby act on visual cues and build rapport (Chiumento et al, 2018). However, in some cases, the additional pressure of using video meant that were there was poor internet connectivity resulting in audio lag. I attempted to counter-act this by pausing for longer to allow for technical issues, by reassuring women that I was not attempting to cut them off and encouraging them to speak freely. Extra care and more time were given to transcription to ensure that verbatim recording of the interview was achieved as much as was possible.

## 4.7 Data Analysis

#### 4.7.1. Participant Observations

Handwritten notes taken during the observations were transcribed onto a computer and then inputted into NVIVO 12 for further analysis to draw out themes. Thematic analysis has been used for analysis of the participant observations following the six-phase guide set out in Braun and Clarke's (2006) work on thematic analysis. Thematic analysis is considered a "core skill" for qualitative researchers, a flexible method that enables descriptive and interpretative analysis as required by the researcher (Braun and Clarke, 2006). Themes developed from the participant observations informed the creation and development of the topic guides for semi-structured interviews with midwives and with the women. Preliminary themes generated from the participant observations include inappropriate/lack of communication, peer support, risk categorisation and management.

### 4.7.2 Interviews with Midwives

As with the participant observations, thematic analysis was used to analyse the interviews with midwives. Audio files were uploaded from an audio recording device used to record the interviews onto a computer, transcribed verbatim, and then inputted into NVIVO 12 for analysis.

## 4.7.3 Interviews with Women

I used a hybrid model of analysis for the interview with women. Data were initially analysed thematically and then a narrative analysis was superimposed using Riessman's (2008) framework for thematic narrative analysis. Her framework advocates for the marriage of thematic analysis with narrative tradition, whereby the content of oral or written narrative data can be analysed thematically. The distinct difference between conventional thematic analysis and thematic narrative analysis is a commitment to keeping the story intact through theorising by case rather than just from component themes across cases. I wanted to understand the findings within the social context as well as provide a critical analysis of the context of their experience of care, so I felt that a narrative approach was better suited to doing this than using a thematic analysis approach.

Riessman's (2008) work focuses on the significance of sense-making through narratives when expectations of continuity have been ruptured. This stance has particular relevance for my work as the data collection of the interviews spanned the COVID-19 pandemic and I found that many women I interviewed sought to make sense of what had happened to them through the dialogue we were creating. Narrative analysis reveals how we attempt to confine life events through a supposedly rational and logical order in order to establish a coherent structure to the past, present and future (Squire et al, 2014; Riessman, 2008; Riessman, 1993). Yet, narratives can reveal deeply private constructions of personalised identity, and analysis allows us to be able to contextualise these within a particular socialised circumstance. Riessman (1993) warns that the challenge of narrative analysis comes from the researcher's need to represent their participants and in doing so, she problematises the researcher's desire to "give voice" to marginalised communities. She argues that it is not possible to be neutral and objective in representation, that the researcher is engaged in constructing reality because of their own personal theoretical interests and values. She highlights a five-step phase of representation that the researcher goes through to interpret the narratives received - attending, telling, transcribing, analysing, and reading (Reissman, 1993). In keeping with traditional thematic narrative analysis, I worked with a

single interview at a time, isolating and ordering relevant episodes into a chronological biographical account. After completing this, I identified the underlying assumptions in each account and coded them. Particular cases were then selected to illustrate general patterns and then underlying assumptions in different cases were compared (Riessman, 2008).

## 4.7.4 Analysis across data sets

Data were analysed separately and thematically. In keeping with Morse's (2010) approach to qual-qual mixed methods, the participant observations can be considered a supplementary dataset, in that they alone cannot be considered sufficient to answer my research question. In addition, this was the only dataset that was collected prior to the pandemic. As noted above, women's narratives were coded thematically, case by case. I decided I wanted the findings chapters to mirror the journey of pregnancy, so these were defined chronologically (pregnancy, labour and birth, postpartum) to help make sense of the women's journeys chronologically as well. This technique has been used elsewhere in women's narratives of pregnancy (Johnson, 2002). Once each woman's narrative had been coded, I examined the other datasets and compared themes for similarity and divergence. Themes related to each chronological period in the women's narratives were mapped onto each findings section and then sorted through for relevance related back to the research questions. Themes either became stronger through the re-ordering and rearrangement of codes or were discarded (codes were removed) if they were not relevant to the research questions. Another level of abstraction was achieved by the creation of the meta-themes by ensuring that the themes developed interlinked and related to each other. Each meta-theme relates to a different point in the pregnancy continuum.

## 4.8 Ethical considerations

#### 4.8.1. Ethical Approval

Ethical approval for the Pregnancy Circles trial was granted through NRES (IRAS number 228894). Ethical approval was gained in December 2018 via a minor amendment to the Pregnancy Circles trial for me to undertake participant observations. Ethical approval was again granted on 30<sup>th</sup>

June 2020 via a substantial amendment which enabled me to undertake interviews with women and midwives. Please see appendix 5 for these approvals.

### 4.8.2 Consent

Please see appendix 6 for the consent form. For the participant observations, written consent was taken for all women and midwives involved and is stored securely on City premises. Participants were given 24 hours to consider participation and had the option to withdraw their consent at any time. Prior to consent, participants were advised that their data would be anonymised to maintain confidentiality. Consent to take part in the interview was taken via audio recording as this was considered an acceptable way to gain consent when conducting distance interviews, a change necessitated by the COVID-19 pandemic. Audio recordings of verbal consent were taken separately from the interview recordings. The right to refuse participation without giving reasons was respected. If a participant withdrew consent, the Pregnancy Circles trial protocol dictates that any data that had been collected was to remain on file to be included in the final data analysis unless participants specifically requested to withdraw their information. There were two cases where participants withdrew their consent but this was prior to any data collection.

#### 4.8.3 Renumeration

In line with the Pregnancy Circles trial protocol, participants were offered a £10 voucher if they agreed to be interviewed. This was to ensure equity amongst participants being recruited to my study and to participants recruited to Pregnancy Circles.

#### 4.8.4 Data Management

Data were stored securely in folders on the university One Drive linked to my university email address, which was password protected and required two-factor authentication to access. The University One Drive is backed up continuously. Transcription of the interviews were completed

by me wherever possible. Where there have been time constraints (for example the transcripts for the midwife interviews were requested by other researchers working on the process evaluation for the main trial), the transcriber employed by the Pregnancy Circles trial research team was given access to some of the transcripts in order to facilitate progressive workflow. Data have been shared with other researchers working on the Pregnancy Circles trial but is being analysed differently due to various methodological approaches, therefore minimising impact on the originality of my study. Data pertaining to women with a raised BMI is not being analysed by the wider research team as this is not related to outcomes being measured as part of the Pregnancy Circle trial.

### 4.8.5 Confidentiality

Participants were pseudonymised throughout all the data collection. During participant observations, in my handwritten notes, women were labelled as "Woman 1", "Woman 2", and so forth, and midwives were labelled as "MW1" and "MW2". It is important to note that "MW1" and "MW2" who was interviewed as part of my study were not the same midwives who conducted the Pregnancy Circle sessions, who are labelled as "MW1" and "MW2" in my field notes. Similarly, I have used the same label of "MW1" and "MW2" in all my field notes even though there were different midwives for almost all of the group sessions that I observed. Prior to conducting interviews, I informed women that a pseudonym was required to protect their identity and they were given the option to choose a pseudonym for themselves. If women declined to offer a pseudonym, a name was chosen at random from the Office of National Statistics (ONS) 2019 list of the most popular girl names (ONS, 2020). During interviews with midwives, midwives were labelled as "Midwife 1" and so forth. Transcription was completed by the researcher and transcribers working on the Pregnancy Circles trial. The transcripts have no participant-identifiable data in them. There were a few instances where participants referred to themselves by name during the course of the interview. When this happened, their names were replaced in the transcript by their pseudonym. Similarly, where women have referred to their hospitals by name, these have been omitted in the transcript and the use of [hospital] has been

inserted instead. There are three interviews where women refer to their children by name. In these transcripts, the children were also given pseudonyms in the transcripts. These are the only instances where interview content has not been transcribed verbatim.

## 4.8.6 Researcher reflexivity

I considered Foucault's (2023) approach in the doctor-patient relationship. He argues that doctors are doctor-oriented, rather than patient-oriented, and thus medicine creates an abusive power dynamic between the doctor and their patient. I was acutely aware that there was a possibility of introducing a power imbalance in dialogue with participants, whereby they would feel unable to disclose difficult or unsatisfactory experiences of care in their pregnancy, labour, and birth, especially if these experiences had involved midwives. I wanted the participants to be able to speak freely, without concern that I would be judging them in my capacity as a midwife, rather than researcher. I took the decision to not disclose my identity as a clinical midwife to my participants. I considered my multiple identities as a researcher, a midwife, a mother, and as a mixed-race fat woman. As the interviews were conducted with video, I anticipated that it was clear to the women that I live in a fat body and that I am mixed-race. Through our informal conversations prior and after the interviews, it became apparent to participants that I was also a mother. I considered that I was potentially being less transparent with my participants about the level of knowledge I have regarding pregnancy, labour, and birth through my work as a midwife. However, I felt that my other identities were more present and appropriate in the context of this study, in that they did not risk introducing a potentially abusive power dynamic that would be present in the narratives. I am a researcher whose background as a midwife informs the work and approach. If I felt it was appropriate to do so, at the end of the interview, I would signpost them to their GP for further support or make them aware of PALS if they felt they wanted to make a formal complaint about the care they received.

Fat bodies are made indisputably problematic, and dangerous in the public consciousness, through continued public health messages, themselves exerting and enacting a specific authoritative knowledge about obesity (Warin and Gunson, 2013; Evans and Colls, 2009). Warin

and Gunson (2013) argue that this is particularly significant when conducting research about obesity, because whether or not the researcher is explicit about it, both they and the participant commence the research relationship abundantly cognisant that the participant's body has already been categorised as problematic. This became apparent to me in the way women spoke about themselves and their bodies. In line with the growing corpus of critical obesity literature, I approach the term "obesity" and all its implications as a socially constructed problem that must be contested rather than an objective biomedical classification (Gard and Wright, 2005; Evans and Colls, 2009). I was mindful of the language I adopt when talking about larger bodies, both with the participants and within the textual body of this work. At no point during any dialogue with the participants did I use the words "obese" or "obesity", as I was aware that use of these words could be perceived as stigmatising and potentially affect recruitment and my relationship with them. Words such as "BMI" and "weight" were used instead, as the wider literature notes that participants find these terms more acceptable (Griffiths et al, 2023; Cunningham et al, 2018).

With the midwife interviews, I did not explicitly make clear to them that I was a midwife but some of them may have already known I was a midwife, as I was introduced as one by other researchers working on the Pregnancy Circles trial during introductory meetings and training sessions. None of the midwives interviewed worked at my Trust, and I was not acquainted with any of the midwives prior to interview. Again, I wanted my identity as a researcher to be prominent in our interactions. I considered that revealing myself as a midwife may help to build rapport quicker with the midwives interviewed but I was also (perhaps overly) concerned about the "purity" of the data collection – would the language become technical, or shortcuts made with exposition due to an assumed shared understanding of the issue, or perhaps too full or jargon to use verbatim quotes? My clinical experience has shown me that many of my colleagues approach the problem of obesity uncritically. My key concern with being candid about being a midwife was that I was concerned that midwives would assume I also found obesity problematic (because biomedical knowledge sets up obesity as an issue requiring resolution) and would tailor their answers on their experiences of facilitating group care for this group of women based on this assumption. In essence, I was concerned that I would potentially be introducing a level of

bias by revealing my identity. Reflections regarding participant observations have been discussed above in subsection 4.2.

# 4.9 Demographics of the women interviewed

## 4.9.1 Participant demographics

Participant demographic details are featured in the table below, with pseudonyms provided. These particular demographics were highlighted as these certain characteristics are overrepresented in the women that die during pregnancy or in the postpartum period. In addition, the risk of maternal mortality and morbidity increases when women have one or more of these characteristics (Knight et al, 2020). Furthermore, it highlights the need for an intersectional lens when understanding women's experiences of healthcare provision in the UK. The indices of multiple deprivation (IMD) quintiles are based on relative disadvantage within a specific localised geographic area, where quintile 1 represents the most disadvantaged through to 5 representing the least disadvantaged.

Name	BMI	Age	Parity	Ethnicity	IMD
	range	Range			Quintile
Florence	30-34.9	25-34	Primiparous	White British	3
Olivia	40-44.9	35-44	Primiparous	White British	1
Elsie	30-34.9	35-44	Primiparous	White British	2
Amelia	35-39.9	35-44	Multiparous	White British	3
Hana	30-34.9	18-25	Primiparous	Asian or Asian British - Bangladeshi	2
Isla	50-59.9	25-34	Multiparous	White British	1
Phoebe	40-49.9	35-44	Primiparous	Black British- African	3
Arana	30-34.9	18-25	Primiparous	Asian or Asian British - Bangladeshi	1
Jade	30-34.9	18-25	Primiparous	White British	1
Grace	30-34.9	35-44	Multiparous	Mixed-White and Asian	1
Ava	30-34.9	25-34	Primiparous	Black British - Caribbean	4
Mia	35-39.9	35-44	Multiparous	White British	3
Reb	30-34.9	35-44	Multiparous	Asian or Asian British - Bangladeshi	3
Sally	30-34.9	35-44	Multiparous	White British	5
Natalie	40-49.9	25-34	Primiparous	Mixed- White and Black Carribean	1

## Table 10. Participant demographics

Isabella	30-34.9	35-44	Primiparous	Asian or Asian British - Any other Asian	1
				background	
Sophia	35-39.9	25-34	Primiparous	White British	5
Lily	35-39.9	35-44	Multiparous	Black British - Caribbean	2
Polly	30-34.9	25-34	Multiparous	White British	2
Kayla	30-34.9	35-44	Primiparous	Black British - Caribbean	1
Рооја	30-34.9	25-34	Primiparous	Asian or British Asian - Indian	3
Freya	35-39.9	35-44	Multiparous	Black British	2

### 4.9.2. Mini biographies of the participants

This section details brief biographies for each of the women interviewed. In each of the findings chapters, a narrative analysis method has been overlaid over a thematic analysis. Some of the women are "followed through" each of the themes, therefore these biographies provide some background knowledge about these women. When the UK entered lockdown in March 2020, recruitment to the Pregnancy Circles trial was paused. Pregnant women were considered a vulnerable population during the pandemic and therefore efforts were made by healthcare services to avoid face to face contact where possible to reduce the risks of complications. The nature of GANC means that sessions were reverted to one-to-one after the first lockdown was announced. For the women interviewed, the pandemic is the only reason Pregnancy Circle sessions were cancelled. Women who were recruited to the Pregnancy Circles trial were moved back into routine antenatal care pathways. The mini biographies highlight how many sessions were attended (if known), at which point women were moved back into standard care during their pregnancies if their care was interrupted by the pandemic, and whether they continued to receive continuity of care with one of the midwives who had been facilitating the Pregnancy Circle sessions, as well as detailing any complications that may have arisen over the course of the pregnancy, labour and birth, and the postpartum period.

*Florence* had an uncomplicated pregnancy and attended all the Pregnancy Circle sessions. Her sessions were not interrupted by the COVID-19 pandemic. The pregnancy was spontaneously conceived and was an unplanned pregnancy. Her labour was induced ten days after her due date. Her labour resulted in a forceps birth in the operating theatre, and she developed a

postpartum infection following birth. There were no complications with the baby following birth. She was partnered during her pregnancy but had become single by the time of interview. She had moved into rented accommodation with her son when he was born.

*Olivia* attended all the Pregnancy Circle sessions. Her sessions were not interrupted by the COVID-19 pandemic. The pregnancy was spontaneously conceived and was a planned pregnancy. Her labour was induced because of her age. She had a vaginal birth on the consultant-led labour ward and experienced no postnatal complications. The baby was admitted to NICU but this was anticipated because of a genetic condition. She was married at the time of interview and owned her own home with her husband.

*Elsie* attended all the Pregnancy Circle sessions. Her sessions were not interrupted by COVID-19 pandemic. The pregnancy was conceived using IVF. She was diagnosed with prenatal depression in the pregnancy. Her labour was induced because of her age, and she went on to have an emergency caesarean section because her labour did not progress. She did not experience any postnatal complications. She was married at the time of interview and owned her own home with her husband.

*Amelia* attended all her Pregnancy Circle sessions before they were cancelled. The last two sessions were cancelled, and she was transferred into standard antenatal care with a different midwife. The pregnancy was spontaneously conceived and was a planned pregnancy. She developed no complications in pregnancy and had an elective caesarean section at term because it was a twin pregnancy. She experienced a major obstetric haemorrhage during surgery and the twins were taken to NICU because of breathing problems. There were no further postnatal complications following the birth. She was partnered at the time of the interview and was living with her partner's parents.

*Hana* could not remember how many Pregnancy Circles sessions she had attended in total. Alongside the Pregnancy Circle, she was also seeing a community midwife at her GP clinic. The Pregnancy Circles sessions were cancelled, and she continued to see her community midwife for the rest of the pregnancy. The pregnancy was spontaneously conceived and was a planned pregnancy. Hana developed gestational diabetes, which she managed with oral medication to

control her blood glucose levels. Her labour was induced because it was suspected that the baby was large. Hana had a vaginal birth following induction on the consultant-led labour ward. The baby received antibiotics as the waters had been broken for a prolonged period during labour. Hana was married at the time of the interview and owned her own home with her husband.

*Isla* attended seven of her Pregnancy Circle sessions in total. Her Pregnancy Circles sessions were not interrupted by the COVID-19 pandemic. This was an unplanned pregnancy and was conceived spontaneously. She developed gestational diabetes in pregnancy, and she was using insulin to manage her blood glucose levels. Her labour was induced because of the gestational diabetes and she had an emergency c-section as her labour was not progressing. The baby received antibiotics after the birth as the membranes had been ruptured for a prolonged period, and Isla was given medication to counteract the high blood pressure she developed during labour and birth. Isla was partnered at the time of the interview and rented her home with her partner.

*Phoebe* attended five of her Pregnancy Circle sessions. Her Pregnancy Circles sessions were cancelled and she was transferred into standard care under a different midwife. Phoebe's pregnancy was complicated by the development of gestational diabetes but she managed her blood glucose levels with diet alone. Her labour was induced because of her age, her BMI and gestational diabetes. She had an emergency caesarean section because her labour was not progressing. She experienced respiratory depression during the operation. She developed an infection after surgery and the baby developed neonatal jaundice. Phoebe was married at the time of interview and owned her own home with her husband.

*Arana* missed the first two Pregnancy Circles sessions. Her Pregnancy Circles sessions were then cancelled so Arana did not attend any Pregnancy Circle sessions. She was then transferred to standard antenatal care. This pregnancy was a spontaneous conception, and it was unplanned. Her pregnancy was uncomplicated. She went into spontaneous labour and initially laboured in a freestanding midwifery unit. The baby passed meconium during the labour and she was transferred to the consultant-led labour ward for additional monitoring where she subsequently had a vaginal birth. The baby was monitored for a short time after birth because of the

meconium. She was married at the time of interviewing and was in private rented accommodation with her husband.

*Jade* attended five of her Pregnancy Circle sessions in total. Her Pregnancy Circle sessions were not interrupted by COVID-19 pandemic. She did not attend the rest of the sessions because the baby was born prematurely. This was a planned pregnancy and was conceived spontaneously. The pregnancy was complicated by intra-uterine growth restriction (IUGR) and was very closely monitored throughout with multiple scans and appointments with consultants. Jade gave birth early at 31 weeks via emergency caesarean section. She subsequently developed postnatal depression and was diagnosed with PTSD. Jade was partnered at the time of interview and owned her own home with her husband.

*Grace* attended three of her Pregnancy Circle sessions. The rest of the sessions were cancelled, and she was transferred back to standard care under a different midwife. She then transferred her care to the homebirth team within the hospital she was booked at. She was then transferred back to standard care when the homebirth team paused their service as a result of pressures on the wider maternity service during the pandemic. Her waters broke spontaneously and then her labour was induced shortly after because Grace was a Hepatitis B carrier. She had a vaginal delivery on the consultant-led labour ward. The baby received the Hepatitis B vaccine shortly after birth and was monitored for a short while as the waters had been broken for a prolonged period. There were no other postnatal complications. Grace was married at the time of interview and owned her own home with her husband.

*Ava* could not remember how many Pregnancy Circle sessions she had attended. Her Pregnancy Circle sessions were not interrupted by the COVID-19 pandemic. She developed obstetric cholestasis later in the pregnancy and was more closely monitored because of this complication. Her labour was induced because of the obstetric cholestasis but did not progress so she had an emergency caesarean section. She experienced a seizure whilst in theatres prior to the surgery but did not have any postnatal complications. Ava was married at the time of the interview and owned her own home with her husband.

*Mia* attended all of her Pregnancy Circle sessions. Her sessions were not interrupted by the COVID-19 pandemic. This was a planned pregnancy and was conceived spontaneously. The pregnancy was uncomplicated. Mia went into spontaneous labour and she had a vaginal birth on the consultant-led labour ward. She experienced a retained placenta so was transferred to theatres to have it manually removed. She also experienced a major obstetric haemorrhage and required a blood transfusion. Mia was married at the time of the interview and owned her own home with her husband.

**Reb** attended three of the Pregnancy Circle sessions. Her sessions were then cancelled and she was subsequently transferred to routine antenatal care under a different midwife. This pregnancy was planned and was conceived spontaneously. The pregnancy was uncomplicated. Reb went into spontaneous labour and had a vaginal birth at the midwifery-led birth centre. There were no postnatal complications. She was married at the time of the interview and owned her own home with her husband.

*Sally* attended seven of the Pregnancy Circle sessions before they were cancelled. She was then transferred to standard antenatal care under a different midwife. The pregnancy was planned and spontaneously conceived. She developed gestational diabetes during the pregnancy and was more closely monitored after the diagnosis. She was using insulin to control her blood glucose levels. Sally had an elective caesarean section because her previous birth was an emergency caesarean section. The baby was monitored for a short while afterwards because of the gestational diabetes and then developed neonatal jaundice. Sally was married at the time of the interview and owned her own home with her husband.

*Natalie* attended five of the Pregnancy Circle sessions before they were cancelled. She was then transferred to standard antenatal care under a different midwife. The midwives from the Pregnancy Circle kept the Circle going with virtual sessions but Natalie did not attend any of these. This pregnancy was spontaneously conceived and was an unplanned pregnancy. She developed polyhydramnios late in the pregnancy and had her labour induced because of this complication. She had an emergency caesarean section as there were concerns about foetal wellbeing. There were no postnatal complications. Natalie was single at the time of the interview and lived in council-owned accommodation.

*Isabella* missed the first two Pregnancy Circle sessions. She attended one Pregnancy Circle session prior to the sessions being cancelled. She was then transferred to standard antenatal care for the rest of her pregnancy with one of the midwives from her Pregnancy Circle. The pregnancy was a spontaneous conception, and it was unplanned. The pregnancy was uncomplicated. Isabella went into spontaneous labour prior to her planned induction and initially laboured in a midwifery-led birth centre. She was transferred to theatres for a forceps birth because of a prolonged second stage of labour. She experienced a third-degree tear and a postpartum haemorrhage. She also received a blood transfusion following the birth. Isabella was single at the time of the interview and lived with her parents.

*Sophia* attended five of the Pregnancy Circle sessions before they were cancelled. She was then transferred back to standard care with one of the midwives from her Pregnancy Circle. The pregnancy was a spontaneous conception, and it was a planned pregnancy. Her pregnancy was uncomplicated. She went into spontaneous labour and had a forceps birth on the consultant-led labour ward. Meconium was present during labour, so the baby was monitored for a short while afterwards. She was married and was about to move into her own home with her husband, after having previously lived in rental accommodation.

*Lily* attended six of her Pregnancy Circle sessions before they were cancelled. She was transferred back to standard care with the midwife who undertook the initial booking appointment. She was seen by both this midwife and one of the Pregnancy Circle midwives for the rest of her pregnancy. The pregnancy was a spontaneous conception, and it was an unplanned pregnancy. She developed COVID during her pregnancy but experienced mild symptoms. She went into labour spontaneously and had a vaginal birth on the midwifery-led birth centre. There were no postnatal complications. She was married at the time of interview and owned her own home.

**Polly** attended one of her Pregnancy Circle sessions before they were cancelled. She was transferred back to standard care with one of the midwives from her Pregnancy Circle. This

pregnancy was spontaneously conceived and was unplanned. Her pregnancy was uncomplicated. Her labour started spontaneously, and she had a vaginal birth on the consultant-led labour ward. There were no postnatal complications. She was partnered at the time of the interview and was in private rental accommodation.

*Kayla* did not attend any of the Pregnancy Circle sessions before they were cancelled. She struggled with abdominal pain because of her fibroids and was frequently admitted to hospital in early pregnancy and some of these admissions coincided with the Pregnancy Circle sessions. She was transferred back to standard care with a different midwife. The pregnancy was spontaneously conceived and was unplanned. Her pregnancy was complicated by the development of gestational diabetes. The diabetes was managed with insulin. Kayla was booked for an elective caesarean section but she went into spontaneous labour before her caesarean section date. She ended up having an emergency caesarean section due to foetal distress. She was partnered at the time of the interview and lived alone in council-owned accommodation.

*Pooja* attended four of the Pregnancy Circle sessions before the sessions were cancelled. She was transferred into standard care and continued to see one of her midwives from the Pregnancy Circles. The pregnancy was spontaneously conceived and was planned. Her pregnancy was uncomplicated. Pooja had her labour induced after a few episodes of reduced foetal movements at term. She laboured on the consultant-led labour ward and had a ventouse birth. She had a postpartum haemorrhage following the birth and the baby developed neonatal jaundice. Pooja was married at the time of interview and lived in privately rented accommodation.

*Freya* attended two of the Pregnancy Circle sessions and missed one of the sessions before they were cancelled. She was transferred into standard care back to the original midwife that completed her booking appointment. The pregnancy was uncomplicated, and Freya had an elective caesarean section because of her previous caesarean section. There were no postnatal complications. She was married at the time of interview and lived in her own home with her husband.

# *4.10 Chapter Summary*

This chapter has outlined the research design, theoretical concepts utilised and methodological approach to the data. Recruitment and sampling strategies were discussed, and the study aims and rationale were reiterated. Data analysis with attention to how the meta-themes and themes were developed were also discussed.

The next three chapters will discuss findings related to each of the meta-themes in turn. Each meta-theme reflects a chronological point in the pregnancy continuum (pregnancy, labour and birth, postpartum) therefore each of the findings chapters will address different periods of the pregnancy continuum in relation to women's experiences with Pregnancy Circles. Chapter five will focus on the themes drawn out from the antenatal period. Chapters six will focus on themes drawn out from women's experiences of labour and birth. Chapter seven will focus on themes drawn from women's experiences of the postnatal period.

# Chapter 5 - Pregnancy Circles as a site of tension

## 5.1 Introduction

For this chapter, I sought to develop themes that illuminate the intersection of pregnancy care interactions challenged by complexity (both real and assumed) as well as assumptions about how women with a raised BMI need to be cared for during pregnancy and the tensions that arose from this. I considered Pregnancy Circles as a site of tension in two main ways. There was a difference of expectation in care provision, and of risk management, by both women with a raised BMI and midwives because of the status these women were perceived to have in relation to themselves and others. Midwives outwardly supported the group care model but in practice, were deeply entrenched with a risk management paradigm that prevented them from embracing and supporting elements of the group care model which could improve the care experiences of women with a raised BMI.

Three themes were developed which will be discussed in turn during this chapter – weight stigma, normalisation of pregnancy, and risk and responsibility. Pregnancy Circle sessions were spaces where women with a raised BMI, on the whole, spoke fondly and positively about their experiences of Pregnancy Circles. What became apparent was that the women identified the Circles as a space where the commonality and 'ordinariness' of pregnancy were supported. Facets of the group care model such as peer support, relational continuity and woman-led discussions were key in establishing Pregnancy Circles as these kinds of spaces. This was important in the context of their pregnancies, as many of them were receiving care outside of the Circles, and were having to negotiate their risk status in these appointments. Women felt affirmed and validated as "normal" within the group dynamic, which centred pregnancy as an ordinary life event rather than as a medicalised process. Importantly, the Pregnancy Circles were also spaces where they did not have to navigate their risk status.

Midwives categorised women with a raised BMI as a discrete group of women who often had additional complex needs in pregnancy and were more likely to develop pregnancy complications. Whilst midwives were generally supportive of the group care model, it was

apparent that in interactions with women with a raised BMI, the midwives struggled to utilise facets of the group care model to support a holistic and personalised approach to their care needs. It appears that the midwives were still enmeshed in a risk management paradigm and struggled to reconcile this with the responsibility of group facilitation for women with a raised BMI.

As previously mentioned in chapter four, to protect participant confidentiality, the names of the women that appear in quotations in each of the findings chapters have been pseudonymised. The table below highlights the development of the meta theme through selected quotes, codes and themes.

# Table 11. Themes, subthemes and indicative quotes

Meta Theme	Themes	Sub Themes	Quotes
	Weight stigma	Anticipated and internalised weight stigma	"I mean, my belly is just absolutely horrendous."
		Competitive comparison	"One of them was quite severely overweight anyway. Much more than me."
		Peer support and experiential knowledge	"I feel like all the women had like, insecurities about their weight and their stretch marksI got a lot of advice from other women."
Pregnancy Circles as a site of tension	Normalisation of pregnancy	Midwife as facilitator	"I wasn't fazed by the act of facilitating or teaching, but what it was good for me was being able to sort of get back to grassroots knowledge"
		Validation and triangulation about care experiences	"If I didn't have the Circle, I probably would have had a very negative feeling about the care that I received."
		Medicalisation as priority	"They didn't always make each circle, because it might have clashed with an obstetrics appointment."
	Risk and responsibility	Perceptions of specialised Pregnancy Circles	"it's something that could be tweaked and actually could be delivered specifically for the high BMI population, I think it would be of benefit"
		Fragmented care	"every time I went into the hospital for something that I was seeing somebody else. I don't think I saw anybody twice."

## 5.2 Weight stigma

Throughout the interviews conducted with women, there was a common feeling expressed of dissatisfaction with their bodies. Women were divided about whether pregnancy altered their body image. For most of the women interviewed, weight management, dieting, and body image were something of a lifelong struggle. These struggles persisted into pregnancy and there was an understanding that having a raised BMI in pregnancy could be a continuation of stigmatisation, as it was pre-pregnancy.

## 5.2.1. Anticipated and internalised weight stigma

Women spoke about the anticipation and expectation of encountering weight stigma in Pregnancy Circles sessions and that this feeling contributed to their initial hesitation towards being part of Pregnancy Circles. Overall, women did not refer to themselves as "obese". Whilst many women echoed my use of the phrase "raised BMI" or "BMI" throughout the interviews, there were some women who did refer to themselves as fat or overweight in a negative way, highlighting their own internalised stigma about weight. Women reflected on how they perceived their bodies prior to becoming pregnant:

Always been a big girl, I've got big boobs, big belly, I'm overweight and I hate it and I'm always very conscious about my body. (Mia, all Circles attended)

I kind of spent most of my adult life um, watching what I eat. I've been on some kind of diet- Slimming World, Atkins, every fad diet I've tried, I'm constantly...I've never been sort of happy with my body. (Elsie, all Circles attended)

I think if anything I felt about my body, I don't think it was unique to being pregnant. If I've had issues with my body, it's been before being pregnant. (Phoebe, 5 Circles attended)

Goffman's (1963) seminal work acknowledges three types of stigma, where stigma is defined as a discrediting attribute that changes how an individual is regarded in society. The three types of stigma he described focus on what he calls "abominations of the body", "blemishes of individual character", and "racial and religious stigma". Obesity can be regarded as falling into all three categories of Goffman's stigma types, if we use an intersectional lens to understand multitudes of marginalisation. As excessive body weight has become a moral issue within society and healthcare, stigma is expressed by others and through internalised perception of body image. Some of the women interviewed commenced their pregnancy journey with internalised stigma about their bodies. As some of the women were receiving care outside of the Circles because they had a raised BMI, some of these care encounters reinforced ideas about their bodies being abnormal, thereby inadvertently increasing weight stigma.

Participant: During the scans it was quite difficult because I was a big woman weren't I? So erm, I think they found it difficult to do my scans.

#### Researcher: Mm

Participant: cos that scans were like, hard. They couldn't see baby under all that, you know, flab (laughs). I do not know how to describe it but...

#### Researcher: Mmm

Participant: I just feel like, I just, I felt like they thought you know, big women are like kind of hard to deal with and hard to scan. (Hana, Circles attendance unknown)

Participant: I looked, looked up a lot of things about pregnancy as well, and it said "the ideal weight that you should really gain from being pregnant is only one stone".

Researcher: Mm...

Participant: But she said to me- I thought maybe because I was bigger, maybe- I just thought it would be the same as everybody else. But she said "ideally, because of your BMI, they only say -- they recommend only half a stone". And I was like but what if it's all baby weight that's the whole stone?, No, you can't really, you can't really say "oh, it's not good to gain only half a stone and for the skinny people you can gain a whole stone", like...

Researcher: Yeah.

Participant: I felt like that was a bit discriminating in that sense. (Natalie, 5 Circles attended)

Hana's care encounter appears to increase her internalised shame as she imagines her body as burdensome for the healthcare professionals. In contrast, Natalie's encounter with her consultant leaves her feeling discriminated against because the doctor suggests she is only allowed to gain half of what a woman with a normal BMI is expected to gain. Natalie identifies this as discrimination, but it also can be seen as a moment of stigmatisation.

For the women that were interviewed, there was the possible risk of additional stigma from other women due to the nature of GANC, meaning that they would regularly encounter not only healthcare professionals but other pregnant women who could be a potential source of stigmatisation. One woman spoke about her hesitation around joining Pregnancy Circles for fear of being stigmatised.

Yeah, because people tend to be judgy, don't they? And you never know when you walk into a room with nine other women you've never met before who are also pregnant and full of hormones, well that can go one of many ways, can't it? Because I'm not just a little bit overweight, I'm a lot overweight, and because I'm outside of the sort of, usual rangeage range for falling pregnant with your first child...just thought I might be shunned by them? Or that there would be unpleasant people in that group. I really couldn't have asked for a better group of people, they're all really, really nice. (Olivia, all Circles attended)

Olivia identifies two features that potentially puts her at risk of stigmatisation – her weight and age. Olivia notes that she is "a lot overweight", indicating that she considers her body weight to be so far beyond the "acceptable" BMI range that there is no possible way she can 'pass' for normal (Goffman, 1963). In addition, Olivia was 40 at the time of her pregnancy and she notes that her age is not usual for first-time mothers, thus rendering another aspect of her identity abnormal, putting her at risk of further stigmatisation. As Olivia recalls, her fears of being stigmatised do not materialise, as she indicates "they're all really, really nice". She described having developed a very strong bond with the other women in her group and they stayed in regular contact throughout the postnatal period. Fear of stigmatisation has been noted as a barrier to inclusion, and self-exclusion has been identified as a social management strategy in order to reduce stigma further (Thedinga et al, 2021). However, amongst the women interviewed, there were no examples of feeling stigmatised by the midwives facilitating the group sessions. There was one woman who experienced the opposite regarding weight stigma in relation to her BMI within the Pregnancy Circles sessions.

Participant: What I had noticed in this pregnancy and also with the, the previous pregnancy, my BMI is high. But I've- the midwives would often say, "oh I'm surprised your BMI is high, because you don't- your body doesn't look like your BMI should be high. Erm, what are you eating? Are you making sure- are we making sure we're drinking water?" All this sort of um, basic nutritional talk.

Researcher: Mm

Participant: So that was spoken about, but we didn't really go in detail about um, what I was eating and so on.

Researcher: Mm. And how did that make you feel when the midwives said that, like, "Oh you don't look like someone whose BMI should be that high"?

Participant: Um...don't, I suppose I don't really think about it because I, I teach PE and I teach dance as well so I, I- personally I feel like I'm a healthy person and I live quite well. Researcher: Mm

Participant: But my BM- my BMI for some strange reason has just always been high so um, I don't know. So even if they say that to me, I'm just always...I can brush it aside because I know that's not really the case. I, I did have comments along the lines of, "Wow, you...you've got really good stomach muscles. They're really, really strong. And the bump is really nice and round and firm", you know... "the baby is normally quite a big baby, by now, you know some women would suffer with um, maybe their stomachs splitting" and so on... but you know, at the time, when that was said to me, I just thought, oh that's quite nice, lucky that's worked out. Um, I suppose in hindsight, maybe just don't say anything. But at the time I didn't really think anything of it, and it didn't bother me. (Freya, 2 Circles attended)

Freya's experience was singular out of the participants interviewed, in being both simultaneously unusual and similar amongst the women interviewed. It was similar because she considered herself healthy, and felt that she took responsibility for her health through diet and exercise, like some of the other women interviewed. It was distinct from the others because of the perception of healthcare professionals about her body and the expectation of what her BMI should be. Freya's BMI was 38 at her booking appointment, which categorised her as having class 2 obesity. It demonstrates clearly that there is a collective imagined idea of what obesity "looks like" and consequently the midwives experience some kind of cognitive dissonance when encountering Freya's pregnant body. This is highlighted with their admiration of her stomach muscles and her "round and firm" bump and their surprise that her BMI is high. In return, Freya observes that she can ignore comments because she has not internalised ideas of her body being deemed abnormal, unlike many of the other women who were interviewed. We will return to Freya in later chapters as her experience overall varied from that of the other women who were interviewed.

### 5.2.2 Competitive comparison

The Pregnancy Circles were a site of tension not only because there was the potential to be exposed to weight stigma by other women but also because pregnancy itself upends Western societal norms about weight gain in women. Current literature notes that weight gain in

pregnancy is expected and desired within societal norms and national guidance, even for women with a raised BMI (Padmanabhan et al, 2015; Keely et al, 2017; NICE 2010; Denison et al, 2019).

Some of the participants recalled a competitive comparison within the group dynamic, when they or other women did not conform to the expected limits on pregnancy weight gain. Women both identified and reproduced this kind of stigmatised thinking about their bodies and other women's bodies, highlighting that the pregnant body was under scrutiny in group sessions.

There was two people in my group who had gestational diabetes. So they were constantly going on about what they could and couldn't eat. One of them was quite severely overweight anyway. Much more than me. Erm, and we were a range of sizes. So there's one of them that we were taking the mick out of sort of, obviously in jest. Like "you're going to be one of those people that has your baby and has this perfect bump, has your baby and is in your size 6 jeans like the day after". And she was like "yeah I am", and "I'm telling you now that I hate you but I love you". So we had a joke about it. So we had her and the rest of us had been sort of struggling with our weight. One of the other girls...I think she had lost a lot of weight to get pregnant, so she's been on the case, a lot on social media and our group. She's confident. I think she's lost all her baby weight already, so she's been great. But she's had...mental health issues. (Amelia, 7 Circles attended)

In this excerpt, there are multiple accounts of comparison that are happening within the group dynamic of the Circle. Amelia's reflections on pregnancy weight gain serve two functions – they reproduce social norms about appropriate pregnancy weight gain and affirm her pregnancy identity as normal. She situates herself as succeeding in gaining an appropriate amount of weight in comparison with the other women- she is "much more" smaller than the women who have developed gestational diabetes but still has gained some weight, as is made obvious by her "jest" of the smaller woman who has not gained much weight. Her comments indicate that this woman is a target because she has stayed below the advised weight gain in pregnancy, thereby earning the jealousy of the other women, highlighted when she says, "I'm telling you now that I hate

you". This scene is particularly poignant when understanding that outside of the Pregnancy Circle sessions, Amelia felt subject to weight stigma by one of the consultants caring for her:

Participant: I had one run in with a doctor...and she had a pop at me. I had to come in for a special appointment because I used, to tell me I couldn't have ketamine. But I wasn't planning on going into labour anyway because of procedures I've had in the past and she had a real go at me for my weight and I'd put on...something like 2kg in my first four weeks?

#### Researcher: Mm

Participant: And I didn't think that was bad with twins and she had a real pop at me. And I was really pissed off about that, to be fair.

#### Researcher: Mm. Mm

Participant: Telling me I can't eat any pasta. I'm gluten intolerant so I don't eat pasta anyway. And it's like she just judged me, and she wasn't particularly nice and yeah, that was a horrible experience. (Amelia, 7 Circles attended)

Amelia was having additional scans in pregnancy and was under consultant care because she had a twin pregnancy. In the above interaction with the doctor, Amelia is reminded that her body is abnormal by medical and societal standards (Goffman, 1963). The doctor is described as expressing disapproval at her weight gain and giving generic dietary advice that Amelia considers not relevant to her. The doctor is characterised as imposing a medicalised idea of health on Amelia. In comparison, Amelia's recounting of the group session demonstrates how she uses the social dynamic of the group session in order to shape and control the narrative about her own pregnant body. Whilst Amelia's initial vignette appears to be devoid of midwifery facilitation, its absence conversely appears to be what aids Amelia in being empowered to own the narrative about her body. Like Amelia, other women spoke openly about their observations of other women's bodies, highlighting the visibility of overweight pregnancies.

I felt a little bit anxious because there were women who had these perfect bumps and then there's me there looking very fat and just more pushed out at the front than normal. (Olivia, all Circles attended)

Participant: I mean, there was another lady who was...more overweight than I was. But then it's like, "ooh"-

Researcher: Yeah?

Participant: -erm, I suppose when you are overweight sometimes, you always worry about being the biggest in the room, (Lily, 6 Circles attended)

These comments highlight the vulnerability and visibility of existing in a larger body, as well as the internalised stigmatised thinking about fatness. Researchers have noted that the visibility of obesity makes women cognisant of the increased risk of stigmatisation (Lindhardt et al, 2013). Lily's comment implies that "being the biggest in the room" is an undesirable quality, indicating that visual comparison against other women may increase her own internalised stigma about her body. Visual comparison and discussions of growing bodies amongst women were also observed during the participant observations, indicating the visibility of growing bodies.

W2 puts her hand on W3 abdomen in a familiar way and they share niceties about how they are really showing now before W3 goes to the table to test her urine and do her BP check. (Pregnancy Circle D, session 4)

The other midwife asks women in the circle to share their dreams and what they are looking forward to in the last weeks of their pregnancies – women report stressors like moving house, sleeping badly, losing their body shapes. (Pregnancy Circle A, session 6)

Pregnancy is often perceived as a time to be less rigid about diet and physical activity, and weight gain is expected during pregnancy. However, weight gain in pregnancy for women with a raised BMI can be an anxious experience because of the social moral judgement about larger bodies gaining even more weight (Padmanabhan et al, 2015; McPhail et al, 2016; Lee, 2020). For women with a raised BMI, this can be a time of emotional conflict between limiting weight gain for themselves but gaining enough weight for the growing baby (Padmanabhan et al, 2015). This is reflected in Lily's comments below.

I think we got together like, every six weeks. And I, I think that I was doing quite well like, my, my clothes weren't becoming tight. Like one of the um, one of the other mums said to me, "I feel like you're losing weight, not putting on weight." And I was like, "I know, but I'm trying not to. But I'm also trying to not put on weight". (Lily, 6 Circles attended)

Lily's pleasure that she has not gained much weight in pregnancy is evident when she says she is "doing quite well", although later expresses that she is not consciously attempting to lose weight. Throughout our interview, Lily expressed a frustration with the lack of information about weight loss or weight maintenance in pregnancy. She had been diagnosed as prediabetic prior to pregnancy and had made significant behaviour changes to lose weight prior to pregnancy. Lily's excerpt indicates an implied judgement from another mother, who notes that Lily is not conforming to expected or imagined weight gain parameters. Lily was one of the only women interviewed who expressed ambivalence about the group dynamic. Later in the postpartum period, she made the decision to self-exclude and leave the group chat, feeling judged by the other mothers due to difference in opinions. Lily's comments demonstrate the fragility of encounters between women in the group sessions, where there may be an implicit moral judgement about their pregnancy identity. We will explore this in greater detail in another chapter.

Weight stigma within the group dynamic raises questions about GANC as a culturally safe encounter. Due to the collective nature of the sessions, women negotiated relationships outside of the midwife-mother dynamic. Regarding Curtis et al's (2019) cultural safety framework, the

ability to feel empowered following a medical encounter relies on the healthcare practitioner acknowledging the unequal power dynamic and resolving to diminish their own authority within the encounter. This is particularly important because women spoke of the vulnerability of visibility – their growing bodies under close scrutiny from other women as well as health professionals and becoming instruments of comparison that they (un)consciously participated in. Whilst midwives did not appear to enact weight stigma within Pregnancy Circles, the absence of adequate midwifery facilitation within these interactions increased stigmatisation within these spaces. In order to ensure that group sessions maintain cultural safety for all its members, the role of the midwife-as-facilitator is likely to be vital.

## 5.3 Normalisation of pregnancy

The facets of GANC include autonomous care practices, peer support, women-led discussions, and relational continuity with healthcare professionals (Wiggins et al, 2020). Some of the women interviewed frequently described these facets working well within their group sessions. It appears that when group sessions functioned as intended, the Pregnancy Circles provided a space to remind participants that pregnancy was a normal life event and validated their feelings. This appeared to be highly valued by women with a raised BMI because they were cognisant of the stigma surrounding their pregnant bodies and many of them began their pregnancies with internalised stigma about their own bodies. In addition, some of the women also spoke about being informed at the booking appointment that their pregnancies were high-risk. It is important to note here that women had their booking appointments outside of the Pregnancy Circles – the first session was usually around 16 weeks' gestation, aligning with NICE (2021) recommendations for antenatal care schedule.

## 5.3.1 Peer Support and experiential knowledge

Peer support was a common discussion point for the women interviewed. Women spoke about peer support as a strong positive experience within Pregnancy Circles, helping them to forge

bonds with other women that lasted through to the postnatal period, long after the Circles were over. For some women, the normalisation of pregnancy was promoted through peer support and the group dynamics, as seen below.

There was a few things that I wasn't sure about, and the girls were discussing, and it made me feel better, because there were certain things that I was like, "is this normal?" and they would talk about it in the Circle, and I was like "oh okay, I feel a bit better now" so... I suppose in that sense it, it helped me reassure myself in that sense, of certain things I had anxiety about. (Natalie, 5 Circles attended)

Participant: I remember one of them, the girl sitting next to me, she was a first-time mum.

#### Researcher: Yeah

Participant: So I thought that was good for her, because it was, I think the rest of them, some of them, this was their third, I think one of them it was like their second child. So I think the rest of us already had children and one of us was a first time.

## Researcher: Yeah

Participant: So I thought that was good for her, because then she has got- like we've all got experience of being mums so if she did have any worries, I thought, it was good for her to have us there like, as a support group as well. Like, we could always, "yeah that's normal" you know? "We've done that before, you know, that's normal to feel like that", and stuff. (Polly, 1 Circle attended)

Natalie's Pregnancy Circle was slightly unusual in that she was the only first-time mother in her group. Most of the other women who were interviewed intimated that the women in their Circles tended to be a more even mix of first-time and more experienced mothers. My field notes indicate that this was also the case with the Circle sessions I observed. Natalie was able to draw on the other mothers' previous experiences of pregnancy and motherhood to make sense of and validate her own experiences of pregnancy. Polly notes that the group dynamic provides a

function in providing advice and support, highlighting the value of experiential knowledge of pregnancy and motherhood. Researchers have noted that experiential knowledge of pregnancy is often considered to have "lower value" status in comparison to biomedical knowledge, but that healthcare professionals and lay people alike use both knowledge bases interchangeably to inform their decision-making processes and to influence others (Clancy et al, 2022). For Sophia, the group dynamic provided a sense of normality about her pregnancy, which she discussed below.

I feel like it wasn't - it wasn't a thing, and it didn't separate me this time. Which I think was quite nice, you know, it wasn't particularly highlighted, it didn't make me feel scared that, you know, I was in a separate group of women that, like, has a high-risk of pregnancy because we just kind of spoke about it all the same. So, I can see what the benefits [of a specialised group] would be, you know, you would probably know more about BMIs and the risks and stuff, but I don't know whether you want to know, do you? You know? I feel like I've benefitted not knowing a little bit, and just kind of getting on like normal and, obviously still having the consultant to check things and stuff, but not dwelling on it, you know? (Sophia, 5 Circles attended)

Sophia had been identified as "high-risk" by her booking midwife due to her BMI. She was referred to a consultant because of this to discuss any additional care requirements and help plan her labour and birth, as per RCOG (2018) guidelines. Sophia reflected that the role of the consultant was to be responsible for the risks associated with her pregnancy. She indicated that a targeted group care for women with a raised BMI would perhaps increase her awareness of the risks of a raised BMI more. More importantly, she did not consider this to be beneficial. The excerpt above highlights that the group dynamic promoted normality which she found invaluable. In essence, the group dynamic helped to mitigate the "high-risk" status that she was assigned at her booking appointment.

Some women developed complications in their pregnancy requiring them to receive additional care outside of the Circles. Phoebe recalls the frustrations associated with the fragmented care she was receiving throughout her pregnancy after she was diagnosed with gestational diabetes.

Well [it was] very much like "okay, from now on you're going to be coming to this clinic every 2 weeks, you can no longer go to the Circles". Erm, "cancel- if you've got Circle appointments on your app, ignore them, just come to these appointments." And then I went to the appointments, at the appointment basically they go through your erm... what your numbers have been based on your morning, after breakfast and evening erm, readings. And they say, the doctor says if that's okay or if that's not okay and obviously they check your blood pressure. But mine always was, it was okay, it was fine, no need for concern. But I was quite keen to get back to the girls and like, let them know what was going on. Erm, and then eventually they were like, "oh yes, yes you can still go to the Circles", so I continued going to the Circles. In general- this is nothing to do with the Circle. I think the only consistent people that I saw throughout my pregnancy was the Circle. Like every time I went into the hospital for something that I was seeing somebody else. I don't think I saw anybody twice...Whereas when I went to the Circle it was nice that they would follow up "okay you said that this happened", or "what's going on with that", or "how's work?" (Phoebe, 5 Circles attended)

In the vignette, Phoebe recalls her frustration at being "unknown" within the hospital setting. This stands in stark contrast to Pregnancy Circles where there was a familiarity that had developed through continuity of practitioners and other women, demonstrated through their enquiries about her life and ongoing pregnancy. Phoebe's dissatisfaction with her care provision in the hospital leads her to resist the request from hospital clinicians to cancel her Pregnancy Circle appointments and she continues going until she gets confirmation that she can attend both. This request suggests that the model of care may not have been well understood by other clinicians not involved in the trial, as women who were identified as having higher needs in pregnancy were supposed to have additional appointments as needed but continue with the usual pathway of antenatal care with the group (Wiggins et al, 2020).

This demonstrates that women have different priorities with regards to their care provision and experience- in the case of higher-risk pregnancies, the emphasis from healthcare professionals may be to prioritise medicalisation as the safest course for the pregnancy, through increased surveillance and additional appointments with specialists but this risks ignoring other health needs including psychological wellbeing. Moreover, increasing medicalisation also risks the care interactions becoming more depersonalised and it is evident in the case of Phoebe that the group dynamic helped her to feel normal, which she reports felt important to her as her pregnancy became more complex. This highlights a tension between women's embodied experiences and an institutionalised approach to conceptualising safety in pregnancy. In addition, it demonstrates that the normalisation of pregnancy through the facets of GANC may be particularly valuable to women with a raised BMI if their pregnancies are exposed to interventionist and surveillant care outside of these spaces where they feel the risks associated with their pregnancies are overemphasised, or their other needs overlooked.

For both Sophia and Phoebe, the commonality of pregnancy is emphasised within the Pregnancy Circles settings which engenders cultural safety because these are spaces where they are not engaged in negotiating or resisting their risk status. This is unlike in appointments outside of the Circle, where the risks associated with their pregnancies must be discussed and a plan to mitigate them must emerge. What is important to note here is that neither Sophia nor Phoebe are opposed to having the risks associated with their pregnancies managed. Although Phoebe complains that the care she receives is fragmented, she continues to engage in the additional surveillant care that has been offered to her because of her gestational diabetes. Sophia considers the role of the consultant as someone who "holds" the risk for her. The women recognised the utility and benefit of interventionist and surveillant care when it was deemed necessary. There was not a single woman interviewed who declined to receive further care associated with their risk status when it was offered. The issue for both Sophia and Phoebe seems to lie in the potential absence of pregnancy-as-normality within their care experiences. GANC appears to occupy an important place in women's care experience where the

(over)emphasis of risk can be mitigated by legitimising the 'ordinariness' of pregnancy with other women.

The nature of the recruitment strategy to the Pregnancy Circles trial was such that diversity was actively encouraged during the recruitment period, therefore women of all ethnicities, language abilities, parity, risk status and age were invited to join (Wiggins et al, 2020). Consequently, the Circles tended to be quite diverse. Midwives observed that women with a raised BMI benefited from participating in diverse group sessions where the potential stigma attached to their weight status could be somewhat ameliorated through the commonality of pregnancy.

The commonality they've all got is they're all pregnant. So we never -- we had quite a few girls with raised BMI, they never, I don't feel - I mean, I may be -- maybe I was naive to it - but they never felt that they were marginalised by their BMI. Because obviously, you know, a lot of women have raised BMIs at the moment, and I think they were more in the majority than the minority, so I think a lot of women can relate to that. (Midwife 1)

I think being able to talk about it in a group setting and not -- and talking about health and wellbeing in a group way so that it's relevant for everybody doesn't then single out a person within the group, so it's making sure it's important for everybody. And actually if they can see that some people are doing some things, or people are picking up certain exercises during pregnancy, or they're meeting up for groups, or they're going for walks all of those sorts of things, that can really benefit women as well...in an individual appointment people can feel as if they're the only one that's hearing this information, even though we're saying it to everyone. So in a group setting that just validates that. (Midwives 4 & 5)

One of the things that a lot of the ladies did kind of, you know, erm, bring up a lot was about you know, the weight gain. Some had not gained that much, and some had gained maybe a little bit more than the others, at, at that particular gestation. So I think it was

something that, it wasn't like, oh you know, isolating somebody just to-because their BMI was slightly higher. (Midwife 6)

The midwives tacitly acknowledge that women with a raised BMI may feel stigmatised about discussing weight gain in pregnancy. Researchers have noted that fears around prejudice from healthcare professionals are heightened during pregnancy for women with a raised BMI (Jones and Jomeen, 2017, Smith and Lavender, 2011). Midwives appeared to understand the power of the group dynamic as one that could reduce stigma and that this could be beneficial for women with a raised BMI as the potential for these conversations to be interpreted as pointed or targeted was reduced. Current research highlights that women with a raised BMI feel targeted by health messaging in pregnancy, particularly as they begin to gain more weight (Lauridsen et al, 2018). Midwives noted that the commonality of pregnancy concerns enabled women to bond strongly within the group dynamic and facets of the group model like peer support could encourage health-optimising behaviours outside of the Circle.

## 5.3.2. Midwife as facilitator

Facilitation was identified as a key factor in running the group care sessions well. There was evidence of good facilitation by midwives across the interviews and the participant observations that were undertaken. Midwives reflected on the importance of shifting the power dynamic within groups so that women could develop stronger bonds through their pregnancies with other women.

I think just chatting about diet, just chatting about the normal routine stuff, a safe space to share what works for them, what -- you know, that shared experience often is a trigger to life changes and longer lifestyle changes, and perhaps re-evaluating what's important. And actually, during pregnancy is a perfect time for change, you know, and those important messages to get through - often they don't wanna hear it from a midwife, you know, it's a friend that said this, that and the other, what worked for them. (Midwife 2) As previously discussed, the cultural safety framework aligns with many of the facets of GANC. In this situation, by acknowledging that the power dynamic makes women resistant to advice given by healthcare professionals, the midwife acts through inaction. She observes that the group dynamic fosters a sense of normalisation for the women - "chatting about the normal routine stuff", which allows them to direct vital information-sharing. The midwife's facilitation appears as silent observation and quiet reflection. By doing so, she removes the didactic element of usual public health discourse and relinquishes her power as the authoritative individual in that space, and subsequently she observes that the women became more relaxed and are empowered to share information that is useful for them. In this instance, the transfer of power has facilitated culturally safe and appropriate care for the women in this Circle (Curtis et al, 2019). Later in the interview, she considered whether the Circles represented a space where health behaviour changes could be discussed and received better by women because they had been given space to develop and strengthen peer support outside of hierarchical knowledge distribution.

It also made me feel like I wasn't running the show. It made me feel like "this is your time, your important time", so I wasn't the person who had all the answers. In fact, often the case -- you know, something would come up and it would be a shared experience of someone in the group. It wasn't necessarily me giving all the answers, it was -- you know, I was empowering them to sort of be resourceful with what they could come up with. (Midwife 2)

Here the midwife appears to imply that group antenatal sessions facilitate an environment whereby women inherently promote normality through talking together about pregnancy. She acknowledges that there might be an unequal power dynamic between women and midwives that mean women may be resistant to public health messaging from midwives. She posits instead that they can be influenced more easily by friends and family members, more than they can be by midwives. This has been documented elsewhere in the literature (Padmanabhan et al,

2015; Vogels-Broeke et al, 2022). Curtis et al (2019) note that systemic change is unlikely to happen unless healthcare professionals are able to reflect on power dynamics that influence encounters between themselves and their patients. The quotes from the midwife interview above demonstrate the potential of good facilitation that has arisen from the midwife willing to redress the balance of power within a shared space and being reflexive enough to understand how the group dynamic may benefit the women outside of her sphere of influence. Later on in this chapter, the theme, "risk and responsibility" sets out examples where midwives struggled with their role in facilitating care for women with additional needs.

### 5.3.3 Validation and Triangulation about care experiences

As well as being part of the Pregnancy Circle, some of the women were also receiving care from other healthcare professionals outside the Circle sessions to help them manage pre-existing conditions or pregnancy complications. As the Circles were often quite diverse and fostered a relaxing atmosphere, it encouraged some women to safely explore whether the care they were receiving outside of the Circle sessions was clinically appropriate and culturally safe. I conceptualised this pattern of behaviour as triangulation. Women used the Circles as spaces to validate their concerns around maternity care provision and to gather more information in order to make sense of their care encounters outside of the Circle. Phoebe noted that the diversity of the Circle members allowed her to understand whether the care she received outside of the Circles was discriminatory in any way.

Participant: I think it's good to encourage people to like, meet people they wouldn't ordinarily meet with. So, like, for example, the ladies that I've met in the Circle under normal circumstances I can't see where we would have ever come into contact with each other, yet they were so there for me emotionally at a really key time.

Researcher: Yeah.

Participant: So I think it's nice to have that diversity in the group whether it's racially, religion... whatever it is... age, background people that have had C-Sections, people that have had natural births. I think it's nice to have that wide range. And then have someand it's nice to have, to compare the treatment that you're getting. I'm not saying as a way of like holding people to account but it's...it's for you to know whether something is normal or not. For me that was valuable. (Phoebe, 5 Circles attended)

For Phoebe, the concept of normality extended beyond usual concerns around pregnancy but also to the care received during pregnancy. The consistency of the group care sessions helped to alleviate her concerns that she was subject to different care because of her weight status and her ethnic background. This is particularly important as Phoebe occupied multiple marginalised identities. She and other women in her group were also receiving care outside of the Circle because of their individual complex needs. This gave her an opportunity to understand whether her care experience varied from what others experienced. This is particularly important because for Phoebe and some of the other women that were interviewed, their racial identity was another factor that featured heavily in their speculation about the quality of care provision they received. We will return to Phoebe later and explore this point further in chapter 6.

The literature discussed in chapter 3 identifies that women with a raised BMI often feel that their antenatal care is of a poor standard. Utilising facets such as peer support and relational continuity within the group dynamic of the Circle to inform their decision-making is a potentially powerful outcome of participating in GANC. The Circle also appeared to be a space where women could share their care experiences from outside the Circle. In one of the Circles I observed, for example, a woman with a raised BMI had been diagnosed with gestational diabetes and used some of the Circle time to share her experiences of being diagnosed and her care within the hospital.

One woman shares her experiences about being diagnosed with gestational diabetes and how she found the encounter with the diabetes specialist midwife upsetting. She shares

dietary advice with the group and her concerns about checking her blood sugar level every hour- this led to her not eating for 2 days because she was scared about how high her blood sugar levels were getting, almost ended up being hospitalised. Midwives sympathise but also defend their colleagues' practice. It transpires that everyone in the group has had a glucose tolerance test because of one or more risk factor- no one else has developed gestational diabetes in the group. The midwife brings it back to groupadvises a low sugar diet for everyone in the group- she opens up a discussion about tea, sugary drinks and reminds everyone to stay hydrated. (Pregnancy Circle C, session 3)

Two significant things happen in the excerpt above. Firstly, the midwives simultaneously validate her feelings but temper the woman's concern about her poor care episode by defending their colleague's practice. Secondly, the group dynamic enables the realisation that everyone has had a glucose tolerance test, which highlights commonality in the group. Although this woman is the only one who has developed gestational diabetes, the midwife quickly makes this discussion relevant for the entire group through a more generalised discussion about diet which everyone can benefit from. Here, the midwife demonstrates the power of effective facilitation in GANC whereby individual experiences can still have relative utility for others in how they consider and practice health behaviours. In this situation, the midwife assumes responsibility for promoting health behaviours that align with the current maternity guidelines (NICE, 2021A). Furthermore, in doing so, she provides culturally safe care for the group, whereby recognising and respecting differences with the women she is caring for empowers women through information dissemination and discussion (Curtis et al, 2019). The midwives attempt to reframe the woman's experience with the hospital midwife also demonstrates the triangulation of information that happens within Circle spaces.

## 5.4 Risk and responsibility

This theme relates directly to midwives' experiences of facilitating group care for women with a raised BMI. As discussed previously, women with a raised BMI sought out a "normal" pregnant identity and found validation in the group dynamic for this.

Midwives appeared to be deeply enmeshed in a risk management paradigm and this influenced how they delivered care to women with a raised BMI. Midwives reported enjoying this way of working, but in practice, they appeared to struggle with utilising facets of the group model to support a personalised approach to care for women with a raised BMI. There seemed to be ambiguity about responsibility towards care for women with a raised BMI when they received care outside of the Circle, as a result of their pregnancies becoming more complex. There are clear guidelines about the role and scope of midwifery practice that state midwives are "accountable as the lead professional for the care and support of women and newborn infants, and partners and families" (NMC, 2021). National guidance is usually unequivocal about obstetricians being the lead professional for women with complex pregnancies (Chief Nursing Officers of England, Northern Ireland, Scotland and Wales (CNO), 2010; RCOG, 2016). For complex pregnancies, midwives often inhabit the role of care co-ordinator and are expected to continue to provide usual midwifery care (NMC, 2019; RCM, 2014). However, current RCOG (2018) guidelines recommend that women with a BMI>30kg/m2 are managed in all antenatal clinics and obstetricians are not named in the guidance as the lead professional for this group of women. Researchers have noted that midwives feel that current guidance remains unclear as to who is the lead practitioner for pregnancies with obesity as a complicating factor (Murray-Davis et al, 2022). The following subheadings highlight some of the tensions of facilitating group care for women with a raised BMI, many of whom had additional and complex needs requiring care outside of the Circles.

## 5.4.1 Medicalisation as priority

There was evidence that within the Circles, the midwives made the appropriate referrals for additional care as required, highlighting that risk management was consistently at the forefront of care provision. This was particularly the case for women with a raised BMI, who were sometimes categorised as "high risk" at their booking appointment. The midwives often identified these women as requiring further intervention and care outside of the Circles, as recommended by national guidance (RCOG, 2018). However, there were examples of uncertainty from facilitating midwives about women's suitability for Pregnancy Circles with the amount of care required outside of the Circles.

Participant: I, I don't know if it's come up, but I was diagnosed with gestational diabetes. Erm so that was then, there was a little bit of confusion because I was told about that at one of the Circles. And then they said, "I'm not sure you're allowed to come to this anymore." And I was a little bit gutted, like oof! Does that mean that I'm kind of then....'cause I'd kind of, it was at 28 weeks so I, I'd met them all quite a few times and I knew, like I said, I knew what the format of the- you know, when the next meetings were, what was coming up, I knew the physio was coming, I knew the you know, the breastfeeding specialist, I knew that was all coming up and I was a little bit gutted that I potentially was not kicked out but you know, that I wasn't -

Researcher: Yeah

Participant: -that I was not going to be able to be invited back. So there was a little bit of to-ing and fro-ing with that. And then the diabetes team said, "no you can, if it works for you. You can go back there." And I did, I, I did carry on going there. (Sally, 7 Circles attended)

Sally recalls that when her pregnancy became complicated by gestational diabetes, she felt that the midwife was unclear about whether Sally was "allowed" to continue receiving routine midwifery care. The midwife essentially shifts from a position of facilitator to gatekeeper. The uncertainty the midwife portrays perhaps highlights her inexperience with this model of care.

However, in this exchange, the medical safety of the pregnancy is prioritised to the exclusion of midwifery care that is provided in the Pregnancy Circles which Sally indicates she values. Sally clearly wants to keep attending the Pregnancy Circles and she eventually seeks clarification from the diabetic team. It is an indication of the facets of the group care model such as relational continuity and peer support were highly valuable to women in the face of the increasing medicalisation of their pregnancies. In one session I observed, the preoccupation with risk management prevented the midwives from facilitating the session as intended.

MW2 speaks openly to MW1 about the women being out of the circle too long and expresses her frustration with MW1- says she has mentioned this to other midwives she does other circles with- there's no need to have women watching you write up notes, they can be back in the circle participating whilst you write up and this is not how they've been trained to run the circles and they are always going to overrun if the future sessions are run like this- especially when they have to actually palpate and take bloods. MW1 shrugs her shoulders slowly and says slightly awkwardly to me that she is a 1-2-1 midwife, and that women need the private time. MW1 also mentions that woman 1 is being caseloaded in the "pregnancy plus" clinic (high BMI clinic) but she can see on her laptop that none of the referrals have been done so it's her responsibility to chase up everything and ensure all the scans and referrals are done- this is stated as an explanation for why this woman was out of the circle for so long. MW1 is unclear who is the lead midwife for this woman- is it her as she is attending the circles or is it the midwife who runs the high BMI clinic- she is usually considered the named midwife for high BMI women. (Pregnancy Circle E, Session 2)

In this passage, the midwives disagreed with how care should be prioritised during the Pregnancy Circle when a woman was identified as having additional care needs outside of the Circle. Being deeply enmeshed in a risk paradigm, MW1 finds herself unable to practice as the group model intended because the responsibility and care co-ordination for a woman with a raised BMI is unclear. It becomes a barrier to effective working practices within the group, which frustrates the other midwife. In one case, the risk management paradigm seemed to align with

the midwives own personal biases which consequently contributed to the lack of discussion around weight, diet or exercise, as observed during one session.

The midwives also discuss that they think it's inappropriate that a woman with such a high BMI (over 40) is in the pregnancy Circle – the language used "*she* knows she shouldn't be in here" (emphasis is the midwife's). They talk about how they find discussing diet awkward with her when the other women in the group are visibly not obese. This woman particularly likes Chinese take-away food, but the midwives feel uncomfortable discussing healthy eating with her especially in front of other women with a low BMI who "can" eat these kinds of foods. One midwife is visibly blushing and is very uncomfortable discussing this. The midwives also share that they think Pregnancy Circles might not be a suitable place for high-risk women because things take longer and often require further referrals that take more time. (Participant Observation, Circle A, session 6)

In this observation, both midwives position this woman's presence in the group as the barrier to effective discussion about diet and exercise, rather than their own discomfort about her weight. In effect, the midwives shift the responsibility of discussions around diet and exercise onto this woman, whereby her participation in the Circle now inhibits other women from receiving information to optimise their health during pregnancy.

## 5.4.2 Perceptions of specialised Pregnancy Circles

One of the differences in how women and midwives perceived the utility and function of the Circles was in how they responded to considering facilitating a Pregnancy Circle targeted at women with a raised BMI. As midwives conceptualised these women as having additional care needs, most of them intimated a preference for running specialised Circles just for women with a raised BMI in the future. I think Pregnancy Circles for specialist groups would work really well, because you could say "right, my specialist group today is raised BMI", or VBACs, or vulnerable women, or --I dunno, whoever, alcoholics, whatever, whatever that is. And you think "right, today I need to make sure that I can address all the stuff that's gonna be really relevant to this group of women" (Midwife 1)

Having similar sort of risk factors, perhaps they would benefit from each other, having that shared experience and having what works for them so that they could crossreference how their month went and how their weeks went, and looking at diet and exercise and having the same sort of goals. So, I think it probably would work better in the longer run if it was a shared aim for a shared problem, a shared goal. But yeah, it's something that could be tweaked and actually could be delivered specifically for the high BMI population, I think it would be of benefit. (Midwife 2)

Participant: If you were going to try and group your -- your bariatric ladies together, actually if they took part, and did it as a Circle. That would be quite a nice... just, you know, not that they did all their clinics like that, but you could have some of the midwifery Circle and then you've got your obstetricians come in as a [clinician] -

## Researcher: Mm

Participant: -because then yes, you'd get the two sides of the story, but then the midwife also - 'cause we don't sit in on the obstetric consultant clinics usually, you know.

## Researcher: Yeah.

Participant: So actually, you could see how skewed or not skewed information is and kind of put it back in one way, and encourage women to ask questions. So that, that provision of what are your choices and what are your options, that you don't normally get. (Midwife 3) Midwives speculated that discussions around weight management or interventions could be more effective in a group specifically for women with a raised BMI as they would not feel stigmatised and could utilise the social support element within the group. However, this assumes two things – first, that women with a raised BMI should be situated in the pathology of their pregnancy, and two, that women with a raised BMI are or should be preoccupied with their pregnancy weight gain, both reinforce the idea that a raised BMI during pregnancy is problematic and requires resolution. In addition, these comments imply that the midwives were aware that these sorts of discussions were not effective in the groups they had facilitated. In recent years, there has been an increasing demand to make the NHS more efficient and boost productivity (NHS England, 2021). The implication that running exclusive group care sessions that specifically targets women with a raised BMI as a more effective way of delivering care highlights a salient issue with the group care model. The demands of facilitating a group with diverse needs appears to be difficult to balance for midwives, finding themselves unable to provide both individualised care that is woman-centred but also advice that is inclusive enough to be applicable to everyone in the group. This may be in part because the model was a novel approach in delivering care, and the midwives were inexperienced with working in a facilitative way. However, there were midwives who acknowledged that a targeted group for women with a raised BMI could increase the risk of weight stigma.

I try not to separate people off for different things. I know that it probably might have benefits in some ways, but I feel like we shouldn't be separating women into different circles. I don't know, I feel like that's not keeping them together and making them feel more normal. I feel like maybe that makes them feel like they have a risk factor that's a concern and that we should be adapting our care for them to that circle. I don't know, if I thought about it in different ways, or for people with diabetes, or people -- or black and brown women because they're more at risk of different things; I wouldn't want to put the circles into different things, I think a real mix of women is great because you can really learn from one another (Midwives 4 & 5)

These comments indicate that for a couple of the midwives interviewed, they understood the Circles as a space to promote normality in pregnancy, rather than using the space to reinforce and emphasise pathology and risk reduction. Women also viewed the concept of a Pregnancy Circle targeted for women with a raised BMI as a potential space for stigmatisation.

Participant: I don't think I'd like- I don't think I'd like that to be done. For there to be a Circle just for women with a raised BMI.

### Researcher: Mm

Participant: No. There's something about that that doesn't sit right with me. I can't quite put my finger on it. No, I don't think that would work. (Olivia, all Circles attended)

Participant: I don't know if singling out women because their BMI is high would be a nice thing either, no -

#### Researcher: Yeah

Participant: I think it would've been a shock to having just the Pregnancy Circle and everybody visibly has a higher BMI or is overweight, I'd feel like - "uh, oh - oh no! We're in trouble!" (Sophia, 5 Circles attended)

As seen earlier, Olivia was already apprehensive about joining Pregnancy Circles as she anticipated that it would be a potentially stigmatising space, highlighting that the embodied experience of having a raised BMI is one of constant vigilance against stigma. Sophia also identifies that it poses a risk of further stigmatisation. As previously seen, Sophia particularly wanted to feel normal in pregnancy and not singled out for her weight. There is evidence that suggests women's perceptions of their bodies as healthy may determine how they perceive risk in pregnancy and how much they want to engage in discussion around obesity as risky behaviour (Relph et al, 2020). However, Lily was one mother who welcomed the idea of having a specific group just for women with a raised BMI. Participant: Erm, and also you know, I...not...not to target people, but if you had said, "okay we have got a pregnancy Circle but it's for people with a BMI of over whatever BMI", the conversations may change?

### Researcher: Yeah

Participant: So women may talk more openly about how they feel about their weight, how they're feeling in terms of pregnancy, we may be able to say, "okay, you know what, let's come half an hour early, we can you know, do a little bit of exercise or we can talk about meal planning", and stuff like that. But that's not going to be important in a group where it's not, there's not enough of it, so to say.

## Researcher: Yeah

Participant: Know what I mean? Like, my voice is never going to be heard, as the Black woman who's overweight, having my third baby, in a room of white women that are not overweight and having their first child. (Lily, 6 Circles attended)

Although Lily's comment initially advocates for a targeted Pregnancy Circle, it also captures something about feeling marginalised within her Pregnancy Circle. She observes that most of the women in her Circle are different to her and speculates whether this makes it difficult for her needs to be met. In a way, Lily's argument for a specific Pregnancy Circle may highlight a need to have some similar characteristics with other women within the group dynamic. She was not alone in this – about half the women identified a desire to be put with a similar ethnic or age demographic and speculated that this may have helped them to bond further. Lily's stance was almost certainly informed by her perspective on holding multiple marginalised identities. In addition, Lily is a nurse by profession, and throughout our interview, she espoused views that aligned with a biomedical understanding of obesity. This may have also contributed to her understanding of her body as pathological and requiring intervention in pregnancy. Lily was one of the few women who attended many Circles and reported that she did not develop strong bonds with other women in her group. Throughout our interview she reiterated the idea that the

group dynamic did not serve her particular needs either as a Black woman, a woman with other children, or a woman with a raised BMI. This vignette serves to remind us that understanding divergent perspectives on care provision for women with a raised BMI can elucidate the ongoing challenges in appropriate facilitation and ensuring that individual needs are not being subsumed by a group dynamic. Furthermore, this suggests that further work needs to be undertaken to understand how best to implement a health intervention specifically designed to be inclusive of women with marginalities.

### 5.4.3 Fragmented care

Developing complexities in pregnancy often changes the antenatal pathway for women. Much of the relevant guidance recommends increased surveillance to monitor for the risk of developing further complications (NICE, 2021A; Denison et al, 2018). A shared care pathway is recommended for women with a raised BMI, although RCOG guidance recommends this group of women are managed across all antenatal clinics (Denison et al, 2018). Issues appear to arise in substandard care co-ordination when complexity develops. As one midwife remarks, the combination of lack of leadership, medicalisation and subsequent care fragmentation for women with complex pregnancies increases the chance of having incomplete risk assessments at appointments.

Participant: Yeah, I mean, the one bit you always notice with the -- when they're on an obstetric pathway, is either people have forgotten to take bloods, or somebody's not done, you know, so the blood pressure bit's always done, everybody always remembers to do that.

#### Researcher: Yeah.

Participant: 'cause the healthcare assistants pounce on to them as soon as they get there, but all of the things of -- even simple things, like, you know, has anyone checked the rhesus negative status? Did anyone remember to order the Anti-D? Bits that you'd expect

usually, because it's -- you've got too many cooks if you like, in -- in there, um, somebody assumes somebody else has probably checked it, but nobody has, so yeah. So from that point of view continuity means you haven't got those little gaps in the pathway, definitely. I find that's always the usual thing where everyone -- when you look back at history and they're like "ughh", you know, and then they go "she never saw a midwife! What's going on?" (Midwife 3)

The midwife indicates that without good coordination of services and understanding of what each healthcare professional is providing, conversely, women with complex pregnancies are more at risk of complications being missed, thus increasing their chances of a poor outcome or experience. The midwife implies that in cases with a poor outcome, the lack of continuous midwifery care has been cited as an important contributing factor to poor care, suggesting that midwives are at least considered to be central to care coordination for women with complex pregnancies. Fragmented care is understood to be a lack of co-ordinated care, both within and outside of the same healthcare system, and it is associated with poor quality of care, increased healthcare cost, and poor patient satisfaction (Stange 2009). However, the rise and prevalence of patients being seen with co-morbidities is often cited as a reason for the need for secondary care specialisation and centralisation of services, in which care fragmentation is most likely to occur (Kailasam et al, 2019). Often the personal cost to the patient of service centralisation is often not considered in economic evaluations – for example, increased journey distance to the hospital may reduce the utility of centralisation especially in vulnerable or marginalised groups where access to transport is poor (Bhattarai et al, 2016).

One of the participating sites could not find an appropriate community location and so ran the Pregnancy Circles in the hospitals parent education room. One of the midwives considered this particular set up to be beneficial to women with additional complex needs because they were able to have all their appointments at the same time.

We came to an agreement that "okay, they might have one or two extra appointments with their diabetic input, but they don't want to miss out on Pregnancy Circles, so can you do this for them and we'll do that?" and we combined it on the same date, it was all a one-stop-shop...and actually a couple of them had a consultant appointment during the time of Pregnancy Circles, but we checked them in and then they'd -- do the Pregnancy Circles and then admin staff would come around to collect them when the consultant would be free. So it worked well, to be fair, it really worked well. I think it's having -- looking at the teams and joining things up from their -- from that kind of timelines, yeah. And I think knowing your contacts, and knowing who to ask as well, helps. So having a bit of wisdom in terms of when the appointments are run, "can we book it for this day?" or "have it on that day, you can review that scan when you come back to Pregnancy Circles", so having a sort of plan in place (Midwife 2)

This midwife was quite experienced and adapted to the group model well. She often spoke about the need for flexibility when facilitating and this sentiment is echoed in the passage above. She notes women did not want to miss out on their Pregnancy Circles session, yet they required further care outside of the Circle sessions. She identifies that being situated in a hospital setting allows her to co-ordinate all the appointments at the same time, meaning that the burden of responsibility of attending multiple appointments has been removed from the women. She uses facilitation in a different context, whereby women are not being excluded because of organisational processes. Appropriate care coordination is a feature of midwifery continuity of care models which she has managed to maintain well, and arguably has been easier to facilitate because the intervention was held within hospital grounds, rather than in a community setting. While this is an excellent example of the power of good facilitation, it also demonstrates that further research is required to understand whether the utility of a community intervention could translate well into tertiary settings for good care experiences when women require multiple and varied care inputs.

## 5.5 Conclusion

The group care sessions were spaces where women with a raised BMI, on the whole, spoke fondly and positively about their experiences of Pregnancy Circles. Some women had a lot of internalised stigma about their bodies therefore anticipated weight stigma from their care providers. Tensions were present in how women engaged in competitive comparison with and about other women in the group, highlighting the visibility and vulnerability of being a largerbodied woman. Facets of the group care model such as peer support and relational continuity supported a positive experience of pregnancy and women identified the Circles as spaces where the commonality and ordinariness of pregnancy were emphasised. This was particularly important for women whose pregnancies became complex and they began to receive care outside of the Circle. Women were not opposed to receiving additional surveillant care related to their BMI but the group dynamic helped to mitigate the creeping medicalisation of their pregnancies. The group dynamic also presented opportunities for women to compare their care experiences if they were receiving care from outside of the Circle and so women were able to triangulate information from different sources in order to determine whether their care encounters were safe for them. Cultural safety was largely maintained in the Pregnancy Circles through the group dynamic and with good midwifery facilitation.

Although there were examples of good facilitation within the Pregnancy Circles, midwives continued to practice within a deeply entrenched risk management paradigm. This influenced their perceptions of women with a raised BMI, often categorising them as a discrete group of women who had "high-risk" pregnancies. This binary application of risk meant that midwives often struggled to co-ordinate care for women with a raised BMI. In principle, midwives supported and enjoyed working within a group care model but in practice, found it difficult to embrace a different way of practicing when caring for women with a raised BMI due to a preoccupation with risk management. They struggled to utilise the facets of GANC, such as woman-led discussions, or a facilitative approach to care in order to optimise care for women with a raised BMI. Midwives demonstrated that facilitating group care sessions where women had diverse care needs was difficult, indicating that fidelity to the model was difficult to achieve.

# 5.6. Chapter Summary

This chapter has introduced and explored the first meta-theme, Pregnancy Circles as a site of tension, with its interrelated themes, Weight Stigma, Normalisation of Pregnancy, and Risk and Responsibility. It has highlighted women's experiences of antenatal care in relation to the facets of the group care model and has also explored the experience of midwives facilitating Circles for women with a raised BMI. The next chapter will now turn to discussing and exploring the second meta-theme, The hospital as a site of danger.

# Chapter 6 – The hospital as a site of danger

## 6.1 Introduction

Following a narrative approach to pregnancy, this chapter discusses themes related to the labour and childbirth period and considers the intersection of GANC experiences with high-risk status, embodied identity, and expectations of birth choices and experiences. I conceptualised the hospital as a site of danger from the point of view of the women interviewed. Healthcare professionals understood risk to be inherent within the fat body, regardless of whether they worked in a GANC model or not, and therefore reproduced ideas about the hospital as a place of safety, where the risk inherent in women's bodies could be managed by the institution. Being deeply entrenched in this risk management paradigm meant that midwives did not utilise facets of the group care model well, such as woman-led discussions, or facilitative practice, in order to strengthen women's decision-making processes around their birth and labour choices. In addition, for many women, their Pregnancy Circles were cut short due to the pandemic, and with it they lost a space that normalised their pregnancies. Absence of the facets of GANC such as relational continuity and facilitative decision-making processes contributed to a poor experience of labour and birth for women with a raised BMI.

During the COVID-19 pandemic, the hospital shifted in the public consciousness from a place of safety to a place of danger, as the media was responsible for heavily influencing women's perceptions of hospitals and their risk of death (Karavadra et al, 2020). Rapid reviews conducted at the time of the pandemic revealed that women who had a raised BMI or who were from ethnic minority backgrounds were more likely to die because of COVID-19 or require the highest level of interventionist support and care in hospitals (Knight et al, 2022).

I considered danger as it related to women's experiences and expectations in the wider context of GANC It appears that care at the hospital was often antithetical to expectations of labour and birth, and experiences of group care. Women did not receive continuity of care, they reported sometimes being at odds with their healthcare professionals and recalled a lack of autonomy in

decisions about their care. For some women, their embodied risk status influenced some of these actions and perceptions which in turn affected their experiences of their labours and birth. Most of the women interviewed developed either a pregnancy or labour complication where they were recommended to labour or give birth in obstetric settings. Although three of the women gave birth on midwifery-led units, and one woman commenced her labour on a free-standing midwifery unit, all of the women interviewed gave birth in hospital settings. Most of them received some form of intervention during their labours and birth. Intrapartum care was often medicalised because the women were considered to have risk factors that required intervention to optimise clinical safety, which made women feel as though their needs (such as comfort and mobilisation) became marginalised. For women with multiple marginalities, racialised experiences within hospital settings solidified the hospital as a site of danger and amplified the trauma around their birth experiences. Women also spoke quite literally of being traumatised by their birth experiences therefore I consider the hospital as also a physical site of danger.

Four themes are described throughout this chapter as follows – expectations of labour and birth choices, COVID and the hospital, interventionist care prioritised, and birth trauma. The table below highlights the development of the meta theme through the quotes, codes and subthemes.

Table 12. Themes, subthemes and indicative quotes

Meta Theme	Themes	Sub Themes	Quotes
The Hospital as a site of danger	Expectations of birth choices and	Within the Pregnancy Circles	W2 wants to try for the birth centre, low risk midwifery unit. MW1 asks what her BMI is exactly as this may be a contraindication for using the birth centre.
	labour	Outside the Pregnancy Circles	she said "you're gonna give birth in the hospital. And you're gonna have to do it there because you're high risk."
	COVID and the	Perceptions of the hospital during COVID	I was thinking, I need to leave. I just need to get out because actually, I don't know where COVID, is. And it's much safer for me to be at home.
	hospital	Medicalisation amplified	it depended on the day of the week, depended on staffing levels, on Coronavirus, on whether the birthing unit was open, and then I said like "can I go to the birthing unit?" they said they haven't got enough staff that day "you'll be on the labour ward"
	Interventionist care prioritised	Birth preferences denied	they were like "okay, you're high risk." I didn't get to be in the birthing centre, I didn't erm, like I really wanted to be in a birthing centre but they didn't let me
		Maternal discomfort	I did tell the midwife look, I need to move. I need to do something. I can't be on this monitor all the time, I have to do something, I'm, I'm going through too much pain.
	Birth trauma	Inadequate care	I'm waiting for an investigation but obviously COVID's put an end to that. My treatment in the hospital was pretty shit
		Racialised experiences	I still ended up in a situation here I was having to plead with them like until I went into shock my body was like, the infection was getting into my blood before they believed I was in as much pain as I was supposed to be, that they said I was in.

## 6.2 Expectations of birth choices and labour

Women's expectations of their birth choices and labour were heavily influenced by both their Pregnancy Circles sessions and by healthcare professionals seen in other appointments. Most of the women interviewed were also receiving care outside of the Circles because of their BMI, or because they had developed pregnancy conditions requiring further surveillance. These were also spaces where expectations around labour and birth choices were shaped. Within the Pregnancy Circles, conversations included, but were not limited to, topics such as how labour might start, place of birth, and pain relief options. Facets of GANC such as peer support and women-led discussions influenced women's decision-making processes, sometimes outside of the midwives' influence.

Some facilitating midwives struggled to utilise facets of GANC such as woman-led discussions or facilitative discussion to optimise shared decision-making processes, instead remaining deeply enmeshed in a risk management paradigm. Therefore, they appeared to understand the Circles as a space where their responsibility was to manage women's expectations of labour and birth within a risk management framework. This praxis was mirrored in appointments conducted outside of the Circle with other healthcare professionals where women experienced gatekeeping of choices and no shared decision-making processes. In discussions that took place in both the Pregnancy Circles and other appointments, the hospital was conceived as the primary location for birth, and there were both implicit and explicit discussions that reinforced the hospital as the safest place for women with a raised BMI to labour and give birth.

## 6.2.1. Within the Pregnancy Circles

There was some evidence that Pregnancy Circles were spaces where women could explore different choices available to them, regardless of their risk status. Some women, such as Grace, spoke about how they realised certain birth choices were available to them through discussions held in Pregnancy Circles spaces.

I think it was also good to be able to hear and discuss um, you know, pregnancy again, because I'd forgotten a lot of things as well, like birthing options. Also understanding what was available through the hospital because I think first time around, home birth wasn't an option. And so, this time, the Pregnancy Circles- they brought in the lady from the home birth team, and she talked us through that and that for me wasn't something that I had ever considered. And actually, I changed my mind, like I wanted a home birth, (laughs) so that was kind of, you know, eye opening. (Grace, 3 Circles attended)

Despite being a second-time mother, Grace notes that the Pregnancy Circles sessions legitimised her decision to opt for a home birth, a choice she notes was not made available in her first pregnancy. By inviting another practitioner to discuss birth choices within the Circles, the midwives simultaneously give up their power and empower Grace to make a different choice about her place of birth. Grace would later transfer her care to the homebirth team after her Pregnancy Circle sessions were cancelled. The decision to opt for a home birth is particularly poignant as women with a raised BMI are often steered away from choices that promote normality and considered only suitable for "low risk" pregnancies (Kerrigan et al, 2015; Rowe et al, 2018). Being exposed to different ideas within the Pregnancy Circles expanded Grace's understanding of her choices and subsequently affected her birth planning.

As part of the randomised controlled trial, participating midwives facilitating the group care sessions were given a manual to help guide each session. The manual followed the NICE (2021) recommendations for individual antenatal care provision, self-care provision, alongside suggested discussion points for various sessions, as well as reflection, documentation and referrals. This was not intended as prescriptive but rather as a guide to aid midwives in how to structure their sessions. The manual suggests that from the third session onwards (when women are around 28 weeks pregnant), physiology of labour and coping mechanisms can be discussed. Multiple considerations of labour and birth (for example: complications, place of birth, induction, stages of labour) are suggested as topics of discussion in every subsequent antenatal session. My field notes indicate that out of the seven sessions that I observed, six of them included discussions about labour and birth planning. The passages below highlight some of the ways

that midwives and women interacted during those discussions across different sessions and how expectations of labour and birth were shaped.

MW2 asks women whether they know anything about induction of labour (IOL)everyone is quiet and looks at her standing by the flipchart. MW2 briefly discusses hospital policy re: IOL and going over 42 weeks requires daily monitoring (this is not presented as a choice) and that induction is offered at 41+5 to avoid going over 42 weeks although she does not explain why women would want to avoid going over 42 weeks. She veers into didactic mode now as none of the women can contribute towards the IOL discussion. MW2 discusses a sweep as a first measure that midwives can undertake to aid onset of labour. Woman 5 talks about her experience of sweeps but is not sure why it's done and what exactly the process is except it is painful and the midwife uses her fingers. MW2 elaborates on the process of a sweep, describing physiology. MW1 holds up a poster of female anatomy and cervical dilation whilst MW2 talks about effacement and dilation. Woman 5 shares her experience of her sweeps – said she had three in total, the first and second didn't do anything but were painful but the third definitely helped, especially as the midwife recommended going walking after. She looks up at the ceiling whilst she talks about this, the other women look at her and MW2 also looks at her whilst she's talking. MW2 waits for her to finish and then discusses what happens after if the sweep doesn't work- induction is only carried out as inpatient process- women need to be admitted, she discusses CTG monitoring and different medications. Woman 4 asks whether she can still go to birth centre with an induction- MW2 says yes if only one application of the medication. MW2 says to ask for pain relief if you require it and continues to discuss the induction process further and directs most of her conversation at woman 4, as woman 4 has interrupted to ask whether they can take their own paracetamol in to the hospital and use it whilst they are there. MW2 talks about breaking the waters and that this needs to be done on the consultant led unit. (Pregnancy Circle B, session 7)

In this excerpt, there is evidence of good facilitation from the midwife within a discussion about induction of labour. Although she initially leads the discussion didactically when there is a pause in the discussion, after a short while, the women start to share their own experiences. By using the lived experience of the woman and linking membrane sweeps to the process of induction, this interaction demonstrates the narrative co-creation of labour and birth expectations between the midwife and women. However, it is not made clear within this interaction that the purpose of induction is for foetal wellbeing. The midwife indicates that women should avoid going too far past their due date but does not explain the reasons why. Intervention is discussed almost as an inevitability, and the "cascade of intervention" that the midwife describes culminates in the consultant-led unit, implying it is the safest place to undergo labour and give birth if interventionist care is required. The notion that the hospital was a place of safety for women who had complex pregnancies was deeply entrenched in midwives' praxis and this idea was observed across multiple Pregnancy Circle sessions.

MW2 asks the women where they had planned to give birth – she advises best place is on the consultant led unit for woman 1 as she is planning a vaginal birth after c-section (VBAC) and therefore will require continuous monitoring. Woman 2 wants to try for the birth centre, the low-risk midwifery unit. MW1 asks what her BMI is exactly as this may be a contraindication for using the birth centre. Woman 2 avoids saying the exact number out loud and says her booking midwife said she was on the cusp but would be fine to use it. (Pregnancy Circle G, session 1)

The midwife leading the discussion in the circle with the photos shares that she wants to talk about low risk settings but is careful to make sure the information is quite general and includes other places because she knows some women will not be eligible but she doesn't want those women to feel bad that they "won't be allowed" to deliver their babies there. (Pregnancy Circles C, session 3)

Some of the photos are used to contrast and highlight different birth settings- some very clinical and some low risk i.e. birth centre and home settings. Midwife empowers women- every birth place is "good and fine" – every woman is different, some feel safe on a consultant led unit and may prefer a more clinical setting. Women query about how to book into the birth centre in time- reassurances given, midwife verbally checks who hasn't had a referral done yet and makes mental notes. Midwife reminds women of exclusion criteria for low-risk settings- prematurity and induction of labour for post dates are not allowed to be on a birth centre. (Pregnancy Circle C, session 3)

In these passages, there is discussion around various places of birth in the presence of women who each have various complex needs in pregnancy. What is apparent is that risk management is so deeply entrenched in these midwives practice therefore they uphold the consultant-led unit as the safest place for birth, even when these women express a desire to consider other options. In the first passage, the midwife leads by asking the women where they plan to give birth but she doesn't wait for their response before she advises the consultant-led unit. What is left unsaid but is evident is that the midwife believes both these women occupy a high-risk status and therefore require additional monitoring. Interventionist care is positioned as necessary without involvement from the women regarding their choice or decision-making about how or if this may be safer for themselves or their babies. In the second excerpt, the midwife positions the birth centre as a place that requires gate-keeping from "high-risk" women. In the third excerpt, the midwife mitigates negativity about "high-risk" birth settings by saying "every birth place is good and fine" and then quickly follows by saying some women even prefer clinical settings. This statement elevates the consultant-led unit as a desirable place, as well as the implication that it is the safest place. Within the Pregnancy Circles, women made associations about place of birth and the hierarchy of choice.

Women discuss birth plans and check with each other about attending a tour of the unit and confirms details with the midwives. This leads to a conversation about "hierarchy of birth place". One woman identifies that homebirth is on the lowest rung of the hierarchy, then birth centre and then delivery suite. Women agree amongst themselves that you

cannot change place of birth if you choose to deliver on a labour ward. Midwives do not contribute to this conversation. (Pregnancy Circle A, session 6)

Amongst the women, the delivery suite is identified at the top of the hierarchy. Interestingly, the women identify rigidity in the way that birth place decisions are made, implying that although you can move from home or the birth centre towards the delivery suite, you cannot choose to move away from the delivery suite. The lack of midwifery facilitation in this conversation may indicate the alignment of midwifery praxis within healthcare organisations. Midwives spoke of the difficult of facilitation and approaching risk with women with a raised BMI, as seen below.

The difficulty is, with the raised BMI girls, is that - and we had a few of them- two of them ended up with a caesarean section having laboured a long time...umm, and I fear, because- you know, and I'm talking of quite raised BMIs now, maybe in the forties plus -is that if the labour's not going too well, or let's say their labour's going very, very well but there is a chance, a very small chance, that she could end up with a caesarean section. But because of her BMI they prefer to do that at certain times of the day where they wouldn't wanna be doing anything- you know, BMI of a lady of 44-50, to them it's exceedingly high risk and to do an unplanned caesarean section is risky. So, I feel that sometimes some of their choice is probably taken away from them. So I think they're prepared well, but when they're in the situation I think some of that choice is eroded away because of the situation, and I get both sides of that. I get it's "why can't I just labour and see how I get on", you know, I think "well actually, that'll be really challenging if we've got a baby whose heart rate is really low and we need to section you quickly", that's a challenge for the team. So I get it, and some of the consultants would prefer to do that in a less stressful environment, which is really difficult. But I can see the- both sides of that story and both sides of that situation. (Midwife 1)

Participant: Guidelines for a home birth is always women with a BMI below 30. If it's over 30 then she's having a home birth out of guidelines, so she'd already- if she wanted that,

we would have that discussed and a team leader would have to go and discuss that with her out of guidelines, to make sure she was aware of the risks of having that baby, because there's an extra risk of bleeding and things like that with a raised BMI too, and difficult to cannulate and things

Researcher: Yeah, mmm... okay, alright

Participant: If she'd wanted to do that, I'd say "that's fine, you had a previous normal delivery" or "you're low risk", "there's no guidelines", or I'd have to say if they did that "well actually, because of your weight you're out of our guidelines for midwife-led care, so it's your choice where you have your baby but I'll need to get my team leader to come and speak to you" or something

Researcher: Did those conversations happen often?

Participant: No

Researcher: No, okay

Participant: Most women want to have their baby in hospital. If they want to have it at home, they're gonna have it at home whether we're there or not. (Midwife 7)

These passages demonstrate how midwives felt that their duty was to manage women's expectations of their birth and labour choices. The first midwife insinuates that maternal choice cannot take precedence over a perceived safety risk – indeed she considers that a doctor's preference, and their comfort as a practitioner during the time of labour, is the primary concern regarding women with a raised BMI. The second midwife acknowledges that women can choose to labour anywhere, but that home birth is only really a choice for women with a BMI under 30. Although she can parse an imagined yet appropriate scripted response for discussions with women with a raised BMI, she admits that these conversations do not happen often, implying that she does not actively encourage this group of women to explore their birth choices. The excerpts demonstrate how these midwife facilitators struggled to balance the need for woman-centred care with the "intensification of risk management" that still dominates maternity healthcare provision for women with a raised BMI (Healy et al, 2016).

## 6.2.2 Outside the Pregnancy Circles

Most of the women interviewed also received care outside of the Pregnancy Circles, in the form of additional scans, dietician referrals, and most commonly, appointments with obstetricians. In contrast to the group care sessions, women frequently reported that encounters outside of the Pregnancy Circles were often where there were no shared decision-making processes. Risk management was prioritised in these encounters, with women resisting their conferred "highrisk" status to varying degrees. Phoebe was receiving consultant care outside of the Circles because of her BMI. Below she recalls the difference between the care she received inside and outside of the Circles.

Because the whole Covid thing happened now. And we wasn't able to go to our Circles. Even in that short time that they knew me, or I was there, I saw consistent people. So I don't know maybe it's just, I don't know, I don't know. I've never done this before, so I don't know what it's meant to be like. But I would have appreciated seeing a consistent midwife because I was even considering having a birth centre birth or a home birth and the Circle was the only place where they wasn't like, "absolutely not". They were like "okay you know what it's not impossible, you know people had had, but you've got to see how things go." But whenever I'd go to like, any of my appointments, it was like "yep, that's out of the question, you've going to have to have medical intervention in order for you to have this baby". And like why, what's the reasons for that? They're like "Yeah, cos things like blood pressure, pre-eclampsia..." and I was like, but I'm not showing any signs of any of those. "Yes, but you've got a higher BMI." (Phoebe, 5 Circles attended)

Phoebe notes that midwifery-led birth settings were discussed as possibilities in the Circle sessions. In contrast, she reflects that outside of the Circle sessions, she was informed by a consultant that there was no choice as to the place of birth. It is apparent that Phoebe felt within this encounter that there was no differentiation between the potential risk and actual risk having

a raised BMI. Phoebe comment raises another significant factor - at the point where her pregnancy was becoming complicated by gestational diabetes, her Pregnancy Circles were cancelled because of the pandemic. As seen in Chapter 5, women perceived Pregnancy Circles as spaces that mitigated the amplification of risk in their pregnancies. Without the Pregnancy Circles, and its protective facets, Phoebe is exposed to this risk amplification which exacerbates her negative care experience. For women with a raised BMI, this perspective does not necessarily work to support their autonomy in decision-making processes. Isla reflected on one such encounter with her obstetrician.

They sort of went over in the Consultant meeting, they went over what would happen, and I got like a piece of paper with all the information on, but I think it's one of those things that it says- it's kind of like a flow chart on the paper- "we'll start with this and if this happens, we'll do this, if this happens, we'll do this. And if it doesn't happen we'll do that." And I think until you're actually in it and it's happening, you don't actually realise how much it does take out of you. (Isla, 7 Circles attended)

RCOG guidelines recommend that discussions should take place in the antenatal period with a consultant obstetrician regarding place of birth, and that women with a raised BMI are informed of the additional care that is available on a consultant led unit (Denison et al, 2018). The interaction between Isla and her doctor indicates that there are no shared decision-making processes about her labour and birth. Isla notes how disempowering the interaction is and that this feeling persists throughout her experience of labour and birth. Isla agreed to an induction that eventually ended up with an unplanned caesarean after many hours of labour. Later in the interview, she would reflect on how disappointed she was in her birth experience. We will return to Isla later in this chapter. Doctors were not the only healthcare professionals who made unilateral decisions about place of birth. One woman recounts an appointment with her midwife after the Pregnancy Circles had been cancelled and she had been moved into a standard antenatal care pathway.

When I told her I would really like to do it in the birthing centre, she straight away said "no, you can't have it in the birthing centre because you can't control your blood sugars and if anything happens to you, then we'll have to..." You know, she was just really straightforward, but she made, I feel like she made my decisions for me. She just straight up said "no, you can't. I'm not going to allow you to have it in the birth centre". So she just wrote it down, and she said "you're gonna give birth in the erm, hospital. And you're gonna have to do it there because you're high-risk." (Hana, Circles attendance unknown)

It is important to note here that the midwife here was not the same one that facilitated Hana's Circle. There is no evidence of shared decision-making processes within this interaction. Hana is denied access to midwifery-led birth settings because the midwife seemingly positions the development of gestational diabetes as Hana's personal responsibility. The midwife also positions herself as a gatekeeper to normality. It is important to note that midwives are also working within a system that advocates for medicalised care for women with a raised BMI. Researchers have noted that discussing risk factors as a way to invoke fear of a negative outcome is a common feature of medicalised cultures of birth (Hall et al, 2012; Thachuk, 2007). The midwife ascribing a "high-risk" status to Hana not only shifts perceptions of her pregnancy identity, but affects her perception of the hospital, as seen below.

Participant: I had to do it in the hospital. And I was really scared.

### Researcher: Mmm

Participant: I was really scared to give birth in, in the actual hospital. I know there was a lot of midwives that help you and stuff but just the, I dunno, I dunno why I was so scared actually. I dunno. (baby cries) I think it was because I was high risk and erm, I thought anything could happen (Hana, Pregnancy Circles attendance unknown)

For Hana, being categorised as "high-risk" shifts the hospital into a site of danger, where "anything could happen". We will see later in this chapter, this changed Hana's pregnant identity as she began to embody a "high risk" status whilst simultaneously resisting it.

The above passages highlight that both inside and outside of the Circles, women experience intervention being positioned as necessary and inevitable by healthcare professionals. Although there was evidence that some women were able to plan or negotiate alternative birth settings, midwives on the whole struggled to use the group care dynamic effectively to support shared decision-making processes. Consequently, the hospital is tacitly acknowledged and positioned as the safest place to give birth for women with a raised BMI. There is little evidence of shared decision-making processes, which leave the women feeling disempowered about their expectations of labour and birth.

## 6.3. COVID and the hospital

Almost all the women interviewed experienced some disruption to their pregnancy or labour care due to the COVID-19 pandemic. This meant that their Pregnancy Circles were cancelled and they were transferred back to standard care. A few of the women remained with their midwives from the Circles but the majority of them were transferred to different midwives, further fragmenting the care they received. Women spoke frequently about their experiences in the hospital during the pandemic, and how they felt their care had been impacted as a result.

## 6.3.1. Perceptions of the hospital during the pandemic

During this time, women's perceptions of hospitals and their specific risk of death was heavily influenced by daily media coverage of the pandemic (Karavadra et al, 2020). The public perception was that hospitals were sites of infection transmission for COVID-19 (Campbell and Bawden, 2021). Rapid reviews conducted during the early years of the pandemic revealed that morbidity and mortality in pregnancy mirrored the general population, in that those with a raised BMI, older people, or those from ethnic minority backgrounds were more likely to die from coronavirus (Knight et al, 2020). Women in this study reflected on that time and their perceptions of COVID within hospital settings. I've got- quite a few of my relatives are NHS workers so my- and at the time I was living with my niece um, my sister was doing crazy shifts and we didn't, didn't know if for health and safety, if she should stay with us. So I knew how bad it was... I'll be honest. I did think, after I was on the postnatal ward, I was thinking, I need to leave. I just need to get out because actually, I don't know where um, COVID, is. And it's much safer for me to be at home. (Freya, 2 Circles attended)

Being a minority, yeah, in the beginning I did feel a little worried but then I was, um, you know? What can you do? Like, just go with it, take care of yourself you know, of the hygiene and everything and um...because we were not going out at all. (Pooja, 4 Circles attended)

Both Freya and Pooja are women from ethnic minority backgrounds and were aware they were more at risk of being severely unwell with a COVID-19 infection. Women from ethnic minority backgrounds were identified as being more at risk of developing complications as a result of a coronavirus infection (Knight et al, 2022). Freya's comment highlights the fear of infection, and particularly how the hospital was seen as a potential source of infection, and therefore was a site of danger. Perceiving the hospital as a site of infection was particularly concerning for women with a raised BMI because they had been deemed "high risk" and therefore had been advised that they would require intervention, such as Sophia.

I was very conscious that I just didn't want to be induced. I didn't want to go hospital like, especially with Coronavirus, without my partner, - my sister had been in hospital for about three days for an induction, like three days without your partner, and then you go into labour and you're still not allowed to be there. Um... so I was kind of really conscious of that, and I think that really, like, was a lot of the conversation me and my partner were having in the final days, um...and it was keeping me up at night. (Sophia, 5 Circles attended)

Sophia had been advised by her consultant to have an induction because of her BMI and had an induction date booked. Current RCOG (2018) guidelines recommend offering induction of labour at 39 weeks for women with a raised BMI to reduce the risk of poor clinical outcomes for either mother or baby. However, for Sophia, the hospital is seemingly a place of potential infection, and therefore represents a danger to herself and her pregnancy. In addition, she notes that intervention under COVID restrictions introduces another layer of complication in that her partner would not be permitted to stay with her, further isolating her during labour and birth. There is an inherent tension between the recommendation of the hospital as a place of general safety and Sophia's perception of the hospital as a place of individual risk. The risk management framework that is deeply entrenched in the medicalised rhetoric of the healthcare professionals situates risk in Sophia's body. The hospital is positioned as a place of safety, one where the risk of Sophia's body can be managed. However, the situated context of accessing healthcare during a pandemic enables Sophia to resist this narrative, instead shifting risk away from her body and into the institution. In essence, the pervasive biomedical narrative of the hospital as a place of safety becomes upturned during the pandemic, where it becomes a site of danger.

### 6.3.2. Medicalisation amplified

Women reported that they felt that the pandemic was responsible for the amplification of medicalisation they experienced in the hospital. For some of the women, they directly attributed their restricted choices in the hospital to the COVID-19 pandemic. Natalie was one such participant.

Um, I didn't want it. I did get a little bit upset. I wasn't like...I wasn't angry or nothing, it was just that I really didn't want this. I really wanted to just be able to do it naturally, and I think because of Covid, I wanted a water birth, and Covid took that away anyway. And then- so I feel like my plan never went to plan. I know, like obviously everybody's pregnancy doesn't go to plan anyway, but I feel like it's because of Covid why mine didn't go to- how I wanted it. So, it wasn't even anything to do with my body. (Natalie, 5 Circles attended)

Natalie was induced because she had developed polyhydramnios during her pregnancy. Polyhydramnios can sometimes be implicated in poor foetal health and development but also presents a risk to the baby and mother during labour and birth through intrauterine death, neonatal death and increased c-section rates (Golan et al, 1994). Natalie's induction ended up in an emergency caesarean section, which in the passage above she expresses disappointment in experiencing. She recalls that waterbirth was no longer an option at the hospital she gave birth in because of COVID restrictions. During the early period of the pandemic, there were concerns that COVID could potentially be passed through waterbirth via particulate faecal matter as the virus had been found in faeces in two studies, (RCM, 2021a). As a result of this, professional bodies recommended a temporary ban on waterbirth in hospital settings as it was considered a potential source of infection (RCM, 2021a). Natalie seems to imply that her c-section is directly attributable to the lack of access to waterbirth, and that this situation is particular within the context of the pandemic.

Natalie's comment indicates that although women perhaps were cognisant that complications in the hospital do occur outside of COVID, the pervasiveness of the pandemic in both the social imagination and the physical location of the hospital indicates that Natalie could not separate the two. In the case of Natalie, she attributes the failure to give birth vaginally due to COVID, rather than to her body or the way care is typically managed. Natalie's comments reflecting on COVID restrictions in the hospital allows her to shift the responsibility of "risk" away from her body to the hospital as an institution, demonstrating how Natalie resists and challenges the narrative of pathology of her body. In addition, it demonstrates how the pandemic exacerbated feelings of the hospital being a place of danger for women with a raised BMI.

# 6.4. Interventionist care

One of the commonalities amongst the women interviewed was that most of them experienced complications in their labour and birth. In fact, there were only three women who reported no

complications in their labours and births, and they were all multiparous women and gave birth in midwifery-led units. The rest of the women gave birth either on consultant-led units such as labour ward, or theatres. Nine of the women developed pregnancy conditions that are known to significantly increase the risk of labour and birth complications and they all subsequently went on to experience labour and birth complications. Almost all the women interviewed experienced forms of interventionist care during their time in the hospital. Interventions were discussed in detail during five of the seven observed Pregnancy Circles sessions. As seen above, healthcare professionals both within and outside of the Pregnancy Circles identified the hospital, and by extension, the consultant-led unit and interventionist care, as safest for women with a raised BMI. Women reflected on how being treated as high risk informed their thinking and their access to care in the hospital.

### *6.4.1 Birth preferences denied*

Some women reported that their birth preferences were denied by their caregivers. For some women, they interpreted the high-risk status that had been ascribed to their bodies as the reason that labour and birth choices were limited for them. Hana was one such participant, and in the passage below, she describes the feelings associated with being ascribed high-risk status.

Participant: I heard the birthing centre is much more relaxing, they give you...you know the double bed for you and your husband, they give you the crib, you get, you get a bathtub. And you can sit in the bathtub. You know, the water. You can sit and relax and things like that. In the hospital you don't get that facility. You don't get the tub, and you don't get this, and you don't get that, if you're high risk.

### Researcher: Mm

Participant: Which I find really sad. Because I don't understand, yes you're high-risk but why can you not go into the tub and relax? You know?

#### Researcher: Yeah

Participant: I don't, I didn't, I did not, I did not understand why they did that to high-risk people. Like, I don't understand why it was so different for us than people who weren't high risk. (Hana, Circle attendance unknown)

It is clear from the passage above that Hana interprets the lack of choice in her labour and birth as punitive. It is not clear to her why midwifery-led settings or hydrotherapy are not available as options to her, even though she is "high-risk". Current guidelines for intrapartum care recommend that healthcare professionals should offer women the chance to labour in water for pain relief (NICE, 2023). There is some evidence that many healthcare professionals recognise the value of water immersion for women with a raised BMI (Kerrigan et al, 2015; Marshall 2019). However, as Marshall (2019) notes, many women with a raised BMI are often excluded from this option despite there being no evidence that water as analgesia is unsafe. Concerns around hypothetical or potential risks of manual handling prevent it being offered during labour and birth. This is indicative of a larger organisational safety culture, wherein women with a raised BMI are recommended to opt into a more medicalised labour and birth pathway which potentially excludes the use of pain relief and mobility that is often afforded to women who are considered "low risk" (Rowe et al, 2018; Kerrigan et al, 2015). Women recounted discussions with healthcare professionals about interventionist care, including potential outcomes should the intervention not work as intended. Women recalled that these discussions did not invite shared decision-making, as seen below.

Participant: They explained what the risks were, they were saying about blood pressure being a problem, although my blood pressure was just fine all the way through and has been. Yeah, they explained what the risks were and there was mention of the longer you go over the more risk there is of stillbirth, so it just seemed like a no-brainer to be induced.

Researcher: Yeah

Participant: And just to follow what the doctors say. You don't wanna go against the doctors and then something ends up going wrong, do you? (Olivia, all Circles attended)

Olivia's recollection of the discussion about induction demonstrates how the risks of expectant management were positioned. The stillbirth rate increasing as the pregnancy continues highlights how women's bodies are situated as dangerous for the foetus past a certain point, and that interventionist care, in this case induction of labour, is positioned as necessary to secure the wellbeing of the foetus. Although she tries to resist the high-risk status that has been ascribed to her, noting that her blood pressure has been normal throughout, she eventually acquiesces, highlighting the difficulty of going against the dominance of a biomedical knowledge base when a poor outcome is threatened. A few women openly discussed their disappointment with not having a vaginal birth. Natalie was one such participant, and below she recounts the moment when a decision to have a caesarean section was made.

Participant: When I did get to 10 centimetres, I think they -- you know the monitor thing that they put on the baby's head? It kept coming off... and then they said that her heartbeat was dropping, so because they couldn't monitor her, they said they might have to take me to have a C-section, after I got all the way to 10 centimetres. I was not impressed.

Researcher: Mm... no.

Participant: But yeah, obviously I had to do what's best, but yeah. (Natalie, 5 Circles attended)

As seen previously, Natalie already felt as though her birth choices had been denied to her because of COVID restrictions in place at the hospital. She had her labour induced because she developed polyhydramnios. A recent meta-analysis has shown that IOL more than doubles the risk of having a caesarean section for women with a raised BMI (Ellis et al, 2019). Here, she recalls at the end of her labour that a decision for a c-section has been made because the clip used to monitor the baby's heartrate is not able to record an adequate foetal heart trace meaning that it is not possible to ascertain foetal wellbeing. Without maintaining continuous foetal heart trace with cardiotocography- a tool heavily relied on to ascertain foetal wellbeingthe intervention loses its relevancy. In this case, having a foetal scalp electrode in place has increased the risks for morbidity and mortality for Natalie, rather than reduced them. As a result of not being able to utilise technology efficiently, a decision for caesarean section is made to ensure foetal wellbeing, even though the procedure itself is associated with increased maternal morbidity.

In both cases, the women imply that they do not have a choice in labour because their needs are, and should be, secondary to foetal wellbeing. Researchers have noted that women with a raised BMI often feel stigmatisation from healthcare professionals which affects how they will be viewed as mothers (Keenan and Stapleton, 2010; Parker, 2017). There is also deep-set cultural messaging that positions women with a raised BMI as dangerous for their babies, as their bodies are constructed as "bio-cultural anxieties, distilling biological and social causes into the one embodied location" (Warin et al, 2012). Therefore, despite their obvious disappointment about their (lack of) birth choices, Olivia and Natalie's decision to agree with medical professionals can be interpreted as an overwhelming desire to align themselves as being good mothers who make good choices for their children. We will return to this point in Chapter 7.

## 6.4.2. Maternal discomfort

Most of the women experienced complications in pregnancy and during labour, and so interventionist care provision was discussed frequently during the interviews, such as the use of foetal scalp electrodes or continuous foetal monitoring during labour. Some of the women interviewed spoke about their frustration around continuous foetal monitoring being prioritised during their labour and birth experiences. Continuous foetal monitoring was a common intervention that women discussed in the interviews, that appeared to increase maternal discomfort. Foetal monitoring (both intermittent and continuous) is one of the cornerstones of labour care in the UK (NICE, 2021a). Additionally, it is also recommended for induction of labour because of the risk of potential foetal compromise through the induction process (NICE, 2021b).

The use of continuous foetal monitoring for women with a raised BMI is common within the UK although there is no specific guidance that mandates this practice (Kerrigan et al, 2015). The evidence on the effectiveness of continuous foetal monitoring for women with a raised BMI is equivocal, NICE (2019) recommend that foetal monitoring should be based on the woman's preference, with consideration to obstetric factors, with emphasis on shared decision-making between a woman and her team.

As seen previously, an interaction between herself and her midwife ended with Hana being told that she was "high risk" and that she would require intervention because she had gestational diabetes. Here she describes the interactions between herself and the midwife during labour, where she was attached to a cardiotocography (CTG) machine to ascertain foetal wellbeing.

Because I was high risk, they wouldn't let me move much because I had to be on the monitor because they had to hear baby's heartbeat and they had to monitor baby's heartbeat. Hence why I couldn't move and why they wouldn't let me move. But there was that one point where I was like to the midwife, listen if you don't let me move, I will scream my head off. Because you know when you're sitting down, you can feel the pain even more. You're thinking about the pain even more aren't you? You're feeling every pain, every way while you're sitting there and no one's there to help you get through the pain or you know. So when, when I did tell the midwife look, I need to move. I need to do something. I can't be on this monitor all the time, I have to do something, I'm, I'm going through too much pain. They're like "alright, we'll let you move for a bit and then you have to get back onto the monitor". I felt so attached, they attached me to that monitor to the point where I couldn't even walk, I couldn't do anything to help you know, soothe myself. So when I did get the chance to move when they did let me move, I was like mum, whatever you can do, can you please just fill that bathtub. I need to be in that tub, I need to have some sort of water. I need to sit in water.... I felt so much more better, and just walking about and you know, squatting and getting on the bouncy ball and you know, every time you have a pain and just holding the wall and supporting yourself by standing was really good and my mum being there at the back and my husband being there. And then I, you know, as soon as they attached me back into the monitor, it was like a nightmare for me. I was just like, this pain is just getting worse and I'm just sitting

here thinking about the pain and feeling every way of the pain while sitting down. Can you imagine? (Hana, Circle attendance unknown)

Hana ended up having her labour induced because she did not go into active labour following a spontaneous rupture of membranes. Induction of labour (IOL) is associated with oxytocin use to enhance contraction strength and length in order to progress labour (NICE, 2021b). Oxytocin use can also be associated with uterine hyperstimulation which can adversely affect the foetus, and for this reason, continuous foetal monitoring is recommended during induced labour (NICE, 2021a). Hana appears to be frustrated by her limited mobility, reporting that she felt "so attached". In contrast, she recalls that when the midwife acquiesces and removes the continuous monitoring, Hana feels more in control of her labour as she can utilise mobility and non-pharmacological analgesia to good effect. Working within a risk paradigm positions interventionist care as of the utmost priority for the purpose of safety and sometimes to the exclusion of other needs. Researchers have noted that continuous foetal monitoring often leads to women with a raised BMI becoming less mobile in labour and having more dysfunctional care in labour due to practitioner concerns over foetal wellbeing (Kerrigan et al, 2015). This is seen above where Hana's discomfort is disregarded to the point where she feels that she must threaten the midwife ("I will scream my head off") in order to get her needs met during labour. Although there is a semblance of shared decision-making processes in that the midwife agrees for Hana to mobilise without the continuous CTG, and for her to utilise active birth aids such as the birthing ball, the scene above is not the picture of respectful or woman-centred care that should be the cornerstone of midwifery care.

Hana implicitly understands that her comfort and needs are secondary to the potential risks of having a "high-risk" pregnancy, so much so that she internalises the medical language used, referring to herself as a "high-risk" person. She implies that she feels discriminated against due to the lack of choice in labour and birth because of her embodied status. This ultimately changes her perception of her birth experience. This has been documented elsewhere in the literature, whereby women with a raised BMI often feel as though the needs of their unborn baby are

prioritised above their own needs (Relph et al, 2020). Relationships with healthcare providers are vital in ensuring that women feel supported and have choices in labour and birth (Relph et al, 2020). Other women discussed the difficulty of labouring under the rigidity of interventionist care. Sophia recounts her experience below:

I really struggled to be on my back, my body just wouldn't let me be on my back. And I remember the midwives were really good; they said like "just do what your body says, birth is very natural, your body will tell you". Um, but they were monitoring the baby at this point, like they'd put something inside me, and there were straps around my belly so...she wanted- the midwife wanted me on my back, and my body didn't want me on my back. So every time a contraction came I had to get on all fours on the bed, and then she would tell me to turn back around after which... was kind of quite a big deal, it was taking a lot of my energy to do. Um... and I was just exhausted, I was just exhausted. (Sophia, 5 Circles attended)

Sophia's membranes ruptured during labour and there was meconium noted in the amniotic fluid. Meconium is associated with foetal distress and current guidelines recommend continuous foetal monitoring (CFM) using cardiotocography when meconium is present during labour (NICE, 2022). CFM is associated with restrictions in mobility and midwives acknowledge that CFM draws attention away from the woman and towards the machine, in order to achieve a good trace (Fox et al, 2022). This is highlighted above where Sophia recounts that the baby is being monitored and the position required is to be on her back even though this is exactly opposite to what Sophia feels she needs during the contractions. The midwives appear to engage with different knowledge bases– acknowledging the tacit knowledge that Sophia has of her own body in labour ("your body will tell you") but also the medicalised knowledge that prioritises the interventionist care she is engaged in giving. The result of this is that Sophia becomes exhausted attempting to balance her needs with that of her caregivers. In a sense, the notion that obesity is a burden of personal responsibility is replicated within Sophia's labour room, where she must bear the cost of the risks associated with her BMI – acquiescing to the midwife's demands to ensure a good foetal heart trace whilst also attempting to minimise her own pain in labour.

# 6.5 Birth Trauma

It was clear that for most of the women, they were subject to culturally unsafe encounters with healthcare professionals within hospital settings, and in some cases, they felt that their care was medically unsafe too. Whilst COVID exacerbated feelings that the hospital may be a place of danger, women's experiences of labour and birth consolidated the idea that the hospital was a dangerous place for them. Women discussed their experiences of giving birth in the hospital in the context of their interactions with care givers, receiving inadequate care and for some women, navigating medical racism in addition to weight stigma.

### 6.5.1. Inadequate care

For some of the women interviewed, their encounters in hospital settings left them traumatised as a result of the poor care they received. This further solidified the notion that the hospital was a site of danger for some of the women. Researchers have noted that birth trauma is associated with medical intervention during labour and birth and mode of delivery (Reed et al, 2017; Ayers et al, 2016). However, studies have identified women's interactions with their care providers as a prominent contributing factor in developing birth trauma, more than experiencing medical intervention or the type of birth (Thomson & Downe, 2010; Elmir et al, 2010). Amelia was one participant who spoke openly about her birth experience as traumatic as a result of poor care.

I was having nightmares that um, I got paralysed. I've had a spinal block before but there's something telling me I didn't want to do it. And on the morning, I was absolutely petrified. Went through all the stuff and then I sat in the, in the...theatre...and they erm, the anaesthetist couldn't get a cannula in my hand. I've still got a scar now from it. Erm, and I freaked. So I forced them to give me a general anaesthetic. I refused to let them put anyth-I thought, I just couldn't handle them putting anything in my back, so I forced them to give me a general anaesthetic. And it's a good job because they cut an artery and I lost nearly, I lost over 3 litres of blood. If I had been ali-if I had been awake, I think I'd be dead now. 'Cause I would have panicked. And my blood would have pumped quicker, and I think I would have bled out. Erm, so [George] was born first, [Saul] was born a minute later and he was whipped out so quick he had bruising on the brain which fortunately he's recovered from. Erm... but he was non-responsive, so he had to have CPR at birth and George stopped breathing after 6 hours. So yeah. That's probably the first time I've been able to tell that story without bursting into tears. (Amelia, seven Circles attended)

Amelia's description of her birth experience is unusual amongst the participants interviewed in that she could not recall it but rather constructed a narrative where she attempted to make sense of what happened during the birth, during which she was given a general anaesthetic, at her request. She notes that the anaesthetist's failure to site a cannula concerned her and she subsequently opted to have a general anaesthetic. For women with a raised BMI, this procedure is associated with a higher risk of failed intubation, hypoxia and respiratory failure (Domi and Laho, 2012). However, Amelia interprets this intervention as life-saving, indicating that being awake whilst experience a major haemorrhage would have caused her to panic further. Later in the interview, Amelia recalled that she shared her birth story with the other women in her Circle, indicating that the group had bonded well and were able to support each other beyond the scheduled antenatal Circle sessions.

The girl that had her [c-section], she had a bit of a rough time too. She didn't tell her story. The last, none of us actually- any bad story, we didn't tell each other until after we had all given birth so it wasn't...we'd carry on that support and not scaring anyone which was really nice. (Amelia, seven Circles attended)

Amelia identifies her birth experience as a "bad story" and recognises its power to influence the other women in her Circle. She notes that there was an implicit agreement between the women to protect each other from their birth trauma, indicating that peer support from the Circle may be beneficial in the postpartum period. Another woman, Phoebe, recalls a sequence of events from her birth to the postnatal ward, where several interactions with healthcare providers

indicate poor care provision.

Participant: I went into shock, it turned out that the pain I was feeling in my stomach, wasn't just my uterus contracting. I had an infection and they hadn't given me any antibiotics after they did the C-Section. So basically I passed out, I was on the phone to my husband and he told me what he seen because I was on Facetime. He said I just passed out and I started like, shaking and he said my eyes rolled into the back of my head. And basically, I think I managed somehow to press the button to call the nurses round, so they come round, then they put me into a separate room because they think I have Covid. But it turns out that I had an infection, and they should have given me antibiotics after I had my C-Section, apparently that is- I didn't know that was meant to be normal standard play. But I don't know whether it's because all the normal people erm, had been taken off the ward to deal with Covid so maybe it was people that wasn't so used to the system and stuff like that, that was dealing with me. They were really lovely, honestly I can't fault their...their care but there was like so many things that went wrong. Like when the person that was doing the epidural for the C Section, he ended up by mistake giving me the amount for somebody that's twice my weight, so then I passed out from that (laughs). Then they had to deal with that, the midwife was furious, because she was so furious that she was like, letting him have it, that even I could hear them in the hallway.

Researcher: Mm.

Participant: She was like "I'm dealing with her pain thing from now on, blah, blah, blah". Erm... so, yeah that happened, but on the whole to me I felt like it was still like, a manageable... positive... experience on the main because I'm still here, I'm alive. (Phoebe, 5 Circles attended)

What is evident from this larger passage is a series of events that has contributed to her poor care experience. Phoebe speculates that COVID perhaps has contributed to her poor care- the unfamiliarity of staff in theatres, and lack of staff in the postnatal ward perhaps contribute to the failure of coordinated care. However, she also notes that during the caesarean section, the

anaesthetist gives her twice the amount of medication for someone of her weight. Like Amelia, the experience of undergoing high-level intervention demonstrates that the hospital is actually a place of danger for Phoebe. Unlike Amelia, Phoebe is not invested in situating the hospital as a place of safety, but she engages in reframing her birth trauma, noting that she "cannot fault their care", despite it being apparent that the lack of appropriate care during multiple sequential events have put her at great risk of mortality and morbidity. Throughout our interview, Phoebe made reference to the mortality rates of Black women in the UK. This is pertinent because whilst the MBRRACE reports acknowledges and records ongoing racial disparities in maternal mortality, its findings do not include near-misses or the resulting physical or psychological co-morbidities that occur at a result of the poor care provision experienced by numerous Black women (Peter and Wheeler, 2022). Phoebe would continue to espouse her gratitude to being alive at the end of her birth experience. We will revisit this point later on.

# 6.5.2 Racialised experiences

Over half of the women who were interviewed identified as Black, mixed heritage, and minority ethnic women. Although a couple of the women made reference to their ethnicity and interrelated concerns about their health, racialised experiences of care were voiced solely by the Black women interviewed. Some of the Black women interviewed were cognisant of the inequalities that they face as part of the pregnancy and birth continuum and linked this to their own experiences of hospital-based care. Not only were they attempting to navigate real or potential weight bias as a result of their BMI status, this could possibly be exacerbated by other marginalised identities they also possessed.

Participant: So I got in, they, they gave me a bed and then I was seen twenty minutes after they've given me a bed. Um, and the nurse there that evening...she.... (sighs) I don't know, don't know how to describe it. She wasn't- I would say, out of my whole pregnancy journey, that was the only thing I would probably say...she was questionable.

### Researcher: Mm

Participant: Um, and for me at the time, I remember thinking...we, we get a lot of information in the press about Black women being mistreated, in the press but...she was a Black nurse so...I couldn't even...I couldn't... even think about her that way. I don't know if that makes sense? 'Cause I thought to myself, well surely, she's going to back me because well, we're the same. (Freya, 2 Circles attended)

Freya notes that her disappointment lies in the assumption that she would receive better care with a Black midwife as they are "the same" and finds it difficult to reconcile with herself that she has received poor care from this midwife. Implicit within this statement is the idea that racially concordant care would allow Freya to experience better care. For Freya, this view is influenced by her understanding of the ethnic disparity in maternal health outcomes in the UK. Authors have noted that Black and ethnic minority women value concordant care but are also aware that there are other factors, such as age, education and patient-centred communication that contribute to health inequalities that concordant care alone cannot overcome (Nguyen et al, 2022). Returning to Phoebe, the passage below highlights her thoughts linking her poor care experience to her ethnic identity.

At least my husband got to see the birth, at least we're home, I'm alive. Some people have died. Like I'm sure you know, Black women are very- much more likely to die in pregnancy. So I'm alive, I'm well. I have colleagues at work who have had their children at [this hospital] and they were like "oh it was wonderful, it was great, it was really nice". But none of those people look like me and I'm the only person that's had that experience there, so I don't know whether it's because I look the way I look. I still ended up in a situation where I was having to plead with them like until I went into shock- my body was like- the infection was getting into my blood before they believed I was in as much pain as I was supposed to be, that they said I was in. (Phoebe, 5 Circles attended)

Phoebe notes that her intersecting identities creates a situation in the hospital where her requests are ignored until she is quite seriously ill. Researchers who study racial differences in pain management by healthcare professionals have found that ethnic minority patients are less

likely to receive adequate pain management (Staton et al, 2007). In addition, women of colour are twice as likely as White women to report delayed treatment and being ignored by healthcare professionals. This is concerning because maternal mortality is associated with a delayed clinical response (Vedam et al, 2019). This is all too clear in the case of Phoebe where her pain is ignored to the point where her body goes into shock, subsequently putting her life at danger.

Authors have suggested that midwifery care, and specifically GANC are possible ways to combat the growing medicalised culture of birth for Black women (Davis, 2019; McClain 2019). Intentional recruitment of marginalised women who are often underrepresented in research was an ongoing concern for the research team on the Pregnancy Circles trial and there were frequent drives by the research team to achieve representation across the recruiting sites. Despite this, Lily reflects on how she felt marginalised within her Pregnancy Circle.

It would have been nice, I think, to have more...Afro-Caribbean erm, women as part of the group, just because of um...the, you know, the research about there being-Afro-Caribbean women being at higher risk of mortality, death and you know, complications during, during maternity, during pregnancy. Erm, I think it would have been nice to have more but I was, I was in one group, so I don't know what the make-up of the other groups were. Like, you know, if there was Black women, Black Afro-Caribbean women, mixed race, Asian even...women as part of the pregnancy Circle, then the narrative may change a little bit. We may focus more on you know, you know, how to keep yourself safe, kind of...what things to look out for. You know, because there's things that I imagine, we could do to try and make sure we stay safe whilst being pregnant and getting towards erm, giving birth. But that's never a...an issue. And it wouldn't be in a group that's majority, that's made up majority of...Eastern European white people. (Lily, 6 Circles attended)

Like Phoebe, Lily identified that her racial identity put her at risk of increased mortality and morbidity. Above, she observes that Pregnancy Circles could be a space where women like her learn how to "stay safe" in their pregnancy and birth but that this was not utilised in her

Pregnancy Circles. She identifies that she would value the experiential knowledge of other Black women in order to help her navigate safety for her pregnancy. This comment highlights how the full potential of Pregnancy Circles was perhaps not reached. Below, a session that was observed highlights how women sought to use the group dynamic to explore unconscious bias in medicine.

Women 1 and 2 flick through the literature given whilst women 3 and 4 directly ask MW2 about newborn rashes and how to assess this on Black skin (they are both Black and so is MW2). MW2 reassures them that they should still be able to see rashes. Woman 4 continues to query whether meningitis sometimes gets missed because healthcare professionals cannot assess Black skin properly. (Pregnancy Circle B, session 7)

Both women appear to be aware of misdiagnosis due to unconscious bias and are clearly concerned that their children may be subject to poorer care. They seek clarity from the midwife who is also Black, who then reassures them. This specific group dynamic allows these women to seek concordant care from the midwife who is running the Circle. In contrast, the midwife does not seem to validate their concerns about potential medical racism- she simply reassures them that healthcare professionals "should" be able to recognise rashes on dark skin. However, research has shown that healthcare providers are more likely to misdiagnose based on skin colour (Dodd et al, 2023; Hutchison et al, 2023). Furthermore, a new review published by the NHS Race and Health Observatory states that current tests and assessments used in the NHS to indicate health in newborns are not fit for purpose for non-White babies and have recommended that the criteria require urgent revision (Fair et al, 2023). Davis (2019) argues that evasiveness from healthcare practitioners to discuss race within medical practice demonstrates fidelity to an imagined ideal wherein medical care transcends colour. Henderson et al (2013) note that minority ethnic women are less likely to feel that they have been spoken to in a way they can understand, be treated with compassion by healthcare professionals, be involved in decision-making processes or have confidence in the staff caring for them. Lily refers to this when she talks about "how to keep yourself safe", in relation to ethnic minority women, illustrating the need for care to be individualised. However, what is clear from both vignettes is

uncertainty about how effective GANC might be in providing cultural safety specifically to Black women, who may feel marginalised in those spaces.

# 6.6 Conclusion

Healthcare professionals continue to work under a risk management model, understanding risk as residing within the fat body, regardless of whether they worked in a GANC model or not. As a result, the hospital was promoted as the ultimate place of safety, where the risk inherent in women's bodies could be managed by the institution. Interventionist care was situated as being inevitable for some of the women with a raised BMI, and so the consultant-led unit was positioned as a safest place for these women. Although there was evidence that the Pregnancy Circles could be facilitative spaces for shared decision-making processes around labour and birth choices, many of the midwives working in the Circles still employed gatekeeping techniques to minimise women's choices. Being deeply enmeshed in this risk management paradigm and organisational safety culture meant that midwives missed opportunities to utilise facets of the group care model effectively, such as woman-led discussions, or facilitative practice, to strengthen women's decision-making processes around their birth and labour choices.

Most of the women interviewed had their Pregnancy Circles cancelled because of the pandemic, and subsequently lost a space that normalised their pregnancies. They became exposed to more medicalised interpretations of their risk factors during pregnancy, without having Pregnancy Circles to mitigate risk amplification, and found it difficult to challenge these narratives, both prior and during labour. After these interactions women demonstrated internalised feelings about their risk status, which would influence how they felt about their labour and birth experiences. Absence of the facets of GANC such as relational continuity and facilitative decisionmaking processes also contributed to a poor pregnancy care experience after the Circles were cancelled, as well as labour and birth for women with a raised BMI. The pandemic also reconceptualised the hospital as a place of danger, as it became a site of infection. Ethnic minority women were particularly concerned about increased morbidity and mortality because

of this. There was also evidence that being ascribed "high risk" status influenced women's understanding of the hospital as a place of safety.

Interventionist care and embodied high-risk status contributed to poor labour experiences, where women recalled their needs being ignored and disregarded and there were no shared decision-making processes. Many of the interventions described are associated with increasing morbidity in women, and that so many of the women interviewed experienced interventionist care in order to safeguard the health of their babies yet reported poor care experiences demonstrates that healthcare professionals are working in a system that continues to promote fidelity to the ideals of interventionist care rather than the reality.

In addition, women recounted their birth experiences as traumatic, solidifying the hospital as a place of danger. Some women experienced racialised encounters of care which amplified the idea that the hospital was dangerous. Pregnancy Circles were identified by women as a potential place where concordant care could be sought in order to alleviate health inequalities but in reality, some participants did not feel this was achieved.

# 6.7 Chapter Summary

This chapter has introduced and explored the second meta-theme, The hospital as a site of danger, with its interrelated themes, Expectations of birth choices and labour, COVID and the hospital, interventionist care, and birth trauma. It has highlighted women's experiences of antenatal care after the Circles were cancelled, as well as labour and birth, in relation to the facets of the group care model and birth place planning. It has also explored the working practices of facilitating Circles regarding discussions around birth planning for women with a raised BMI. The next chapter will now turn to discussing and exploring the final meta-theme, Good motherhood in a pandemic.

# Chapter 7 – Good motherhood in a pandemic

# 7.1 Introduction

This chapter discusses themes related to the postnatal period following the Pregnancy Circles. All the women interviewed experienced some form of mothering during the COVID-19 pandemic, whether it was during more severe periods of lockdown or just during the pandemic period more generally. The interviews followed a loose narrative style, led by the women, and were conducted during the COVID-19 pandemic. What became apparent was that the pandemic formed part of a contemporaneous discourse the women constructed about their perceptions and experiences of expected/altered motherhood identity in the postnatal period following their experiences with Pregnancy Circles. The meta-theme, "good motherhood in a pandemic", considers the impact of Pregnancy Circles on women's experiences of motherhood and the formation of a "good mother" identity within the context of the COVID-19 pandemic. Three themes were developed in relation to the meta-theme- isolation and seeking support, forming good motherhood, and the postpartum body (see Table 13).

Group care facets such as peer support appeared to have been utilised beyond the Circle sessions and into the postpartum period. For women who developed strong bonds, the group dynamic continued to be a source of support for them during the postnatal period. Women reported that having this form of social support softened the loneliness of the mandated lockdown periods. However, some of the women reported that their Circles had not bonded that strongly, or their Circles were not established enough before they were cancelled, and therefore the peer support from the Circle did not emerge for them.

Pregnancy Circles were an influential space for the formation of a "good mother" identity. Women reinforced ideas of the "good mother" identity, informed by their previous experiences of mothering. The lack of Pregnancy Circles input for some women denied them neutral and balanced ideas about infant feeding. With the lack of public services available during the pandemic, many women chose to formula feed their babies and internalised failure in their

mother identity around breastfeeding their babies. Midwives missed opportunities to optimise women's health by discussing postpartum exercise in the Circles. In the absence of available services, women utilised the group dynamic as a form of emotional and social support when engaging in health change behaviours, although women also cited barriers such as anticipated weight stigma or financial concerns that prevented them from utilising this fully. The table below highlights the development of the meta theme through the quotes, codes and subthemes.

# Table 13. Themes, subthemes and indicative quotes

Meta Theme	Themes	Sub Themes	Quotes
Good Motherhood in a pandemic		Lockdown	"there was no "mum, can you please take him for a couple-" there was like nobody."
	Isolation and seeking support	Support from Pregnancy Circles	"it was the best thing I ever done. It was amazing. I absolutely loved it. Like, I've made just such a tight bond with all the mums"
		Disrupted Circles and lack of support	"We had a whatsapp group created but no one reallykinda messaged on there and no one really kind of, wanted to keep in touch."
		Motherhood identity in the Pregnancy Circles	All women discuss the joy of motherhood, how you will think your baby is the most beautiful thing, when you become a mother, you will love staying up watching your baby sleep.
	Forming good		
	motherhood	Infant feeding	"I felt like I failed as a mother. I felt horrible, especially because I was seeing so many people going, "oh breast is best, this and that," I was seeing it everywhere."
		Postnatal diet	"I've had a year of basically eating what I wanted and not saying no to myself and just being kind to myself I guess"
	The postpartum	Body image	"I don't feel overly happy with my body, I'm not as big as what I was when I was pregnant obviously, but I'm still not where I want to be"
	body		
	-	Postpartum weight	"I put more weight on in lockdown not being able to go anywhere than I did in my
		management	entire pregnancy."

# 7.2 Isolation and seeking support

All the women interviewed experienced motherhood during the COVID-19 pandemic and found that their expectations for postnatal support were drastically changed from what they had imagined prior to the pandemic. Many expressed disappointment that they did not receive support from family or friends and reported feelings of isolation throughout the pandemic. Women spoke about the lack of access to health clinics, as well as mother and baby groups, implying that there were possible ramifications for infant development. Women were actively engaged in reducing their isolation by seeking support where they could and identified the peer support from their Pregnancy Circles group as a good source of support that helped to reduce their isolation and supported their transition into their new motherhood identities. However, some women recalled a lack of Pregnancy Circle support either through a lack of ability to bond or because of feeling marginalised within a group space.

# 7.2.1 Lockdown

Behavioural control guidelines were introduced in England in March 2020 to limit the spread of the COVID-19 virus. There were severe restrictions on freedom of movement, including limiting unnecessary social contact and non-essential shopping, offices were closed and working from home was mandated where possible, schools and other educational facilities shut down and moved their teaching online. Most notably, healthcare services underwent significant changes to cope with the overwhelming pressure of demands of public health needs (Public Health England, 2020). Within maternity, changes such as shifting from face-to-face care to virtual appointments, fewer appointments and changes to the maternity pathway regarding COVID-19 test results were reported to affect women's experience of care during this time (Flaherty et al, 2022). Within England, these governmental guidelines were known colloquially as 'lockdown', and for a brief time, it fundamentally changed how society functioned (O'Connor et al, 2020). Restrictions began to ease in May 2020 but there was a continuous rise of COVID-19 cases which meant restrictions were reinstated to control the spread of the virus. There were two subsequent lockdowns in November 2020 and in January 2021. Some of these women were mothering during multiple lockdown periods, meaning that during those times it was not permitted to have people who did not live in the same domicile in the same indoor vicinity. Below, Phoebe and Pooja, both first-time mothers, recall feeling isolated during the periods of lockdown.

I felt alone, honestly. I know that my family were there on the Zoom, but you know when you've- this is my first child and having a picture of what I thought it would be like. I thought like, I'd have my family all around, I'd have people to do the laundry, I'd have people to do- and my husband was honestly, he was really, really good. But he had to still go back to work. I just felt like, when you have a baby you want your mum around, you, you want like family around, my sisters and when, when they all had their babies-I've even been a birth partner to them or I've been, or I've taken a couple of weeks off of work and I've gone and been with them. And I kind of expected that that would happen but because of the whole Covid thing, it was just such a like lonely... lonely time. There was no one, there was no "mum, can you please take him for a couple-", there was nobody. (Phoebe, 5 Circles attended)

Because she was not latching on properly at that time, he was preparing formula and this and that...so because of COVID, it was really difficult. Like, we had no one else's opinion, you know? Come in and have- you know, do a change of shift...we are getting back into the, you know, just things, slowly she's getting into a sleep schedule and it's getting easier, but we still want people. Sometimes, what I do, I put my sister or my mother on you know, um, Whatsapp video call? Put the phone there and then just do stuff around the house, talking to them, and it feels like I have someone in the house. (Pooja, 4 Circles attended)

These comments highlight how women's expectations of support in the postpartum period were upended in the pandemic. Pooja's family lived abroad and were not able to provide physical support during the postpartum period. In addition, her family resided in a country that were considered by the UK government as a "red-list" country, where the spread of COVID-19 was more prevalent. This meant that no travel was permitted from these countries to the UK during the pandemic, ending the hope of possible support later on for Pooja. Gray and Barnett (2021) suggest that the expected transition into motherhood was altered by the pandemic. In their

study, they note that an inability to connect with family alongside limited healthcare support were perceived to be detrimental by new mothers. Women who had other children recalled how the lockdown compounded the difficulty of mothering children of different ages. Sally recounts the added responsibility of teaching her older child whilst also caring for a newborn during lockdown.

I did struggle to start with because [Kiki], my second, she did have reflux and she would scream for hours in the day. Erm, and at the time, I didn't know it was reflux. Erm, and I was trying to do homeschooling and I think I put a bit of pressure on myself for that, that I needed to get that homeschooling done and- but at nighttime, she was an absolute dream. She would- the baby would kind of sleep really nicely for three, four hours at a time. But during the day, she, she would not be put down and it was really, really hard and that's when I missed my mum, and my mother-in-law. (Sally, 7 Circles attended)

Dividing attention between a newborn and an older child who requires educational support highlights the unique challenges that experienced mothers were facing during the pandemic. Sally recalls that these moments warranted further assistance, citing her mother and mother-inlaw as functional supports that were missed during lockdown.

Women recalled that usual services were also not available during the pandemic which amplified feelings of isolation. They spoke about not having access to mother and baby groups, where they would have met other parents, or to clinics where they could have access to healthcare professionals.

I saw there is a baby-mum group here in our area but like, they have so many limited stuffs because of the COVID thing. They do meet outside of Zoom meeting but I have been trying to get an appointment but because of the, the venue sometimes, or because they don't have enough staff, I'm unable to meet. (Pooja, 4 Circles attended)

It all died down 'cause of lockdown. And 'cause normally you could go to like, there's like

groups and you can- they normally have a weigh-in station, and they normally also have midwives there and then if you have issues with breastfeeding, you can go and talk to like, with somebody...I think, I haven't really spoke to anyone, I think I had like um, where you know where it changes from the midwife to like, then a health visitor. I think I had one phone call with the health visitor. And then that was it. (Polly, 1 Circle attended)

Women appeared to be keenly aware of what was lost during the pandemic in the context of their mothering. Pooja recalls although some groups were running, organisational issues were sometimes a barrier to accessing in-person services, which she infers a preference for. Polly's comment highlights that there was a clear lack of support from the usual services that could support baby wellbeing, such as weigh-in clinics or breastfeeding support. This is despite national recommendations during the pandemic advising for a minimum of three postnatal contacts and a telephone call made prior to face-to-face appointments (Jardine et al, 2020).

#### 7.2.2. Support from Pregnancy Circles

Some of the women interviewed had built up strong bonds during their time in Pregnancy Circles that were maintained in the postpartum period. Women identified that a facet of the group care model, peer support, provided much needed postnatal support in what was otherwise a lonely time. Below, Sophia observes the difference between herself and her sister-in-law, who was pregnant at the same time and did not receive group antenatal care.

We had a WhatsApp group anyway, that -- with all the women in it, so -- we still speak with each other, we all meet up with our babies now, um... which is invaluable really... Obviously there's a chance that you could do it this time and not get on with any of the women, or anything like that, but my sister-in-law, um... she had a baby three weeks before me, and her care was not done as part of Pregnancy Circle, and I feel like, personally, she could've done with a Pregnancy Circle, um... she was a bit younger than me, and she didn't really have a lot of friends with babies and, kind of like- I just remember being up in the night, and she'd be, like, feeling very alone, whereas I know that I could just message in our Whatsapp group and other mums would be awake, andjust kind of have that additional support as well, whereas she didn't have that. And I can't actually imagine, with Covid, then as well, not of having that. Because I feel like even though we was by ourselves, and we was really by ourselves, as you can imagine all mums in lockdown...um, felt very isolated, but then I didn't because I had that WhatsApp group. (Sophia, 5 Circles attended)

Sophia recalls the value of immediacy in an instant-group forum, reflecting that the lockdown periods of the pandemic exacerbated feelings of loneliness on top of usual postpartum isolation. Sophia's group clearly bonded well but she recognises that there is the possibility the group dynamic might not have worked well. Sophia was a first-time mother so had no other experience of motherhood to compare the group care model against, but instead compares her experience with her family member, who received routine antenatal care, reflecting that she seemed more isolated. Outside of the lockdown periods, although restrictions were still in place, women spoke about face-to-face social support from their Pregnancy Circle group. Below, Olivia speaks about meeting up with some of the other women from her group.

Participant: But there were also people who were first time mums and had a raised BMI who I could identify with so um, we're all still, with the exception of one lady who's just moved away to um, up north, but the rest of us, the other nine- we are in contact daily, we've got a WhatsApp group where we probably exchange a hundred messages a day, sometimes more than that even. We meet up now that the social distancing rules have been relaxed a little bit for the last couple of weeks with meeting up in a park. We just all lay our blankets a couple of metres apart and sit and have a chat.

Researcher: Mm

Participant: It's nice to see them, um, before all the situation with coronavirus started, we would meet up probably once a week, going to a local pub restaurant, having something to eat and drink in and just having a chat and let the babies socialise with each other.

### Researcher: Yeah

Participant: So it's been great because...being my age, I don't really...have any friends

who have babies. (Olivia, all Circles attended)

For Olivia, the group dynamic with other women in her Pregnancy Circle have contributed to blossoming friendships beyond pregnancy. For Olivia, this is important as she considers herself isolated from her own friendship group as an older mother. While the age difference in the group is not a barrier for developing deep meaningful bonds, Olivia recalled sharing similar demographics with other women, such as being first-time mothers. Of significance, Olivia notes that there are other women with a raised BMI in her group that she related to and bonded with, indicating that having at least one similar demographic feature or aligned identity may help women to bond further within group settings.

The potential utility of Pregnancy Circles in the postnatal period was also highlighted by the midwives facilitating the Circles. Some of the midwives identified that the philosophy of group care could potentially be extended further into the postnatal period to promote public health. Barriers to effective implementation were also identified from their experiences of running and facilitating the postnatal "reunion" session during the Pregnancy Circles trial.

Well, we had a reunion, but the trouble is the women all delivered at different times and one of the women went overdue two weeks, so by the time we had the reunion she had only just had her baby and some of them were quite old. One lady had her baby preterm, and another one had it...she had it pre-term, and then another one had their baby later, and another had them really early. (Midwife 7)

This midwife implies that it would be difficult to implement postpartum sessions effectively for the same group of women as their postpartum needs would be too varied to manage in a group session. Other midwives were more optimistic about the relevance of postpartum group sessions and how it could feasibly be embedded with other health professionals, such as health visitors.

Midwife 5: I think postnatally we did -- well the Circles were set up that you would meet postna- that you would meet, the day was already set for a postnatal meet

Midwife 4: Yep. One reunion, wasn't it?

Midwife 5: One reunion, yeah. But absolutely you could -- it's very difficult, though, 'cause you don't know when people are gonna birth so that's a little bit more challenging, because you -

Midwife 4: Like you could do a breastfeeding one, for example Midwife 5: You could, yeah, yep Midwife 4: Yeah, between like day 10 and day 20 potentially, you could do a -- you know, once people have seen a health visitor you could do a session, umm... Yeah, I think you could. (Midwife 4 and Midwife 5)

Definitely the conversation we've been having now is that we could run pregnancy-style Circles... with seeing the midwife at certain touch points, when you might want to give her the information for your parent education. Invite a health visitor for one of those session, so at least they can say hi, make themselves known. If you can do it by the geographical location that they're on now, then that would work, and then they would then take them on and continue that postnatally. (Midwife 3)

The midwives indicate that facets such as relational continuity could be flexibly adapted to include other healthcare providers, such as health visitors. Researchers have shown that collaborative working processes between midwives and health visitors would be welcomed by women, particularly from the point of view of receiving continuity of care (Aquino et al, 2018). Supporting public health agendas such as breastfeeding highlight a potential holistic approach to health that does not predominantly focus on weight management.

# 7.2.3 Disrupted Circles and lack of support

Fifteen out of the twenty-two women interviewed experienced some form of disruption to their Pregnancy Circles sessions. Some of the women were only able to attend one or two sessions prior to their Circles being cancelled. During the Pregnancy Circles trial, women were encouraged by midwives to set up a private group through WhatsApp, an instant messaging app, where they could keep in touch outside of the Circle, and independent of the midwives. Some women reported that this did not happen for them because too few Circles had been attended before lockdown was implemented.

Participant: So I probably could have only gone twice and the first time round it was basically- the second session they were having and everyone was still getting to know each other and then they said, "oh we suggest you make a WhatsApp group", and it just never happened.

### Researcher: Mmm

Participant: It was, it was never done. So I wasn't, I wasn't able to have a, a WhatsApp group or anything. (Isabella, 1 Circle attended)

Researcher: Were you able to set up a WhatsApp group in your, in your Circle? Or had that not happened yet?

Participant: No, 'cause we was gonna wait until the next week-

Researcher: Right

Participant: -but then it went like, straight into lockdown, yeah, so we didn't set up a, a WhatsApp group or anything. (Polly, 1 Circle attended)

Both Isabella and Polly were only able to attend one Circle each before lockdown was enforced and their Circles cancelled. Isabella's comment that the women were "still getting to know each other" implies that a certain level of familiarity was required before a virtual messaging group could be established. Research has shown that social support is key in promoting maternal and baby wellbeing in the postpartum period (Razurel et al, 2012; De Sousa et al, 2020). Structural social support refers to the existence and amount of support available through both formal and informal social relationships (Leahy-Warren et al, 2012). Pregnancy Circles can be seen as a form of structural support in that the development of peer bonding and support is a key element of the model of care. What is evident is that for women whose experiences of the Circles were severely truncated, they also lost the ability to utilise the social bonds that the Circle potentially could have provided because the support network was not established during the antenatal period. However, some women had been in more established Circles but still felt that they did not have support from their groups during lockdown. Below, Sally and Lily note the lack of support from their Circles in the postnatal period.

We haven't kept in contact. And I think that would have been nice if, if maybe we'd had similar backgrounds. That we might have- I say similar backgrounds, I mean, just our circumstances, kind of age erm, you know, other children. (Sally, 7 Circles attended)

Sally was an older mother who already had children. Sally speculates that the lack of similarities between herself and the other women as the reason why the group dynamic has not continued in the postnatal period. Lily also spoke about the lack of support from her Circle, highlighting the potential difficulty of holding multiple identities simultaneously within a space.

I've kind of stepped back a bit. Just because you know, at one point it was...things got a bit heated. Because there was myself, who was a nurse, there was another lady who was a er, a student midwife. Erm, and then other mums from other fields that because erm, of you know, like the Internet and stuff you know, people would just be coming with opinions and yeah, there, there was often like, heated discussions and one of the mums, the, the, the student midwife, she left the group. Erm, just because you know, I said to them, it's hard because if you're saying something that's incorrect, as a nurse, I'm going to correct you. And as a student midwife, she's also going to correct you. But also... there was, there was times when people were asking for advice and you know, it would be like, I'm, I'm here in the capacity of a mum, not of a nurse, kind of thing? (Lily, 6 Circles attended).

Lily was alone among the women interviewed in having made a conscious decision to exclude herself from her Pregnancy Circle group during the postnatal period. Here, she seems to struggle with multiple identities. As previously seen in Chapter 5, Lily felt marginalised within the group

dynamic and observed a lack of similar demographics within the group amplified marginalisation for her. Here, she acknowledges that the group dynamic is meant to be a space where she is permitted to be a mother, and seek support herself, and therefore should be able to perform her private identity outside of her professional identity. Her frustration appears to lie in the overlay of the two, when she identifies the group dynamic as somewhere that is not safe for her to express these two identities simultaneously.

# 7.3 Forming good motherhood

Pregnancy Circles appeared to be highly influential spaces that informed the development of a "good mother" identity. Recent conceptualisations of the "good mother" commonly characterise the act of mothering as instinctual. Women are positioned as having an intrinsic capacity and a natural, nurturing desire for childrearing (Hall, 1998). This was seen in some of the group interactions during the participant observations where there was evidence of reproducing certain motherhood ideals. Some of the women interviewed had managed to maintain strong peer bonds beyond the Pregnancy Circles sessions, and spoke about how these ideas continued to be reproduced in the postpartum period within their groups. In addition, infant feeding was a common theme that was discussed among the women interviewed. Women's perceptions of formula feeding articulated ideas about internalised failure in their motherhood identity.

## 7.3.1 Motherhood identity in the Pregnancy Circles

The experiential knowledge of women who were already mothers appeared to be highly valued in the Pregnancy Circles session. The trial was designed to be as inclusive as possible, meaning that women who already had other children were invited to participate (Wiggins et al, 2020). Women-led discussions around new parenthood were observed where women produced ideas around good motherhood, as seen below.

Woman 4 asks whether your relationship with your partner changes. Woman 5 opens up and addresses the whole group, stating how challenging she found the new dynamic with

her husband. She talks about how she recognises how controlling she had become and was self-aware enough to know she was being 'difficult' but felt resentful of her husband because she felt the responsibility of parenthood fell more on her- gives the example of him sleeping through their baby coughing whilst she stayed up listening to their baby cough. When he woke up, she was so angry with him and was upset that he did not approach parenthood in the same way. Woman 3 agrees and shares that her and her husband had different parenting styles and she found it challenging accommodating his style, she wanted him to conform to how she had decided to parent. Woman 1 offers a contrasting narrative- she shares that her husband did most of the baby caring- he did all the night feeds and nappies, stating that "you did the birth, now I do the rest", so she was able to rest at night. (Pregnancy Circle B, session 7)

Within the discussion, multiple styles of parenting are offered with alternate views of how parenting works. One woman recounts how she was resentful of her husband sleeping soundly. The implicit assumption is that any concerns around the baby's wellbeing was her responsibility. In this interaction, the frustration for this woman is clear because her perception of "good parenthood" does not align with that of her husband's. Simultaneously, she reinforces a "good mother" narrative in the Circle by recounting that she stayed awake all night monitoring the baby. Another woman admits that she finds it difficult to accommodate her husband's parenting style, implying that her parenting style is superior to her husbands. The last woman offers a different narrative – her "good mother" identity is performed in being able to rest, and the parenthood style appears to be more collaborative. There were other examples of motherhood identity formation within the Pregnancy Circles space, as seen below.

All women discuss the joy of motherhood, loving your baby, woman 3 talks about how you will think your baby is the most beautiful thing, breastfeeding, woman 3 and 5 talk about how you sound crazy saying you will love to watch your baby sleep but when you become a mother, you will love staying up watching your baby sleep. Woman 4 goes back to breastfeeding and asks whether breastfeeding is joyful. Woman 5 and 3 say no, not joyful exactly. Woman 5 says you're not used to having your nipples sucked so the sensation is strange- the women laugh. Woman 3 and 5 dominate the conversation and

direct a lot of their eye contact between themselves and woman 4. Woman 2 and 1 stay mostly silent and look at the women talking without interjecting. Woman 5 talks about skin to skin and how she did it all the time, whenever possible, it made her feel so good with her baby. Woman 3 talks about maternity leave as a joy of parenthood. She also mentions that smiles and laughter, seeing them make friends also contribute to the joys of parenthood. The women look relaxed with each other, hands on bellies, rubbing their bellies, wide sitting stances taken to accommodate for growing bellies. (Pregnancy Circle B, session 7)

In this passage, it was clear that not only were multiparous women's experiences valued by the group but that this demographic could be very influential in shaping motherhood identity. Women talk positively about parenthood and loving your baby – the implication being that these traits confer "good mother" status. In both the above passages, these discussions took place without midwife facilitation, however it appears that women found these kinds of discussions useful in anticipation for motherhood and to manage their expectations of the postpartum period. Both passages call attention to how good motherhood identity is reinforced and explored in the Circle – the group dynamic invites a level of trust that gives women permission to be candid about their motherhood experiences.

## 7.3.2. Infant feeding

Through the interviews, it was clear that some women felt that the way they fed their babies informed their identity as mothers. Some of the mothers appeared to grapple with internalised messages around exclusive breastfeeding as the superior way of infant feeding in relation to good motherhood status, and spoke openly about how this affected their identities as mothers. Arana was one participant who spoke at length about the difficulties she had with exclusive breastfeeding.

I felt like I failed as a mother. I felt horrible, especially because I was seeing so many people going, "oh breast is best, this and that," I was seeing it everywhere. And it was so horrible, I remember taking my baby to A&E like on two different occasions after she was

born, and the embarrassment of like "Yeah she's combined fed, I'm feeding her breast and bottle", but it was only the bottle that was feeding her. (Arana, no Circles attended)

Arana explicitly links her motherhood status to her ability to breastfeed her baby when she says she has "failed as a mother". Arana did not attend any of her Circles before they were cancelled, so her views about infant feeding were not informed from within this space. Yet she recalls that the message "breast is best" is pervasive, and she has internalised it in relation to how she relates as a mother. She recalls that she lies to healthcare professionals about how she feeds her baby, because the idea that the baby is exclusively formula fed is so shameful to her. Shame around her inability to breastfeed was also intertwined in her perceptions of her body failing, as seen below.

Participant: I would curse myself and my damn PCOS for putting me-I feel like, honestly, I told my mum and she sort of laughed at me but my younger sisters they have, you know, bigger boobs than me, if that makes sense. My cousins- all of them, none of them have what I have.

#### Researcher: Mm

Participant: And all of them have what a girl is supposed to have, what a lady is supposed to have, and I don't. And I've cried to my mum, and she was like "What the hell? That's so silly, you know, why are you crying? Babies are used to getting nutrients from the formula, this and that" But as a mother, the first time- I remember my sister called me when I was pregnant and she was like, "oh, do you know how you are going to feed your baby?" I was like, "Yeah, 100% breast milk." And I couldn't even express my breast milk. (Arana, no Circles attended)

Early on in our interview, Arana disclosed that she had been diagnosed with polycystic ovary syndrome (PCOS) prior to pregnancy. She attributed "not feeling like a woman" to this condition throughout the interview. For Arana, the lack of milk production confirms her fears that her body

is abnormal – she associates her small breasts with the failure to produce milk, and this is a source of shame for her. Other women spoke about their choice not to exclusively breastfeed and how this impacted their identities as mothers. Reb was an experienced mother who had breastfed her other children. Below she recounts her decision to not exclusively breastfeed.

Although I would have loved to exclusively breastfeed her, but the situation didn't allow me and I'm okay with that...I think at first, I kind of beat myself up about it and I was kinda disappointed almost? Oh, 'why didn't I do it', you know? She needs this. (Reb, 3 Circles attended)

Reb's father had died suddenly and unexpectedly of COVID-19 during the late stages of her pregnancy. She spent early postpartum in a prolonged mourning period, which aligned with her family's cultural values. During this mourning period, she spent a lot of time at her mother's house, away from her newborn because she was worried a baby would be disruptive- Reb obliquely refers to this in the passage above. Above, her disappointment in not persisting with exclusively breastfeeding her daughter situates the act of breastfeeding as necessary in the good mother identity. Reb's passage highlights how mothers self-regulate their good mother identity. Freya was also an experienced mother, who discusses her decision not to breastfeed her son below.

I also feel I put pressure on myself 'cause I thought, I breastfed my firstborn. I don't want to not breastfeed him. And then spending the rest of my life, when he becomes a criminal, saying, "I should have breastfed him, maybe he would have turned out to be a good person". Just stupidness you say to yourself. (Freya, 2 Circles attended)

Freya identifies that she has internalised the pressure of performing good motherhood, comparing her previous motherhood experience, where she breastfed her other child. This is particularly poignant for women with a raised BMI, who are already positioned as bad mothers through their inability to regulate their own bodies (Warin and Gunson, 2013). Although Freya notes that these thoughts are "stupidness you say to yourself", it highlights how pervasive public health messaging can be and how it interacts with women's sense of identity and affects their decision-making processes around infant feeding. An important thing to note here is that these women not only did not have the support of the group dynamic of their Pregnancy Circles in the postpartum period, but they also only attended six Circles between them. Arana did not go to any Circles in the end and Freya's Circles were not yet established enough to create a WhatsApp group. Although Reb's group did establish a WhatsApp group, the group dynamic itself was not well established so the virtual messaging was less utilised in her group. The absence of social support in the form of the group dynamic highlights that these women had less resources to use in the postpartum period to support their decision-making processes as mothers. Anxieties around infant feeding were also present in the Pregnancy Circles that were observed, as seen below.

MW2 asks woman 1 to contribute her thoughts. Woman 1 addresses the other womenher concerns were largely about why her baby wouldn't sleep and wouldn't feed. Woman 3 interrupts and agrees that the baby not feeding was a large source of anxiety for her, made her feel very hormonal and she cried all the time- she is looking and talking mainly to MW1 whilst discussing this. The other women look at her whilst she shares this but stay silent. MW1 uses this as an opportunity to discuss the differences between baby blues and postnatal depression- discusses rates of PND (1 in 10 women develop this) and support in the community. MW 2 reminds the women that they are a source of support for each other. (Pregnancy Circle B, session 7)

The midwife uses this moment as an opportunity to link anxieties around infant feeding with postnatal mental health, reminding women that the Circle is a form of social support, implying that this may be useful in the postnatal period. This is an example of how the group dynamic could work in balancing women's knowledge with the midwives' facilitation skills. Other sessions were observed where neutral advice about infant feeding was offered.

MW1 discusses importance of feeding frequency, does not differentiate between breastfeeding or formula. (Pregnancy Circle B, session 7)

Midwife returns to the circle to discuss breastfeeding and breast anatomy- didactic learning and teaching methods observed- visual cues and physical aids used to help with teaching. Questions offered at the end. Non-judgmental advice given about formula. (Pregnancy Circle A, session 6)

Although there is a national and global public health agenda about increasing rates of exclusive breastfeeding, the neutrality with which these midwives approach infant feeding highlight how midwives may have contextualised risk in a wider context, particularly as it related to maternal mental health.

## 7.4 The postpartum body

Women spoke extensively about their postpartum bodies in relation to their motherhood identity. The pandemic had also upended a lot of their expectations in the postpartum period in relation to their bodies. Women had expected to be able to exercise and lose pregnancy weight gain and lockdown was frequently cited as a reason for postpartum weight gain. Women also spoke about body image as it related to their motherhood identity and diet. The presence or absence of Pregnancy Circle peer support was apparent in how women navigated their new embodied motherhood identities.

#### 7.4.1 Postpartum diet

Some of the women discussed their diets in relation to their motherhood identities, as seen below.

I did try keto for a week. Um, I think a couple of months after my father passed away. But it wasn't for me, I was lacking energy and the kids needed me to be like, a fully energised mum. (Reb, three Circles attended)

When I was breastfeeding [Sufyan], erm I felt more hungry, I felt like I was craving a lot more food, and you know like when I was pregnant with [Sufyan] I, I said to myself, look when I breastfeed him, I'm gonna try and diet again. I'm gonna try and eat healthier and I'm gonna try, gonna try and suck in the tummy again and go back to my- you know the diet that I was on before and I'm gonna go back to my weight-losing routine and whatnot. But oh my god, it was easy to say and hard to do. (Hana, Pregnancy Circles attendance unknown)

Both women identify the postpartum period as a time to initiate health behaviour change. The women appear to be motivated in the postpartum period although acknowledge that it is difficult to maintain. This indicates that advice and support may be required to help women achieve their postpartum weight loss goals. Other women found that their dieting was made problematic in the context of their mothering, as seen below with Lily.

Participant: I kind of kept eating really healthily...after I had her. Drinking lots of water etc. But she um, was losing weight. As I was losing weight, she was losing weight. Erm, 'cause I was breastfeeding so um, what happened was, it fully took her months to get back to her birthweight and the midwife had basically said to me, "Look, you either need to start eating or you need to stop breastfeeding and give her bottles". Obviously, I wanted to keep breastfeeding her-

#### Researcher: Yeah

Participant: -so then I just kind of threw myself into eating everything and anything! (laughs) Because I was eating healthy. I was eating a balanced diet. I was eating lots of veg, having lots of fruit, drinking lots of water, but she just said to me that she can tell

that she's latching on well and she's feeding but she's getting very watery feeds rather than calorific needs, so she's wanting to feed constantly and actually, her weight is not going up. Erm, so yeah, that was hard because I tried to do the best for myself and for her, but didn't manage to. (Lily, 6 Circles attended)

Lily maintained a strict diet throughout her pregnancy including severely limiting her carbohydrate intake, increasing her protein intake, eating a mostly vegan diet, and increasing her water intake. She gained very little weight over the course of her pregnancy, much to the pleasure of her obstetrician, dietician and herself, and she kept up her diet in the postpartum period. However, she recalls that her baby was not gaining weight and her midwife surmised that her diet was responsible, in that it was not calorific enough to sustain the baby's growth. There is little evidence to suggest that poor maternal diet relates to insufficient milk production except in low-income and low-resource countries where severe malnutrition may be a contributing factor (Piccolo et al, 2022). In this case, the midwife is mistaken but in the absence of other sources of support such as the Pregnancy Circle and the experiential knowledge of the other mothers, Lily is clearly more influenced and beholden to the advice of the midwife. As seen previously, Lily removed herself from the Pregnancy Circle group because she felt marginalised and unsupported. Research has shown that women are likely to need multiple sources of support in the postpartum period and there is a risk of possible isolation for those who fear being stigmatised and are unable to access culturally relevant support (Ni and Siew Lin, 2011; De Sousa Machado et al, 2020).

As before with Natalie and Olivia in chapter six, the implication around good motherhood arises around the choices that Lily makes as a woman with a raised BMI. Although Lily determines that her diet is very good in the postpartum period, it is considered insufficient by the midwife. The midwife gives Lily an ultimatum to "start eating" or "stop breastfeeding". As seen in the previous chapters, care outside of the Pregnancy Circles was often not culturally safe as was the case here- the didactic approach of the midwife appears to limits the decision-making capabilities of Lily as a mother, and as a result, Lily is totally disempowered and ultimately gives up eating healthily for herself so she can continue breastfeeding her baby, as requested by the midwife. As

Lily states "I tried to do the best for myself and for her, but didn't manage to", indicating that she has internalised the message that she is not only a bad mother but a bad woman, having failed in both her attempts to lose weight in order to bring her BMI to an acceptable range, and to breastfeed her daughter to ensure optimal growth.

#### 7.4.2. Body Image

The vast majority of the women when interviewed, spoke about their relationship to their postpartum body image with regard to their ongoing concern about appearance, rather than fitness and health. Orbach's (2006) seminal work observed that fatness is considered offensive to Western ideas of beauty and therefore she posits that fat is a feminist concern, whereby the interaction of fat women and normative ideas about beauty reveal oppressive patriarchal ideas that women may either resist, reproduce or reinforce through their own identity formation. The women interviewed recollected the changes that had happened to their body image over the course of pregnancy, comparing how they used to feel along with some of the behaviours they engaged in pre-pregnancy, as opposed to after the baby had been born. Some women discussed good motherhood in the context of their changing bodies. Elsie was one such participant:

I kind of spent most of my adult life um, watching what I eat. I've been on some kind of diet, slimming world, Atkins, every fad diet I've tried, I'm constantly...I've never been sort of happy with my body. Um, and being pregnant kind of allowed me to just...that knowing my body was just doing something amazing and what I looked like didn't matter and you know, and what was going on inside was far more important. Erm, and yeah, yeah so it definitely, definitely changed. And after, after I gave birth, immediately after I gave birth I think everything- cos I had a caesarean section as well- I don't think everything had gone quite back into place. Everything was still pushed up so I was like "oh my god my stomach looks really flat!". Now I've got this lovely mum-tum but I don't mind it. Um, but yeah, yeah straight afterwards I was kind of rocking crop tops around the house so (laughs) yeah. Yeah, as I say, I didn't even get stretch marks which really surprised me as well considering my age. Um, I thought I'd even had stretch marks but, but I didn't. (Elsie, all Circles attended)

For women with a raised BMI, the life-long struggle to manage weight is imbued with a moralistic judgement about personal autonomy over health behaviours that is legitimized largely by a society that has adopted a medicalized approach to understanding the body (Warin and Gunson, 2013; Orbach, 2006). Elsie's comment demonstrates that this kind of thinking is deeply entrenched, even though pregnancy ends up being a catalyst of change for her in how she perceives her body. She interprets her body as a source of positive productivity, rather than a contested site of expected beauty standards (Orbach, 2006). However, later on in our interview, she expressed conflicting feelings about her new body image.

So I've really embraced having my photo taken and this is a really new thing for me. And actually I've looked at the photo and not hated them as well which is really interesting. Erm, until yesterday. Someone- my husband took a picture of me and my first thought in that was 'I'm starting to look fat again'. (Elsie, all Circles attended)

The above passage demonstrates how women with a raised BMI may feel compelled to reduce their weight and in the case of Elsie, a motivating factor appears to be in improving her body image. This may be particularly more stressful or poignant for women with a raised BMI, who, like Elsie, have struggled with dieting and weight management throughout their adult lives. Unlike Elsie, other women did not express feelings that pregnancy had transformed their body image. Florence was one such participant.

Participant: I have put on...some weight since having...before I had a baby I was like in a size 14 but now I'm in like a size 18 and like...it is like...just like a big difference if that makes sense?

Researcher: Can you tell me a bit about how you felt about your body in pregnancy? Participant: Er, I hated it.

Researcher: And why's that?

Participant: Absolutely hated it. Erm because I was, when I was younger I was quite a big child and then I managed to lose three and a half stone.

#### Researcher: Wow

Participant: And I got down to a size 10. Before I was pregnant. Like a year and half before I was pregnant. Erm, and then erm, obviously as soon as I fell pregnant...all the weight just piled on. Like....and now, I'm just like "oh my goodness", like I'm trying so hard to lose all this weight-

#### Researcher: Mm

Participant: -and now to put it all back on I don't know it's like such a precious thing that's inside of me, but now I can't get rid of it. Like literally I can't get rid of it. It's more frustrating than anything else, I think? Just because obviously... you want to feel...good...once you've had a baby. (Florence, all Circles attended)

Like Elsie, Florence also demonstrated conflicted feelings about her body, noting that being pregnant was "such a precious thing" but simultaneously struggled with gestational weight gain when she had lost a significant amount of weight prior to falling pregnant. Current literature notes that women with a raised BMI are less likely to lose gestational weight gain and return to their pre-pregnancy weight (Nehring et al, 2014). We will return to Florence later in this chapter to explore potential barriers to postpartum weight loss.

#### 7.4.3. Postpartum weight management

Some of the women spoke about how they had gained weight over the pandemic, especially because of the lockdown restrictions which severely limited the amount of time people were allowed out, and how their expectations of weight loss over the postpartum period had not materialised. Some of the women recalled that postpartum weight management was not a topic that had been discussed in the Pregnancy Circles with the midwives but added that this was a topic of interest within their groups.

There was a couple of people who were trying to follow slimming world or follow an eating plan while they were pregnant. But I don't remember it being brought up. It certainly wasn't ever talked about as an issue, not within the group. I know some of the girls did physiotherapy. (Olivia, all Circles attended)

I don't think that ever was conversation really that we had in the Circles. We had a lot of that conversation even now, in the WhatsApp group...I think people were worrying once Coronavirus happened, and they weren't at work on their feet: that's when they started to worry a lot about weight gain and things, and exercise, and - kind of, we all started doing, um, the same pre-pregnancy or pregnancy workouts, we all found on like Youtube and stuff, we'd send them to each other and, um, we'd do them at the same time, and sometimes we'd FaceTime each other and do them together. But I don't think we ever got to that point in the Pregnancy Circles, I think - you know - they were giving us so much information anyway... (Sophia, 5 Circles attended)

The comments from Olivia and Sophia indicate that weight management was a general concern in the group, highlighting both the potential utility of Pregnancy Circles and the missed opportunities to use the space to discuss health-optimising behaviours in the postpartum period. Sophia recalls that even in the absence of midwifery facilitation, the peer support from the Pregnancy Circle was established enough that the women were able to provide social and emotional support after the Circles were cancelled. However, the role of the facilitator is likely to play a vital role in ensuring that Pregnancy Circles can enhance facets such as peer support that enables practices such as these to flourish. She recalls how the health optimising behaviours that the group had commenced in the antenatal period continued after the babies were born.

A lot of the girls from Pregnancy Circle, they straight away, were like - did their home gyms, and their runs straight away, within, within the six weeks because they were like "Oh my God", they were wearing um...belts from like, I don't know, MotherCare or something, but they were like tying up their bellies and stuff, which - it's just not how I

personally am, like I - it's not that I don't worry about my weight, it was one of the most... things I thought about sharing. (Sophia, 5 Circles attended)

As noted in her previous passage, Sophia's group were quite proactive in sharing resources in the pregnancy period, such as online workout videos, without much input from the midwives. Although Sophia indicates she has concerns about her weight, she chooses not to participate. This perhaps highlights the potential conflicting nature of a group dynamic for women with a raised BMI– it is simultaneously a space of safety whereby motherhood identity could be explored and reaffirmed through social support, but also a potentially stigmatising space. Florence noted that additional marginalities were potential barriers to utilising the peer support in the postnatal period.

Participant: Some of the mums after they gave birth, they went to erm, like pregnancy, like mother and baby groups where they had like, exercise sessions with the babies. But that was something you had to pay for and at the time, obviously me having a brand-new baby and being by myself, not having a partner there, it was kind of a big impact...on my financial side of things as well so-

#### Researcher: Yeah

Participant: -that was something I didn't attend to. But maybe that could have benefit, that could be a benefit like, for other mums-

#### Researcher: Mmm

Participant: -because the other Circles ladies did do it and they found that beneficial...and they've managed to shift more baby weight than obviously what I have. (Florence, all Circles attended)

Florence had become a single mother over the course of her pregnancy and indicates that her financial difficulties were a barrier to her accessing peer-supported mother and baby group physical activities. As noted previously, Florence expressed a lot of dissatisfaction with her postpartum body, and this passage highlights how economic barriers not only limits opportunities for women to partake in health changing behaviours in the postpartum period but also limits potential peer support opportunities in doing so. This reflects the wider literature where researchers have noted that a lack of support, competing demands and limited resources are cited as barriers to weight loss efforts for postpartum women, especially those with lowincome (Graham, Uesugi & Olson, 2016; Sterling et al, 2009: Thornton et al, 2006). The intersection of raised BMI and socioeconomic factors such as low-income requires further exploration to see whether health interventions in the postpartum period can be strengthened for vulnerable or marginalized groups of women. Some scholars have noted that many women with a raised BMI consider weight gain to be a natural consequence of pregnancy, and that they expect to lose weight in the postpartum period (Lauridsen et al, 2018; Keely et al, 2017). However, some of the women expressed frustration that they had gained weight and attributed this to the multiple lockdown periods.

Participant: If COVID hadn't have happened, I was doing really well losing my baby weight. I'd lost quite a lot of it. Okay, I'd had a bit of swelling where it all...but I'd lost a lot of it and I'd probably only about a kilo or so to go. And then COVID hit and I put it all back on again. So yeah, possibly if COVID hadn't have hit it might have been a different story-

#### Researcher: Mm

Participant: -but obviously not able to go out, not able to do anything, and obviously then my in-laws moved in and they were cooking...and so yeah they use a lot of oil and a lot of fried stuff... and obviously when someone's cooking a meal you're just gonna take it. So yeah that's annoyed me a little bit. But thats more to do with COVID than my actual pregnancy.

#### Researcher: Mm

Participant: But yeah...I'm not happy with my weight at all at the moment. But it's very difficult when you've got two of them because they don't even sleep at the same time. For me to even do a bit of exercise and, and getting them out of the house and park. I try

and walk every day but I've also joined up for this thing that I can do, this exercise at home but in my mind I can't even find time to do that. I'm gonna see what I can do because I need to lose it. (Amelia, 7 Circles attended)

Obviously I've probably put on a lot more weight than well, I would have normally because of like, lockdown. Because of lockdown you didn't, you wasn't doing your normal- you was pretty- obviously you could go out and do your daily exercise but every time I wanted, I would've wanted to go for a walk, it is like taking three kids out with you. So it is a lot. Obviously I didn't do as much exercise as I would have done normally if, if lockdown wasn't here...obviously with a newborn it's quite hard for me to be standing in front of the telly you know, and do all like moves, like exercise things. I have put on a lot more weight than what I ideally wanted to, if lockdown wasn't there. Obviously it's hard when you're trying to lose it now, 'cause I'm in the hospitality industry. I've only like, just gone back to work like in the summer. And then I was, then it was November we went into another lockdown so I was only at work for a little bit and then we've only gone back in April. So it's, it's hard, I've not been at work like, doing all that walking I'd normally do on like, an eight-hour shift. (Polly, 1 Circle attended)

Amelia cites multiple barriers to postpartum weight loss. She recalls that although she had support from her in-laws who had moved in with her family during lockdown, she felt she had to be grateful for their support which sometimes came in the form of food that Amelia thought to be unhealthy. The "busyness" of motherhood, alongside lack of motivation are also considered barriers to postpartum weight management for Amelia. Polly identifies two barriers in her weight management journey during lockdown – the ability to work and care for a baby. Expectations of weight loss were tied to employment, which was physically quite demanding but subsequent periods of lockdown have paused her work. Her comments also highlight the difficulty of prioritising her needs over that of the baby.

## 7.5. Conclusion

It appears that group care facets such as peer support were utilised well beyond the Circle sessions. Women noted a distinct lack of services and other forms of social support during the pandemic so for the women who were able to develop bonds within their Pregnancy Circle, the group continued to be a source of emotional support in the postnatal period and helped to mitigate feelings of isolation and loneliness. Women recalled that Pregnancy Circles were a space that normalised pregnancy, and validated their pregnancy identity through sharing commonality with other women who were also pregnant. In much the same way, the group dynamic that was developed in the Pregnancy Circles helped the women to validate their motherhood identities in the postpartum period. This is particularly important for women with a raised BMI, where the visibility of their postpartum bodies codify them as "bad mothers" (Parker, 2014). Researchers have noted the social support has been identified as key to reducing postnatal isolation and to support the transition into motherhood (De Sousa Machado et al, 2020). Furthermore, peer support has been identified as providing elements of validation, security and self-confidence for new mothers (Darvill et al, 2010; Dennis and Chung-Lee, 2006). Other women noted that their Circles were not well established and therefore had lost the potential for social support. Where women were denied the ability to develop social supports in their groups, in addition to the lack of services, the absence of different support systems were keenly felt by women when attempting to navigate their motherhood identities in relation to their postpartum bodies, infant feeding and body image.

Pregnancy Circles were an influential space for the formation of a "good mother" identity. Infant feeding was a common theme for women that was also influenced within these spaces. For women whose sessions were truncated, the lack of influence from Pregnancy Circles demonstrated that women utilised less resources around their decisions on infant feeding. Women in this study relayed frustration about their postpartum bodies and reproduced internalised stigmatised thinking about their bodies as it related to their good mother identities. One particular way this manifested was in discussions about infant feeding and the pervasive public health messaging around breastfeeding. With the lack of public services available during

the pandemic, many women chose to formula feed their babies and articulated ideas of internalised failure in their mother identity around breastfeeding their babies. Women with a raised BMI are less likely to be able to successfully breastfeed and are noted to have lower breastfeeding rates at initiation and later on (Bever Babendure et al, 2015). There are several psychosocial factors that reduce exclusive breastfeeding in women with a raised BMI. Women with a raised BMI have been shown to have reduced confidence in their abilities to breastfeed and have less social support to breastfeed (Hauff et al, 2014). An inability or lack of desire to breastfeed puts further burden onto mothers as they are seen as key for the future health of the nation, where formula feeding is seen as a risk factor for future obesity. Fat mothers are further vilified by the literature wherein the potential risk of childhood obesity is the consequence of their choice to formula feed (Amir and Donath, 2007). Fat motherhood has been identified as a fraught experience heightened by societal anxieties around "good motherhood", leading women to internalise messages around failure (Lee, 2020).

Ideas of good motherhood were also articulated through the postpartum body, in discussions of diet, body image and weight management. Researchers have suggested that good motherhood continues to be defined by the maternal body, where thin and fit bodies are idealised and thus are seen as examples of good motherhood, through neoliberal ideas of self-regulation and personal responsibility (Warin and Gunson, 2013). Women frequently expressed dissatisfaction with their postpartum bodies, with some indicating the postpartum period was ideal for adopting health behaviours to feel better about themselves. Postpartum weight management was a frequently discussed topic and women indicated that this was not discussed in the group sessions. This suggests that midwives missed opportunities to utilise facets of the group care model such as woman-led discussions and facilitative practice to optimise women's health through the postpartum period. For women whose groups were well established, they were able to access the group dynamic as a form of emotional and social support when engaging in health change behaviours in the postpartum period, although women also cited barriers such as anticipated weight stigma or financial concerns that prevented them from utilising this fully. Midwives identified the potential for collaborative working practices in the postnatal period by utilising health visitors to provide relational continuity and public health promotion. However,

women are more likely to seek support from lay people rather than healthcare professionals, demonstrating a particular preference for support from other women with children (Dennis and Chung-Lee, 2006). This warrants further examination in the context of group care, and whether the informal support that the group dynamic gives in the antenatal period can be meaningfully translated into the postnatal period in a standardised way.

# 7.6 Chapter Summary

This chapter has introduced and explored the third and final meta-theme, good motherhood in a pandemic, with its interrelated themes, isolation and seeking support, forming good motherhood and the postpartum body. It has highlighted women's experiences of postpartum in relation to the facets of the group care model, particularly the use of peer support and its utility in the absence of other services and resources. The next chapter will now turn to discussing all three meta-themes in more detail and in relation to the wider literature.

# Chapter 8 – Discussion

## 8.1. Introduction

In this chapter I summarise and discuss the principal findings of the study within the context of the existing literature. I outline a summary of the key findings and then discuss each of the meta themes in turn, exploring each in greater detail. The implications of the thesis findings and how they extend the current knowledge base are discussed further. The experiences of antenatal care for women with a raised BMI from diverse backgrounds is poorly understood and not well documented. Much of the current literature focusses on the experiences of white women with medium or high socioeconomic statuses. This study attempted to redress this gap in the current literature through the inclusion of women from diverse backgrounds. It also considered the intersectionality of women who use the health service and whether facets of GANC can improve their experience of pregnancy. The application of the theoretical framework, cultural safety, is extended beyond its original definition and the implications of this are discussed below. I also consider how GANC aligns with a cultural safety framework and what the impact of this might be on women's experiences of pregnancy care. The limitations and strengths of this study are then discussed. Final reflections on the work conducted are also discussed below.

## 8.2 Summary of key findings

The primary research undertaken for this thesis found that facets of GANC support women with a raised BMI to have a positive experience of pregnancy. Many of the women were receiving care outside of the Circles for various reasons and therefore were receiving additional care related to their risk status. For women, the Pregnancy Circles represented a space where their risk status did not have to be navigated. Facets like peer support and relational continuity normalised the pregnancy experience for women, which helped mitigate the impact of increasing medicalisation when pregnancy complications developed. Other facets such as woman-led discussions and facilitative discussions were powerful tools that women utilised in order to determine whether their care provision outside of the Circles was safe.

Midwives outwardly supported the group care model and the attributes that make the model successful but in practice, found it difficult to utilise the facets effectively to support shared decision-making around choice provision for women with a raised BMI. Much of this praxis stemmed from being deeply enmeshed in a risk management paradigm which prevented them from embracing a different way of practicing when caring for women with a raised BMI. Healthcare professionals, both inside and outside of the Circles, operated in a way that affirmed a deeply entrenched way of thinking about risk and reproduced a pervasive biomedical rhetoric about risk residing within women's bodies. Safety was promoted in a hierarchical way, where not only was the hospital situated as the ultimate place of safety, but specifically consultant-led units were considered the safest place within the hospital for women with a raised BMI.

In contrast, women did not perceive the hospital as a place of safety but rather as a site of danger because of the risk of over-medicalisation of the pregnancies. This fear was heightened by the COVID-19 pandemic, where minoritised and marginalised groups were overrepresented in the deaths in hospital. Pregnancy Circles were cancelled during the pandemic, and women lost a space where their pregnancies were normalised. They became exposed to increasing medicalisation which they found difficult to negotiate without the support of the Circles. Many of the women received intervention during their labours and birth, and reported that their labours and births were medicalised because of their "high risk" status. Women reported that their overall needs were often marginalised to prioritise clinical safety during labour. For women with multiple marginalities, racialised experiences within hospital settings solidified the hospital as a site of danger and amplified the trauma around their birth experiences. The loss of facets such as relational continuity and facilitative practice, although expected, intensified poor experiences in the hospital.

The peer support facet of the Pregnancy Circle was utilised well in the postnatal period and for some of the women helped to mitigate the loneliness of the lockdown periods of the pandemic.

This was especially welcome particularly where women identified usual services and support were lacking.

Facets such as women-led discussions in the Pregnancy Circles were heavily influential in the creation of the "good mother" identity. For women who stayed connected and bonded into the postnatal period, these ideas continued to be reproduced in their groups long after Pregnancy Circles had ended. Women who were not able to establish bonds with the other women in the group experienced anxieties related to infant feeding and their motherhood identities.

Women expressed frustration at postpartum weight gain and attributed this to the multiple lockdown periods. Many women appeared to desire support for postpartum weight loss but identified that this was not discussed in their Circles, indicating that opportunities to optimise health were missed by facilitating midwives. Women identified peer support as a highly motivating factor but also cited various barriers to utilising this fully. Midwives considered Pregnancy Circles in the postnatal period as a feasible opportunity to work collaboratively with health visitors in order to provide formal support and relational continuity to promote health in the postpartum period

# 8.3 Pregnancy Circles as a site of tension

As discussed in previous chapters, the existing literature establishes that women with a raised BMI have a generally poor experience of standard antenatal care, related to feelings of stigmatisation, restrictions in decision-making processes and over-medicalisation of the pregnancy (Smith and Lavender, 2011; Jones and Jomeen, 2017). These themes speak to a larger problem about how this group of women are generally perceived and addressed in healthcare systems, namely that a biomedical discourse about obesity-as-risk is pervasive and dictates clinical encounters. Implicit within these encounters is the understanding that there is an uneven power dynamic between the healthcare provider and the woman (Foucault, 2023; Jordan, 1997). This is often heightened for women whose ethnic or racial identity is not concordant with their healthcare providers (Altman et al, 2019; West and Bartowski, 2019; Davis, 2019). Women are

left performing the emotional labour that comes with either navigating, resisting or accepting the categorisation of risk and the bodily implications that come with it (Keely, 2017; Lee, 2020; McPhail et al, 2016).

Within Curtis et al's (2019) cultural safety framework, navigating risk status in pregnancy is not necessarily an issue because the healthcare provider should be actively engaged in dismantling the inherent power dynamic, allowing the facilitation of appropriate care. This rebalancing of the power dynamic is key to shifting the current paradigm on what safe care looks like. However, it also means that the onus is on the healthcare provider to be self-reflexive enough to enable this change in how women approach and experience the care encounter. GANC contains facets (such as women-led discussions, relational continuity and self-autonomy) that facilitate this change in thinking but the actors within are responsible as to whether this change can happen.

This study found there was a tension because women with a raised BMI and midwives were not aligned in terms of expectations of care provision, and of risk management, within the Circles, because of the risk status these women were perceived to have in relation to other women. Another tension arose in how midwives conceptualised the group care model. Fundamentally, midwives really supported the idea of the group care model and reported enjoyment with this way of working in partnership with women. However, there was evidence that when confronted with caring for women with a raised BMI, midwives struggled to balance risk management with facilitating women's choice and utilising facets of the group care model in order to achieve that.

Despite these tensions, this study found that cultural safety could be maintained within Pregnancy Circles because women were not engaged in navigating their risk status within these spaces and were able to interchangeably use various knowledge bases to determine safety within clinical encounters outside of the Circles.

#### 8.3.1. Potential/anticipated weight stigma as a barrier to care

Having a raised BMI was understood by both the women and midwives interviewed as a stigmatising state. Some of the women interviewed were wary about joining Pregnancy Circles, fearing that it could be a stigmatising space for them, having started pregnancy with an internalised sense of stigma, as well as being categorised as "high risk" at their booking appointments because of their BMI status. Jarvie (2017) notes that some women with a raised BMI can experience layers of stigma if they occupy multiple marginalised identities. Some of the women in this study could be seen to occupy multiple marginalised identities and were cognisant that these characteristics potentially put them at risk of further stigmatisation. Women did not appear to be stigmatised by the midwives facilitating Pregnancy Circles but were subject to engaging in competitive comparison. This was a source of tension because women reported their experiences of Pregnancy Circles as positive due to facets such as peer support. Goffman's (1963) work on stigma defines it as an attribute that is "deeply discrediting" to the individual. In addition, he notes that the visibility of the attribute potentially increases the risk of stigmatisation. Comments about the visibility of already-large bodies made larger by pregnancy highlighted that gestational weight gain was a vulnerability that could invite stigmatisation. Furthermore, for women with a raised BMI, gestational weight gain can be fraught as it brings forth moral judgement about larger bodies gaining even more weight (Padmanabhan et al, 2015; McPhail et al, 2016; Lee, 2020). Current NICE (2010) guidelines do not stipulate an appropriate range for gestational weight gain but suggests that women rely on trusted sources of information. Midwives recognised that Pregnancy Circles could be particularly beneficial for women with a raised BMI because generic advice given about diet and exercise in a group setting could diminish feeling targeted because of their BMI. Feeling singled out with health information due to obesity is a concern of women that has identified in much of the literature (Jones and Jomeen, 2017). Despite this, there was evidence that midwives did not use facets of the group care model effectively to optimise health for this group of women, indicating that the potential of weight stigma prevented appropriate midwifery care within the Circles.

Curtis and colleague's (2019) cultural safety framework is limited in assuming that clinical interactions are only between a healthcare provider and a participant. Due to the collective nature of the sessions, women in this study developed relationships in Pregnancy Circles outside

of the midwife-mother dynamic. In the case of GANC, the interaction of the women within the group dynamic, both with midwives and without midwives, must also be considered. At its core, weight stigma is an enactment of a particular power dynamic, whereby an individual with a raised BMI is aware they occupy an abnormal identity. The risk to cultural safety for women with a raised BMI is that weight stigma is re-enacted in a space such as Pregnancy Circles that are meant to dismantle and challenge dominant power dynamics and narratives. It may not be possible to enable cultural safety through ensuring that all the other participants are aware of, and take responsibility for the power that weight stigma holds because implicit in this must be an understanding of the cultural and societal context of morality, personality responsibility and fatness in relation to health (Warin and Gunson, 2013; Evans and Colls, 2009, Parker and Pause, 2018). Therefore, the role of the midwife in the facilitation of these kinds of interactions is likely to play a vital role in ensuring cultural safety for all the members of the group care sessions. Aphramor and Gingras (2011) suggest that an environment where fatness is steeped in negativity should force healthcare providers to be engaged in consistent efforts to counter this narrative, rather than participate in it. The absence of appropriate midwifery facilitation in Pregnancy Circles risks legitimising weight stigma within these spaces. There is an additional tension for healthcare professionals in that they are enmeshed in a system that upholds and legitimises a biomedical model of health wherein individuals can be quantitatively deemed abnormal or normal. Upskilling midwives in the art of facilitating group care models may help midwives manage this task better. Opportunities for teaching a new generation of midwives these skills, and potentially a different praxis, emerges.

#### 8.3.2. Risk mitigation and normality

Facets such as peer support and relational continuity supported the normalisation of pregnancy, which women reported contributed to a positive experience of their pregnancy care. This was particularly important for women of this study, many of whom were receiving care outside of the Circles. Women were not opposed to receiving additional care related to their risk status, although they recalled that much of it was fragmented. Some of the women sought to resist the

pervasive biomedical narrative about the risk in their bodies by gaining validation of their pregnancies as a normal phenomenon within the Pregnancy Circles. Women resisting external identification as "high risk" has been found elsewhere in the literature (Keely et a, 2017; Jarvie, 2017; Atkinson and McNamara, 2017; Dinsdale et al, 2016). The Pregnancy Circles represented a space that mitigated the impact of medicalisation, particularly if complications had developed in that pregnancy. Women were not compelled to navigate their risk status in the Pregnancy Circles as this was happening in appointments outside of the Circles.

Facets such as woman-led discussions allowed women to utilise different knowledge bases in order to inform their decision-making processes. This has been observed in the wider literature (Clancy et al, 2022; Padmanabhan et al, 2015). In particular, experiential knowledge was highly valued by women in the Circles, even though researchers have noted that this is often considered to have a "lower value" status when compared to a biomedical knowledge base (Clancy et al, 2022). One potentially important function of GANC may be to bolster medical pluralism, thereby challenging the pervasive 'biomedical hegemony' (Baer et al, 2013) that is found within healthcare encounters in the UK. This enables cultural safety further though the provision of care using frameworks that respect difference (Curtis et al, 2019). Epistemic pluralism has been posited as a way of dismantling uneven power dynamics present within clinical encounters so understanding how or if group dynamics function in this context may give an insight into how to meaningfully apply a decolonial lens to maternity care, thereby promoting cultural safety further (Lokugamage et al, 2022).

#### 8.3.3 Information exchange and dismantling power dynamics

Furthermore, the group dynamic enabled women to triangulate information from different sources to determine whether their care encounters were safe for them, thereby further ensuring cultural safety within the Circle. Clancy and colleagues have noted that both healthcare professionals and lay people use various knowledge bases interchangeably to inform their decision-making processes (Clancy et al, 2022). The group care dynamic appeared to be a powerful form of social support in allowing women to share and exchange information

contemporaneously about their care encounters outside of the Circles. This was particularly important for the women of this study, the majority of whom were receiving additional care outside of the Circles and reported being subject to fragmented care or inconsistent information from multiple care providers. This finding has been noted elsewhere in the literature (Jones and Jomeen, 2017). With regards to intersectionality, this type of social support in the form of the group dynamic may be instrumental in supporting the cultural safety of Black and ethnic minority women by helping them to consider whether the care they receive is discriminatory. Authors have noted Black women are frequently involved in the navigation of asymmetrical relationships with their care providers both inside and outside of hospital settings (Davis, 2019; West and Bartowski, 2019). By dismantling hierarchies and power dynamics within the patient-care giver relationship, the wider availability of GANC may decrease the burden of responsibility and advocacy that Black women often undertake within clinical encounters to ensure equity in care provision.

Women did not appear to be opposed to receiving additional care associated with their risk status outside of the Circles. This is contrary to what Furber and McGowan (2011) found, whereby women in their study were not accepting of additional medicalised care. However, women in this study expressed some consternation about having their pregnancies, and births over medicalised, as this was not perceived to be beneficial. This has also been seen elsewhere in the literature (Jarvie, 2017; Knight-Agarwal et al., 2016; Norris et al, 2020). What emerged was an idea that the group dynamic may help improve women's experience of pregnancy by mitigating the emphasis of risk outside of the Circles, with legitimising the 'ordinariness' of pregnancy inside of the Circles.

#### 8.3.4 Risk management within the Circles

It appeared that midwives struggled to utilise facets of the group care model to support shared decision-making processes and empower women in their choices. This demonstrated a fidelity to a risk management paradigm that aligns with a larger organisational safety culture. The wider literature highlights the current culture of "risk amplification", where the fear of adverse

outcomes remains a key driver in maternity policy (Healy et al, 2016; Dahlen, 2010). The result of this is that pregnant women are exposed to ongoing speculation of risk (Possamai-Inesedy, 2006). Many of the NICE recommendations use language such as 'suggest' and 'offer' with regards to intervention and additional monitoring in pregnancy, labour and birth and reflects a more nuanced perspective on the dynamism of risk in pregnancy (NICE, 2021a). In contrast, RCOG (2018) guidelines are more prescriptive in their recommendations – their interpretation of the NICE (2021a) guidelines transforms a suggestion of offering consultant-led care in labour for women with a raised BMI to a recommendation that women *must* plan to give birth on a consultant-led unit. The outcome of a binary application of risk has resulted in the conflation of the risks of obesity with the certainty of poor or unacceptable outcomes. The implementation of this in healthcare systems has led to poorer care experiences for women (Dejoy et al., 2016; Furber and McGowan, 2011).

One of the key tensions was that much like the women, midwives also understood Pregnancy Circles as a space where the commonality of pregnancy was uplifted through facets such as peer support and woman-led discussions. However, midwives struggled to utilise these facets effectively and opportunities to optimise women's health were missed, for fear of stigmatising certain group members. Failure to communicate public health ideas during pregnancy due to weight stigma has been documented elsewhere in the literature (Detereich et al, 2020; Blaylock et al, 2022). Like the women, midwives in my study were cognisant that obesity is stigmatising so appeared to avoid appropriate facilitation within the Circles for fear of causing further stigma. These findings align with Atkinson and McNamara's (2017) work on unconscious collusion, where they found midwives colluded with women to avoid difficult discussions around obesity and risk in pregnancy. This may pose a risk to the development of a supportive group dynamic if the perception is that the space cannot be culturally safe for all group members.

Further tensions emerged as some women reported ambivalence from the midwives about whether they could return to the Circles once they had developed complications requiring extensive care outside of the Circles. Current RCOG (2018) guidance recommends that pregnant women with a raised BMI can be cared for in usual antenatal clinics. This would indicate that women of any BMI category would be suitable for Pregnancy Circles. In continuity of care models

where there is complexity, the role of care co-ordinator is brought into sharper focus for midwives (Rayment-Jones et al, 2019). Although midwives on the whole accept women with a raised BMI would benefit from midwifery-led care due to its personalised and relational approach to care, there is still some uncertainty about suitability for women with a very raised BMI (Murray-Davis et al, 2022). Other authors have noted that some midwives hold stigmatised views on women with a raised BMI (Schmied et al, 2011; Hodgkinson et al, 2017). This was seen in my study, where stigmatised thinking from midwives positioned the presence of women with a raised BMI as a barrier to supporting health behaviours for all women within the Circle. Clinical encounters risk the cultural safety of women with a raised BMI if there is the possibility that weight stigma will be reproduced by midwives in those spaces. In this study, midwives overall did not display overt stigma to women with a raised BMI but did imply that the time in the Pregnancy Circle was a finite resource that needed to be shared by all the women. Women with a raised BMI were positioned as a potential burden that would negatively impact the other women in the group because of their additional needs.

#### 8.3.5 Ambivalence about continuity of care

Recently, there have been a few reports in England highlighting safety concerns across some NHS trusts regarding the care of mothers and babies (Independent Maternity Review 2022; Kirkup, 2022). Some of the recommendations reflect reactive measures, responding and relating to findings in these reports. For example, the Ockenden recommendations include a cessation of mCOC models where staffing levels are inadequate, and introduction of centralised CTG monitoring systems. The report suggests that a suspension in provision of mCOC models of care will "preserve the safety of all pregnant women and families", arguing that continuity of care models place additional pressure on maternity care services already under strain (Independent Maternity Review, 2022). In addition, there is not a single meta-analysis to date that has proven the beneficence of continuous foetal monitoring regarding poor perinatal outcomes (Alfirevic et al, 2017; Al-Wattar et al, 2021; Small et al, 2019). On the other hand, continuity of care has been shown to reduce preterm birth, and rates of foetal and neonatal death (Sandall et al, 2016). Yet

the sentiments in the Ockenden report position continuity of care models as potentially unsafe for women, indicating that there is likely some ambivalence around the safety of continuity of care models in the context of organisational pressures. In the current maternity landscape, these recommendations can be interpreted as borne from larger safety culture concerns and organisational pressures due to a diminishing midwifery workforce (RCM, 2015; Department of Health, 2022; Kirkup, 2022). These recommendations also reflect a narrow view of what constitutes safety at a national level. It is evident how we embed cultural safety in healthcare provision requires more consideration. At the same time, researchers have also noted that midwifery practice is becoming more marginalised as maternity care is becoming more medicalised (Najmabadi et al, 2020). These tensions were reflected in some of the group care sessions that were observed.

A recent systematic review highlighted that although midwives were enthusiastic about practicing in group care models, several organisational barriers were identified that contributed to dysfunctional working practices (Lazar et al, 2021). In my study, midwives were largely in favour of adapting the group model for specialised groups, such as women with a raised BMI, speculating that targeted advice would be beneficial for the function and utility of the group. This highlighted how deeply entrenched they were in the organisational culture of their hospitals, where the consideration of efficiency was paramount. Further work is required to understand midwives' experiences of working in specialised groups.

## 8.4. The hospital as a site of danger

Conceptualising the hospital as a site of danger favours the primacy of data from the women interviewed (see Harding, 1991). Midwives and doctors both inside and outside of the Pregnancy Circles understood risk to be inherent within the fat body, and reproduced ideas about the hospital as a place of safety, where the risk inherent in women's bodies could be managed by the institution. Positioning women's bodies as risky demonstrates fidelity to a biomedical narrative around obesity as risk (Warin and Gunson, 2013). It appears that facets of the group care model did not support a shift in practice for midwives when they encountered and cared for

women with a raised BMI as there was a tension between how the hospital was conceptualised by women and by healthcare professionals. It could be argued that by situating the hospital as a site of safety, midwives and doctors were also reinforcing a narrative around biomedical hegemony and its practices within institutions (Baer, 2013; Jordan, 1997). The COVID-19 pandemic also aggravated women's concerns about the hospital as a place of safety. This was further exacerbated by Pregnancy Circles being cancelled in the pandemic. For some of the women interviewed, the care they received during labour and birth was both culturally and clinically unsafe, solidifying the hospital as a site of danger. This is discussed further below.

#### 8.4.1. Contextualising risk and choice

Within the Circles, evidence of good facilitative discussions about home birth and midwifery-led settings could be argued to further cultural safety for this group of women as traditionally, women with a raised BMI are often steered away from birth choices that are considered only suitable for "low-risk" pregnancies (Marshall, 2019; Kerrigan et al, 2015). This facilitation of birth choice contributes to the dismantling of the usual power dynamic that can be present within disrespectful maternity care (Diorgu and George, 2021). The notion that the hospital was a place of safety for women who had complex pregnancies was deeply entrenched in midwives' praxis and this idea was observed across multiple Pregnancy Circle sessions. The culture of "risk amplification" places significance on the likelihood of poor outcomes (Dahlen, 2010; Healy et al, 2016). This was reported by women in appointments outside of the Circles where there were unilateral decision-making around birth choices, indicating the lack of cultural safety within these spaces. Researchers have noted that the judgement of risk is subjective, where certain risks are considered acceptable whilst other, often less serious risks are seen as unacceptable (Walsh, 2006). This has ramifications for maternity care, where poor outcomes have resulted in a heightened litigious culture (Coxon et al, 2012). Nolan (2015) argues that maternity services tend to emphasise and plan for the medical risks of the pregnancy, but women may place contextualise risk more broadly, with consideration to their emotional wellbeing and their ability to bond with their baby. She acknowledges that both healthcare professionals and women are

dedicated to ensuring the safety of the pregnancy and that of the baby, but disparate definitions of risk and medical hegemony lead to an absence in women's decision-making processes. Researchers have noted that women with a raised BMI are engaged in resisting the problematisation of their bodies in order to gain control around the narrative of their pregnancies (Parker and Pause, 2018; LaFrance and McKenzie-Mohr, 2014). In my study, women did this to some degree in their consultations but the cancellation of the Pregnancy Circles represented a loss of normalisation in their pregnancies, meaning they were exposed to more care that reinforced and advocated for medicalisation. Although they were engaged in navigating their risk status, women eventually acquiesced to the recommendations, or demands, of their healthcare professionals to receive interventionist and medicalised care. Women related these decisions to a "good mother" identity. Researchers have noted that women with a raised BMI have observed that adherence to guidelines leaves them with less choice regarding birth planning (Mills et al, 2013; Nyman et al, 2010). RCOG (2018) guidelines recommend that for women with a raised BMI, discussions should take place during pregnancy with a consultant obstetrician regarding place of birth, and that women are informed of the additional care that is available in a consultant-led unit. The implication of this is that low-risk midwifery settings, such as home birth or midwifery-led units are insufficient for the needs of women with a raised BMI. However, this also presumes that women's needs should be anticipated and dictated by institutions rather than by the women themselves. A larger question emerges about whether care for women with a raised BMI can ever be considered culturally safe if national and local guidance recommends restrictions of choice in the first instance, and clinicians only consider a single framework, most likely a biomedical knowledge base, in order to achieve national objectives.

#### *8.4.2.* Unfulfilled potential of the group care model

The disparity in risk perception between women and midwives is well documented in the literature and continues to be challenging for both parties in the context of obesity (Relph et al, 2020). On the one hand, midwives must support and respect women's choices and this is

enshrined in the professional standards laid out for midwives (NMC, 2018). On the other hand, national guidance recommends the restriction of birth place choice for women with a raised BMI (RCOG, 2018). This issue is complicated further by considering how to promote birth choice and planning in mixed group sessions in a meaningful way that does not exclude or marginalise women further. Group care offers a way to discuss pregnancy concerns more generically so women with a raised BMI may not feel targeted by public health messaging. However, this presumes that midwives are confident enough to facilitate these kinds of conversations skillfully without causing offense. Furthermore, midwives may also feel challenged or restricted practising in group care models as they work in healthcare systems and in hospital settings that prioritise hierarchical medical knowledge to operate, counter to how group care models are designed. The risk here is that the midwife inadvertently reproduces medical hierarchies with didactic information sharing, and very few shared decision-making processes, thereby reducing the potential benefits of the group care model related to women's self-autonomy or empowerment. My study highlighted that midwives struggled to utilise facets of the group care model to its full potential to improve women's experiences of care.

Within England, there has been a consistent drive for several years to provide safer maternity care and this is enshrined in national and local policies (National Maternity Review, 2006; NHS England, 2023). With this has come a dramatic rise in risk management (Healy et al, 2016). The issue is that managing risk is often conflated with providing safety despite evidence that some outcomes have not improved, and in some cases have worsened (Dahlen, 2014; Al-Wattar et al, 2021; Walsh, 2006). Furthermore, the augmented focus on mitigating adverse physical outcomes for mothers and babies has come at the cost of ensuring psychological, cultural and spiritual safety (Dahlen, 2014). This indicates that further training may be required to enable midwives to practice as the group care model is intended. Caring for women with a raised BMI within this model may require midwives to consider how to utilise the facets of the model effectively in order to facilitate choice outside of a risk management paradigm in order to redress the balance between reducing avoidable, measurable "risky" outcomes and supporting cultural, psychological and social safety.

#### 8.4.3 Interventions as risk embodied

Almost all the women interviewed experienced forms of interventionist care during their time in the hospital. However, interventionist care itself is not without risk, and for women with a raised BMI, it is more likely to fail, therefore potentially increasing morbidity for this group of women (Ellis et al, 2019). Researchers have noted that restrictions in the choice of birth planning highlights a bigger struggle with asserting autonomy during labour (Thorbjornsdottir et al, 2020). The struggle with asserting autonomy during labour was reflected in some women's sentiments about interventionist care. Tensions arose in the acceptance of interventionist care in labour to reduce their risk of poor outcomes, such as continuous foetal monitoring and induction, which women reported feeling obliged to accept for the wellbeing of their babies. The care received during labour highlighted the lack of cultural safety in these interactions. Women implied that they felt coerced into accepting intervention, indicating the difficulty of rejecting a biomedical framework of risk reduction. There is also a deeply rooted social bias that positions women with a raised BMI as posing a danger to their babies, considering their bodies as an embodied location of concern and "bio-cultural anxieties" (Warin et al, 2012). Within the context of maternity care, the expression of fat-phobia as medical concern is particularly harmful because the mother's body and her needs are situated as a danger to her baby (Parker and Pause, 2018). In my study, women expressed disappointment about their lack of birth choices but felt the need to situate themselves as good mothers by agreeing with interventions suggested by their carers in hospital. This undermines a positive maternal identity by implying that women who do not comply with medical advice will be poor mothers as they cannot or will not prioritise their baby's health (Davis, 2019).

#### 8.4.4 The hospital as a site of infection

During the COVID-19 pandemic, women's perceptions of hospitals and the risk of death in those institutions was heavily influenced by daily media coverage of the pandemic (Karavadra et al, 2020). The public perception was that hospitals were sites of infection transmission for COVID-19 (Campbell and Bawden, 2021). This was particularly concerning for Black women and women of

colour, who were aware that they were at a higher risk of infection and of a poorer outcome. This was reflected in my study, where Black and ethnic minority women expressed concern about their mortality risk in the context of COVID-19 and pregnancy. A rapid review commissioned by the government conducted during the pandemic found participants were overly saturated with messages of risk, with a larger focus on mortality and hospitalisation risks due to COVID-19 but other concerns such as mental health were ignored (Race Disparity Unit, 2021). What became apparent was that the labour and birth experiences of some of the women interviewed mirrored what was happening during the pandemic, in that population level health inequalities were compounded, disproportionately affecting minority ethnic groups and those living in areas of deprivation (Capper et al, 2023). During this time, women identified the hospital as a source of danger for them, in relation to infection, isolation and uncertainty. Fears around contamination have been found in other studies related to women's experiences of pregnancy during the COVID-19 pandemic (Vermeulen et al, 2022; Sanders and Blaylock, 2021; Montgomery et al, 2023).

#### 8.4.5 Medicalisation amplified during COVID

Although women perceived the hospital as a site of danger, the pervasive nature of a biomedical narrative around risk still compelled women to give birth in them. Women reported that they felt that hospital restrictions due to the COVID-19 pandemic contributed to medicalisation of their labour and attributed a lack of choice in labour and birth to the pandemic. This phenomenon has been observed elsewhere in the literature (Flaherty et al, 2022). However, in a broader sense, the experience of being denied nonpharmacological pain relief, such as waterbirth, or the choice to labour and give birth in a midwifery-led unit is common for women with a raised BMI and has been well-documented in the existing literature (Aughey et al, 2021; Parker and Pause, 2018; Lee 2020; McPhail et al, 2016). These experiences are not necessarily related to the pandemic but demonstrate larger ongoing organisational and workplace cultural issues that prevent choice for women with a raised BMI during labour and birth. A wider cultural shift is required in order to support women's decision-making capabilities. Effective utilisation of the facets of GANC with

appropriate midwifery facilitation may support this but it requires dedication from midwives through self-reflexive practice, and to demand organisational support in order to achieve this.

The experiences of women during the COVID-19 pandemic forces us to question exactly how we conceptualise risk and danger in pregnancy. Women's experiences of being pregnant during a pandemic highlighted a shift in thinking whereby risk was embodied by the institution, rather than in women's bodies. In this way, women's narratives during this time highlight a situated resistance to the pathology of the fat body. This perception of risk may prove challenging to both women with a raised BMI and healthcare professionals caring for them, as different systems of knowledge can prioritise vastly different conceptions of safety, particularly as women with a raised BMI may reject "high-risk" status as it relates to their (non)pathologised body (Warin et al, 2008).

#### 8.4.6 Poor hospital care experiences

For some of the women in this study, the hospital constituted a physical site of danger. In addition, it was evident that some women experience weight stigma during their time in hospital and this contributed to their poor experience of care. This has been seen in the wider literature where a recent meta-analysis exploring risk factors for maternal mortality in women with a raised BMI in France, found that in 40% of those cases, women with a raised BMI were subjected to sub-optimal care that directly contributed to their deaths (Saucedo et al, 2021). The authors found that clinical signs of deterioration were systematically and incorrectly attributed to obesity, leading to the misdiagnosis of the condition that led to death. In addition, women were prescribed and administered incorrect doses of medication according to their BMI, and clinicians struggled to correctly carry out normal clinical procedures such as venous access or intubation, thereby delaying vital treatment, which contributed to the death of these women. It does not appear that participation in Pregnancy Circles was protective in ensuring that women with a raised BMI had a good labour or birth experience. This may have been exacerbated by the premature discontinuation of the Circles for many of the women due to the COVID-19 pandemic. In addition, although Pregnancy Circles was designed as a continuity of care model, relational

continuity was not required beyond the antenatal period (Wiggins et al, 2020). The lack of facets of the group care model such as relational continuity and facilitative shared decision-making processes may be contributed to a poorer experience of care in the hospital. However, studies have demonstrated that women's satisfaction of birth experiences were much lower during the pandemic, and this has been attributed to a lack of labour support, lack of choice and overmedicalisation (Suarez and Yakupova, 2022; Preis et al, 2022). These were also reflected in the women's narratives in this study.

### 8.4.7 Missing facets of GANC impact labour care

GANC is associated with a better experience of antenatal care provision, attributed to facets such as relational continuity and peer support (Hunter et al., 2018b; Garces-Ozanne et al., 2016; Ickovics et al, 2007). However, none of the literature on GANC has determined whether this model of care improves women's experiences of labour and birth. Whilst this model of care is associated with better clinical outcomes for marginalised groups of women (Byerley and Haas, 2017), we cannot infer that this improves women's birth experiences. Outside of group care, relational continuity with a trusted health provider increases women's feelings of empowerment (Mills et al, 2013; Dejoy et al, 2016; Nyman et al, 2010). There is a small body of evidence that demonstrates that antenatal education is positively associated with higher levels of birth satisfaction for a vulnerable population (Stoll and Hall, 2013). However, there is a larger body of evidence that is more equivocal about whether antenatal education improves women's experiences of birth and labour (Mueller et al, 2020; Duncan et al, 2017; Cyna et al, 2013; Maimburg et al, 2013; Suarez and Yakupova, 2022). However, authors have also noted that there is no direct evidence that links a good antenatal care experience with a good birth experience (Relph et al, 2020). It might not be realistic to consider whether group care can be facilitated during the intrapartum period but facets within the group model, such as continuity of care and facilitative discussions could be utilised outside of the group model and may improve women's autonomy and decision-making processes as well as dismantle power dynamics, which could improve the experiences of intrapartum care.

#### 8.4.8 Navigating the "afterlife of slavery"

Some women related their poor birth experiences to their racial identity. Interactions with unconscious bias is not uncommon for both women with a raised BMI and Black women, and have been noted elsewhere in the literature (Alspaugh et al, 2023; Nguyen et al, 2022; Davis, 2019; Strings, 2019; McClain, 2019). The 'afterlife of slavery' has been identified as a critical framework that links Black women's poor birth experiences to medical negligence and explores the interrelatedness of racism in the medicalised management of their reproduction (Davis, 2019). In the context of maternity care, this framework argues that the continuation of medical racism is contributing to poor birth experiences for Black women, premature birth and prolonged stays in NICU for Black babies. Davis (2019) reflects on this by observing that medical racism creates specific stressors that disrupt Black women's pregnancies. Disparity in how maternity care is offered to ethnic minority women is also clearly documented in the literature – as far back as Martin (1987) who notes that Black women were recommended to have their labours augmented with oxytocin much more frequently than their white counterparts, indicating that Black bodies are "riskier" than White ones. Researchers have suggested that concordant care is becoming a recognised aspect in the patient-provider relationship (Nguyen et al, 2022). Concordance is associated with higher levels of patient satisfaction as well as improved health outcomes (Greenwood et al, 2020; McLemore et al, 2018). In particular, racial/ethnic congruence has been noted as a predominant element in building trusting relationships because these healthcare providers tend to be more cognisant of and impacted by structural racism, therefore, are able to understand the specific struggles of their patients and provide a sense of community in clinical encounters (Altman et al, 2019). In this study, there was evidence that Black women sought racially concordant care, and to a lesser degree, representation within the Circles. One woman attributed her marginalisation within the Circles to her multiple identities that were not represented in the group dynamic. The Pregnancy Circles trial was specifically designed as an intervention to be as inclusive as possible to reach women who are most at risk of higher health inequalities, but this study has shown that women with multiple intersecting identities may potentially be at a higher risk of isolation and marginalisation than other women within this type of care model.

## 8.5. Good motherhood in a pandemic

The interviews revealed women's concerns about parenting in a pandemic, where their expectations and assumptions about their postpartum bodies, identities, mothering and support were upended with the pandemic and the lockdown periods. Kukla (2006) argues that mothers serve a critical role as a lynchpin in the community as they often assume primary responsibility for household nutrition, care, protecting children and organisation of appropriate contact with healthcare services. Implicit within this is the formation of a "good mother" identity. Although the Pregnancy Circles were finished at this point in their journeys, the influence of the facets of the group care model was evident in how women regarded their choices as mothers, and how they socialised in the postpartum period.

#### 8.5.1 Postnatal isolation and Pregnancy Circle support

Mothering during lockdown periods revealed incongruence between women's expectations of support and the reality of mothering during lockdown. In this study, women observed that standard care provision and other services that could support their transition to motherhood and ascertain baby wellbeing were minimal during the pandemic. Instead, they utilised the peer support from their Pregnancy Circles to mitigate the loneliness of the lockdown periods. Early research has identified that social support can improve health and well-being (Sherbourne and Stewart, 1991; Bloom 1990). Research has shown that social support is key in promoting maternal and baby wellbeing in the postpartum period (Razurel et al, 2012; De Sousa et al, 2020). Structural social support refers to the existence and amount of support available through both formal and informal social relationships (Leahy-Warren et al, 2012). Kinser and colleagues noted that the pandemic compounded an existing lack of community-based or healthcare system resources required to address postpartum women's needs (Kinser et al, 2022). More research is required to understand the development of relationships within the group dynamic in GANC and whether it can be utilised effectively as an informal type of social support.

What this study found was that for women whose experiences of the Circles were severely truncated because of the pandemic, they also lost the ability to utilise the social bonds that the Circle potentially could have provided because there was no support network established during the antenatal period. The lack of social support in the postpartum period during the pandemic has been associated with poorer mental health and higher levels of anxiety and depression (Zhou et al, 2021; Kim et al, 2023; White et al, 2023). Higher levels of depression were noted for women with a raised BMI due to the pandemic, indicating that this group of women may benefit the most from social support (Wdowiak et al, 2021). During the lockdown periods, the WhatsApp group provided a sense of social support through immediate validation. This correlates with other studies conducted that have demonstrated that women successfully reduced their postpartum isolation during the pandemic through online forums and virtual messaging, highlighting the great demand for informal social support (Zhou et al, 2021; Kim et al, 2023).

#### 8.5.2 Pregnancy Circles influencing motherhood identity

Within the Pregnancy Circle sessions, there was evidence that women developed and influenced motherhood identity through the exchange of ideas and there was evidence of articulating certain motherhood ideals that reflected conceptions of "good motherhood". This study found that Pregnancy Circles were a highly influential space for reproducing cultural norms regarding motherhood identity, with the tacit experience of experienced mothers particularly valued. Authors have considered notions of an "ideal mother", a type that has been largely fetishised, and exists in a perfect dyad with her child (Kukla, 2006; Davis, 2019). The wider literature notes that mothers seek validation about "good" or "bad" motherhood made in the context of cultural norms (Lee, 2008). These kinds of ideas were observed in Pregnancy Circle sessions, where examples of inhabiting a good mother identity were reiterated through woman-led discussions. The absence of midwife facilitation was noticeable in these sessions although likely to be vital in order to mitigate potentially oppressive or patriarchal ideas around "good" motherhood.

### 8.5.3 Breastfeeding and failing motherhood identity

Women who lacked the support of the group dynamic from Pregnancy Circles shared concerns around infant feeding, specifically failure to breastfeed. This revealed the pressure that participants put on themselves regarding the baby's development, where they positioned themselves as bad mothers for failing to breastfeed their babies. Researchers have argued that formula feeding compromises women's identities as "good mothers" (Lee, 2008). The absence of social support in the form of the group dynamic highlights that women had less resources to draw from in the postpartum period to affect or support their decision-making processes which in turn influenced their good motherhood identities. Researchers have noted that maternal responsibilities around infant feeding have shifted from just domestic significance to one of civic concern – mothers are now considered responsible for the health of the next generation of citizens (Kukla, 2006). For women with a raised BMI, this potentially amplifies anxiety as they are already positioned as poor citizens through their inability to regulate their own bodies (Warin and Gunson, 2013; Keenan and Stapleton, 2010). Improving exclusive rates of breastfeeding remains a national and international public health agenda and women with a raised BMI generally achieve lower rates of exclusive breastfeeding (Bever Babendure et al, 2015). Considering the needs of women with a raised BMI needs to be put into a wider context of maternal and child health. Utilising the facets of Pregnancy Circles effectively could support public health agendas for women with a raised BMI in ways beyond just weight management. Midwives recognised the potential to extend Pregnancy Circles in the postpartum period as an opportunity to optimise women's health in a holistic way – for example, supporting breastfeeding. The midwives recognised that formalised support with facilitation from healthcare professionals such as health visitors could benefit women, although they acknowledged the challenges of continuing with the same group given the unpredictable temporality of birth. In the wider literature, frustration with the loss of face-to-face contact with healthcare professionals have been noted by women (Moltrecht et al, 2022; Riley et al, 2021; Kinser et al 2022). Formalising the social support element of the group care in the postnatal period may help to reduce stigma and improve health outcomes beyond weight loss.

### 8.5.4 Disrupted routines and bodies

Women in this study reported that the pandemic had disrupted a lot of their assumptions in the postpartum period in relation to their bodies, primarily their expectation to lose gestational weight gain. Postpartum weight gain was attributed to lockdown. Postpartum weight retention beyond six months has been associated with a higher risk of cardiovascular disease, diabetes and obesity (Kirkegaard et al, 2018). Although the majority of women maintain a small amount of postpartum weight retention long term, those who retain the most weight more often already have a raised BMI, are from ethnic minority status, have lower socioeconomic status and have less education (Endres et al, 2015; Gore et al, 2003; Nehring et al, 2014). The interrelatedness of the social determinants of health requires an approach that recognises the complexities of individuals. Weight management interventions often utilise a single-axis framework, to little effect. For women with a raised BMI, weight loss is a primary focus of postpartum health interventions (Amorim et al, 2014). Women in my study appeared to desire support for postpartum weight loss, indicating that there may be utility to formalising support around this.

#### 8.5.5 Motivators and barriers to postpartum weight management

In the absence of more formalised services available during lockdown, peer support from the more established Circles was identified as another form of informal support for weight management. A lack of social support is correlated to decreased physical activity levels and a higher chance of weight gain (McGiveron, 2015). Some barriers to participation were identified by the women, specifically, internalised weight stigma and financial concerns, highlighting the potential conflicting nature of a group dynamic for women with a raised BMI. These groups may provide a functional social support for the development of a good motherhood identity, but without mediation from an external source, such as a midwife or a health visitor, it may also a potentially stigmatising space that actually increases the risk of social isolation further.

Women also spoke about body image as it related to their motherhood identity and diet. The presence or absence of Pregnancy Circle peer support was apparent in how women navigated their new embodied motherhood identities. In the absence of other sources of support, such as the Pregnancy Circles and the experiential knowledge of the other mothers, women were more

influenced and beholden to a biomedical narrative about obesity and their bodies. Research has shown that women are likely to need multiple sources of support in the postpartum period and there is a risk of possible isolation for those who fear being stigmatised and are unable to access culturally relevant support (Ni and Lin, 2011; De Sousa Machado et al, 2020). There was an unarticulated understanding by the women that "good motherhood" status is not only precarious but can be challenged. As women with a raised BMI are not considered "normal" by social norms and idealised standards of health (Goffman, 1963), good motherhood was sometimes fraught for these women as they attempted to balance their needs with the needs of their babies. Bodies became biopolitical tools wherein they felt they were required to govern their own behaviour to meet an idealised standard of health for their babies, not for themselves. This dilemma has been reflected in wider literature (Parker and Pause, 2018). As Verseghy and Abel (2018) note, in the contemporary sociocultural climate, both obesity and motherhood are sites of blame and regulation. They observe that increased pressure on mothers and fat individuals obscure larger structural issues of racism, sexism, and economic inequality. Furthermore, the wider literature notes that women with a raised BMI often experience stigma by association around eating behaviours and food choices of their children (Gorlick et al, 2021; Jarvie, 2017; Keenan and Stapleton, 2010).

### 8.6 Strengths and limitations of the study

Due to the COVID-19 pandemic, I had to drastically change my research approach. There were both challenges and benefits that have been summarised in the COVID-19 impact statement appended at the beginning of this thesis. One of my biggest concerns at the time of the initial lockdown was being methodologically challenged – I had already started collecting data prior to the lockdown and my research design and approach required a dramatic overhaul to ensure a feasible and realistic project that could be completed despite the pandemic. By far the largest benefit of this was the collaborative efforts of my supervisory team and the wider Pregnancy Circles trial research team to ensure that my new methodological approach would be robust to minimise the impact of the pandemic. This entailed careful consideration to various

methodological approaches, different research questions, sampling and recruitment strategy as well as analysis methods. Another strength of this study was the use of an intersectional lens to understand different perspectives. It was important to me to centre the experiences of marginalised women in my research so maintaining a narrative analysis element to the research was key and required some attention to incorporate this appropriately.

I anticipated that some of the participants might have no or low technology literacy, but all the participants found it easy to join the virtual interview once I set it up. By far the largest benefit of virtual interviews was that I was able to be more flexible with my participants than traditional interviews would perhaps permit. As the interviews were conducted online, it was easy to rearrange, and this could be done at no additional cost to myself or the participant, thereby reducing potential barriers to inclusion. My participants were also renumerated for their time, another strength of this study. My notes indicate that I rearranged interviews for at least half my participants, including the midwives. For three of my participants, I rearranged interviews more than once. If I were conducting face-to-face interviews this would have represented possibly eighteen additional journeys I would have been required to make to collect the same amount of data to achieve information power. Given that my participants lived across various parts of London, the East of England, and the South-East of England, this may not have been feasible due to time constraints or finances thereby reducing the number of overall interviews conducted or an increase in time and effort in my recruitment strategy. In addition, the consensus is that ethnic minority communities living in deprived areas are typically underserved in health services and underrepresented in health research (Darko, 2021). Over half the women interviewed were from ethnic minority or mixed ethnic backgrounds, and lived in deprived areas of England. This represents a departure from much of the health literature published about the maternity care experiences of women with a raised BMI. By utilising an intersectional lens, it became clear that offering flexibility to participants would help increase the likelihood of participation. For example, most of my participants were not able to arrange childcare to undertake the interview. The inclusion of these women within the study superseded these concerns so women were encouraged to take a break whenever they liked, attend to their children as needed or invite their children to be in the same room as them if they needed to care for them during the

interview process. Offering flexibility acknowledged the holistic needs of the women, and recognised that they were often the primary caregivers to their children.

Although the virtual interviews allowed me to interview a high number of women across various parts of England, and reached a diverse group of women, there were drawbacks to this method of data collection. As previously mentioned, the inclusion of children within the interview space meant that some of audio quality of the data is poor. There are several small chunks of dialogue that cannot be clearly heard and therefore were discounted as they could not be analysed. There were sometimes problems with internet connectivity meaning that the interviews were disjointed. Connectivity issues meant that the audio and visual components of virtual interviews were not perfectly synchronous, meaning there are awkward pauses in the interview, questions being repeated multiple times and several instances where both I and the participant were talking over one another because there was a delay in the audio on one of our devices. These technical problems made it difficult to conduct the interviews through a narrative method as it was more difficult to build rapport with the women in addition to not conducting these interviews in person.

Engagement with midwives was extremely challenging. Thirty-seven midwives were approached and invited to take part in this study. Eight accepted an invitation to participate. Two declined participation and twenty-seven midwives did not respond. Many of these midwives were known to the wider research team, and to myself. The high level of non-response amongst these participants was therefore surprising. In addition, most of these interviews were rearranged multiple times because midwives failed to attend or had conflicting work commitments. Only two interviews were conducted during non-working hours. The rest of the interviews were conducted during the midwives working hours and therefore were sometimes limited by other work commitments. The difficulty in getting midwives to participate reflects recent literature outlining concerns about the working conditions for midwifery practice in the UK. Even prior to the pandemic, there was an estimated shortage of 2,500 midwives across the UK contributing to a landscape of emotional burnout, stress and mental illness (Hunter et al, 2019). More recent literature has highlighted how working during the pandemic has exacerbated feelings of

burnout, moral injury, and an overwhelming desire to leave midwifery practice altogether (McGrory et al, 2022; RCM, 2021b).

## 8.7 Chapter Summary

This chapter has discussed the meta-themes in the context of the wider literature and has discussed the strengths and limitations of the study. The next chapter will explore the contribution this study has made to the existing knowledge base as well as discuss implications for practice and education. Final reflections will conclude the thesis.

## Chapter 9 – Conclusions

## 9.1 Study Summary

Under the current system of antenatal care provision, women with a raised BMI generally have poor pregnancy experiences due to weight stigma, inconsistent advice and fragmented care. Furthermore, these women tend to have poorer maternal and infant health outcomes, which are compounded when they have other intersecting marginalised identities such as age, ethnicity or socioeconomic status (Knight et al, 2020). This indicates the improving choice around antenatal care provision may improve the pregnancy experience for women with a raised BMI. Group care has been shown to improve women's care experiences, and for marginalised women, it has also been shown to improve clinical outcomes. GANC allows us to radically reimagine maternity care provision where relational continuity, holistic and respectful patient-centred care and high levels of self-autonomy represent a culturally normative pregnancy experience for women in the UK. However, little is known about women with a raised BMI and their experiences of this model of care.

To the best of my knowledge, this was the first study exploring women with a raised BMI's experiences of GANC. This study has highlighted that facets of the group care model such as peer support, women-led discussions, and relational continuity can support women to have a positive experience of pregnancy. This study has also shown that facets of the group care model had utility beyond pregnancy, as peer support was utilised as a form of informal support in the postnatal period and were highly influential in forming a good motherhood identity.

Divergence of perceptions of the hospital as a place of safety highlighted a breakdown of trust between women and their care providers, indicating that when women were no longer receiving care in the group model, their experience of care worsened. This suggests that facets of the group care model were protective in supporting women to have a positive experience of pregnancy. Both women and midwives were invested in the safety of the pregnancy, but midwives conceptualised safety in a more narrow way, leading them to situate the hospital as the ultimate place of safety for women with a raised BMI. Researchers have noted that maternity

care provides an interesting perspective to safety as women navigate their care provision across various sites in both community and hospital settings. In addition, they are engaged in navigating the boundaries between their sense of risk and normality (Mackintosh et al, 2017). This study has also shown that while midwives supported the principles of GANC, they found it difficult to shift their praxis in order to utilise the facets of the group care model effectively for women with a raised BMI. A risk management paradigm is deeply entrenched in midwifery praxis, as midwives are deeply enmeshed in safety culture, and the facilitating midwives interviewed were working in a healthcare system that prioritises a highly surveillant, medicalised understanding of pregnancy, labour and birth. As midwifery theory and praxis advocates a holistic care approach, a larger question remains about whether the singularity of biomedical discourse replete with its recommendations for medicalised care is entirely suitable for how midwifery care should be delivered to improve outcomes and experience of birth.

### 9.2. Contribution to knowledge

To my knowledge, this was the first qualitative study conducted on women with a BMI and their experiences of GANC. Therefore, this study contributes new knowledge around these women's experiences of pregnancy care, and specifically that of GANC. Crucially, this study provides new knowledge on the utility and function of group care for women with a raised BMI beyond weight management. Additionally, this study considers an intersectional approach to the participants experiences and their lives, highlighting issues with utilising a single axis framework. Utilising a critical feminist approach reinforces the primacy of women's perspectives, which is often not considered in biomedical narratives of obesity in pregnancy. This study adds to the body of research to continues to challenge the orthodoxy of obesity-as-risk in pregnancy. This study also extends the knowledge base around midwives' experiences of working within a group care model, and highlights ongoing tensions to provide woman-centred care with organisational pressures seen as a potential barrier in providing this.

### 9.3 Implications for maternity care provision, clinicians and policymakers

The existing literature suggests that a risk-based approach that focuses on more intensive surveillance and monitoring for the sake of medical safety does not enable healthcare providers to develop trusting relationships with women (Rayment-Jones et al, 2019). Equally, a growing body of evidence now demonstrates that midwives report a high level of job satisfaction working in continuity models, citing factors such as providing relational care, forming trusting relationships with women and having professional autonomy (Edmondson and Walker, 2014; Collins et al, 2010; Newton et al, 2016; Lazar et al, 2021). GANC also provides an opportunity for clinicians to practice in a continuity of care model and develop their role as facilitators. If GANC models are more widely adopted, the challenge for clinicians will be to willingly embrace self-reflection and adapt their personal clinical practice in order to dismantle power dynamics that continue to uphold unequal relationships between themselves and the women they care for. Additionally, model fidelity was seen to improve women's experiences of care – clinicians should receive further training to ensure that they can utilise the facets of the GANC model well to optimise women's health.

Further challenges are related to organisational pressures and shifting perceptions of care provision, particularly in a post-COVID recovery period, and in the context of the larger national safety culture agendas and priorities. The challenge for policymakers will be to consider how national guidelines and recommendations must broaden the definition of 'safety' in pregnancy to include cultural, psychological and emotional safety and that this must be on par with medical safety. In recent years there have been a number of reports that have highlighted the shortcomings in a handful of NHS trusts, demonstrating that the current safety culture has failed women and babies (Independent Maternity Review, 2022; Kirkup, 2022). This study has shown that improving choice around antenatal care provision may help improve women's experiences of care. If the provision of GANC cannot be implemented in its entirety, further examination is required to understand whether facets of the group care model, such as relational continuity and facilitative discursive practice, can be flexibly adapted to improve women's care across the pregnancy continuum.

This study also demonstrated that midwives understood the potential for GANC to be expanded into the postpartum period. With an established national and international agenda focussed on optimising child health in the first 1000 days of life, researchers have noted that there is utility in adopting a maternal lens to strengthen the mother-baby dyad and optimise the health of the mother at the same time (Thurow, 2016; Kinshella et al, 2021; Wrottesley et al, 2015). There is scope to explore whether health visitors can continue the group dynamic beyond pregnancy in order to formalise social support for women with a raised BMI in order to optimise their postpartum health along with their babies.

### 9.4. Implications for education

Cultural safety is a framework and ethos that could be disseminated in educational spaces as well as clinical spaces in order to change the working culture within the NHS. The decolonisation of midwifery and medical education must be a priority for higher education institutions in order to ensure an embodied praxis of woman-centred care, rather than focus on a risk-management paradigm, including understanding different models of antenatal care provision. Epistemic pluralism is already being introduced into some medical education pathways as part of ongoing efforts to decolonise education prior to clinical practice (see Wong, Gishen and Lockugamage, 2021), and there is scope to expand this into both pre-registration and post—registration midwifery programmes. Continuity of care models have been an established part of many university programmes and GANC as a model of care has already been implemented in at least one university, indicating a continuation of this pattern of education. The expansion of GANC in education settings requires further collaboration between higher education institutions, as well as stakeholder involvement from NHS England.

This study has shown that opportunities to optimise women's health and improve their decisionmaking processes were missed in the group care model in the presence of women with a raised BMI, indicating that weight stigma continues to remain an issue in clinical encounters. There is scope to critically approach how obesity is taught, and considerations of epistemic pluralism may

be useful here, as well as a more general remit to improve communication skills in midwives, which could be tackled in pre-registration midwifery courses.

### 9.5 Unanswered questions and future research

Midwives recognised the potential for the group care model to be expanded into the postnatal period, collaborating with health visitors to provide relational continuity. In addition, women appeared to want support with postpartum weight management and were often relying on the peer support of the group in the absence of more formal support. This indicates that formalised support in a group care model could be used for this. Further research is required in order to understand how the model may be adapted with health visitors in the postpartum period.

Women found that facets of the group care model such as relational continuity and peer support helped them to have a positive experience of pregnancy. Further research into how to implement these facets into maternity care provision for women with a raised BMI requires consideration. The provision of Pregnancy Circles highlighted that women with a raised BMI needed a space that normalised pregnancy for them to mitigate the overemphasis of risk. This suggests that women with a raised BMI could benefit from maternity care provision that aligns with a cultural safety agenda. Further research is required on how to adopt cultural safety as a framework for midwifery care provision in the UK. Much of the cultural safety framework aligns with current recommendations for maternity care provision, yet the concept of cultural safety remains largely unknown beyond small academic spheres, and certainly is not utilised in healthcare settings.

This study highlighted the uncertainty of GANC as culturally safe for Black women. There is need for more research that critically approaches obesity and its intersections with other marginalities to determine how best to provide care for women. Future studies need to focus attention on Black women's experiences of GANC that encompasses the multitudes of their lives and whether this changes how Black women birth.

## 9.6. Final reflections

This work is a culmination of my growth as a novice researcher. When I started this work at the end of 2018, I would have no idea that the world would soon be completely changed forever. Choosing to grow my family at the same time provided unique challenges, but also brought unique insights into pregnancy that I could only glean ideologically from my background as a clinical midwife. These insights made the research stronger and forced me to consider my intersectional positionalities – midwife, researcher, and soon to be mother.

The pandemic was an extremely difficult time both personally and professionally. I found it almost impossible to manage the challenges of full time study, working part-time as well as care for my baby. I will remain forever grateful to my supervisory team and to the wider research team for supporting me throughout, and for teaching me valuable lessons on collaboration and flexibility. I struggled to embrace flexibility in my research design and methodological approach and the pandemic forced me to consider how best to adapt my processes, and the study is better for it.

Knowing that the women I interviewed were the demographics who were overrepresented in maternal deaths, and during the time of COVID, strengthened my resolve to complete this work. These women continue to be underrepresented in research, meaning that we do not understand how best to care for them and this means there needs to be ongoing work to reduce health disparity for these women. I believe my study is a small contribution in understanding attributes of maternity care that improve care experiences for these women, highlighting the value of women's narratives as a way of understanding how best to care for them.

# Appendices

Appendix 1. Database searches

MeSH headings were only available through CINAHL, Cochrane, PubMed/Medline therefore only keyword searches were conducted for MIDIRS, Psycinfo and SCOPUS.

### CINAHL

Search	Search Terms	Results
Number		
Search 1	Subject heading search:	154, 379 articles found
	(MH "Obesity") OR (MH "Obesity, Morbid") OR (MH	
	"Obesity, Maternal") OR (MH "Body Mass Index")	
Search 2	Keyword search:	154,622 articles found
	High Body Mass Index OR Raised Body Mass Index OR Body	
	Mass Index > 30 kg/m2 OR obes* OR overweig*	
Search 3	S1 OR S2	203,968 articles found
Search 4	Subject heading search: (MH "Health Services Needs and Demand") OR (MH "Nurse- Midwifery Service") OR (MH "Prenatal Care") OR (MH	262,153 articles found
	"Maternal Health Services") OR (MH "Perinatal Care") OR (MH "Maternal-Child Care") OR (MH "Pregnancy") OR (MH "Pregnancy, High Risk	
Search 5	Keyword search: antenatal OR pregnan* OR prenatal OR midwi* OR "maternity care" OR "midwifery care"	331,936 articles found
Search 6	S4 OR S5	364,184 articles found
Search 7	Subject heading search: (MH "Life Experiences") OR (MH "Maternal Attitudes")	37,419 articles found
Search 8	Keyword search: experience* OR view* OR attitude* OR explor* OR understand*	1,290,643 articles found
Search 9	S7 OR S8	1,290,643 articles found
Search 10	3 AND 6 AND 9	2,584 articles found

### Cochrane

Search Number	Search Terms	Results	
Search 1	Subject heading search: MeSH descriptor: [Obesity, Maternal] explode all trees	18 articles found	

Search 2	Keyword search: High Body Mass Index OR Raised Body	74092 articles found
	Mass Index OR Body Mass Index > 30 OR obes* OR overweig*	
Search 3	Subject heading search: MeSH descriptor: [Body Mass Index] explode all trees	10837 articles found
Search 4	#1 OR #2 OR #3	76327 articles found
Search 5	Subject heading search: MeSH descriptor: [Maternal Health Services] explode all trees	2491 articles found
Search 6	Subject heading search: MeSH descriptor: [Prenatal Care] explode all trees	1653 articles found
Search 7	Keyword search: antenatal OR pregnan* OR prenatal OR "maternity care" OR "midwifery care" OR midwi*	80027 articles found
Search 8	#5 OR #6 OR #7	80211 articles found
Search 9	Subject heading search: MeSH descriptor: [Life Change Events] explode all trees	443 articles found
Search 10	Subject heading search: MeSH descriptor: [Attitude] explode all trees	40129 articles found
Search 11	Subject heading search: MeSH descriptor: [Comprehension] explode all trees	676 articles found
Search 12	Keyword search: experience* OR view* OR attitude* OR explor* OR understand*	264396 articles found
Search 13	#9 OR #10 OR #11 OR #12	287140 articles found
Search 14	#4 AND #8 AND #13	1691 articles found

## PubMed

Search Number	Search Terms	Results	
Search 1	Subject heading search: overweight/ or obesity/ or obesity, maternal/ or obesity, morbid/	235253 articles found	
Search 2	Keyword search: (High Body Mass Index or Raised Body Mass Index or Body Mass Index > 30 or obes* or overweig*).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	422238 articles found	
Search 3	1 OR 2	422238 articles found	
Search 4	Subject heading search: Prenatal Care/ or Nurse Midwives/ or Midwifery/ or Pregnancy/	952240 articles found	

Search 5	Keyword search: (antenatal or pregnan* or prenatal or maternity care or midwifery care or midwi*).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	1130492 articles found
Search 6	4 OR 5	1130492 articles found
Search 7	Subject heading search: Comprehension/	16396 articles found
Search 8	Subject heading search: Attitude/	50987 articles found
Search 9	Keyword search: (experience* or view* or attitude* or explor* or understand*).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	4068619 articles found
Search 10	7 OR 8 OR 9	4075868 articles found
Search 11	3 AND 6 AND 10	4363 articles found
Search 12	limit 11 to English language	4134 articles found

## SCOPUS

Search Number	Search Terms	Results		
Search 1	Keyword search: High Body Mass Index OR Raised Body Mass Index OR Body Mass Index > 30 kg/m2 OR obes* OR overweig*	2927 articles found		
Search 2	Keyword search: antenatal OR pregnan* OR prenatal OR "maternity care" OR "midwifery care" OR midwi*	2,035,412 articles found		
Search 3	Keyword search: experience* OR view* OR attitude* OR explor* OR understand*	20,925,571 articles found		
Search 4	1 AND 2 AND 3	161 articles found		

## MIDIRS

Search Number	Search Terms	Results
Search 1	Keyword search: High Body Mass Index OR Raised Body Mass Index OR Body Mass Index > 30 kg/m2 OR obes* OR overweig*	7310 articles found
Search 2	Keyword search: antenatal OR pregnan* OR prenatal OR "maternity care" OR "midwifery care" OR midwi*	168297 articles found
Search 3	Keyword search: experience* OR view* OR attitude* OR explor* OR understand*	67634 articles found
Search 4	1 AND 2 AND 3	1065 articles found

# PsycInfo

Search	Search Terms	Results
Number		
Search 1	Keyword search: High Body Mass Index OR Raised Body Mass Index OR Body Mass Index > 30 kg/m2 OR obes* OR overweig*	48,074 articles found
	Limiters- English; Exclude dissertations	
	Expanders— Apply equivalent subjects	
	Search modes- Boolean/Phrase	
Search 2	Keyword search: antenatal OR pregnan* OR prenatal OR "maternity care" OR "midwifery care" OR midwi*	84,026 articles found
	Limiters- English; Exclude dissertations	
	Expanders— Apply equivalent subjects	
	Search modes- Boolean/Phrase	
Search 3	Keyword search: experience* OR view* OR attitude* OR explor* OR understand*	1,717,625 articles found
	Limiters- English; Exclude dissertations	
	Expanders— Apply equivalent subjects	
	Search modes- Boolean/Phrase	
Search 4	1 AND 2 AND 3	665 articles found

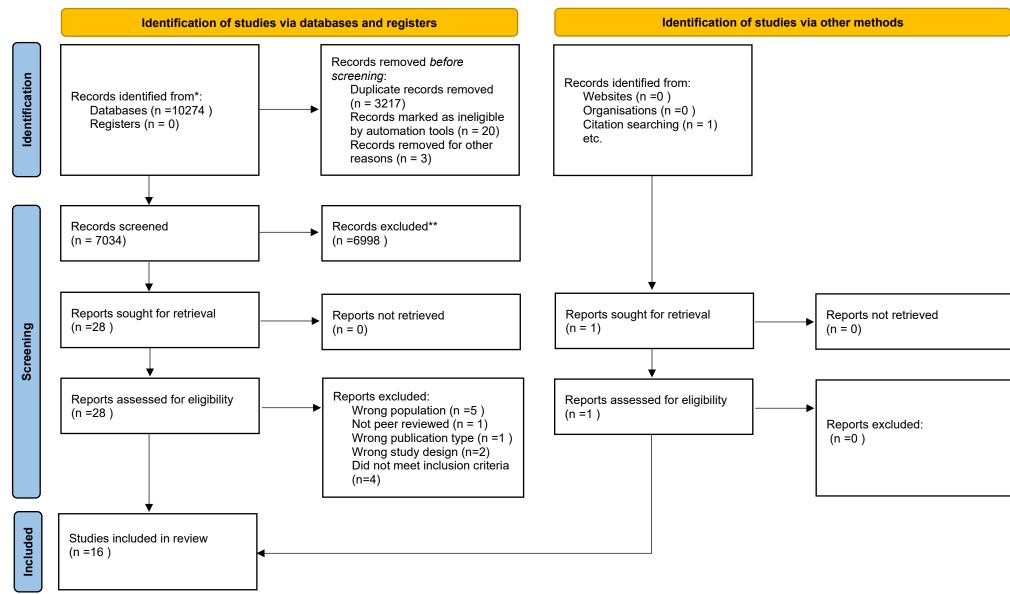
## Grey Literature searching

1. National Grey Literature Collection

14 results found – titles and abstracts skimmed, none were relevant

- 2. Advocate Aurora Health Institutional Repository No results found
- 3. IRIS (Institutional Repository for Information Sharing) WHO No results found

#### Appendix 2. PRISMA chart



\*Consider, if feasible to do so, reporting the number of records identified from each database or register searched (rather than the total number across all databases/registers).

\*\*If automation tools were used, indicate how many records were excluded by a human and how many were excluded by automation tools.

*From:* Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. BMJ 2021;372:n71. doi: 10.1136/bmj.n71. For more information, visit: <u>http://www.prisma-statement.org/</u>

Authors, Year,	Scope and	Design	Sample	Findings	Strengths/Limitations
Title and	Purpose				
Country					
Atkinson, S. and	In-depth study	Qualitative design. IPA	Mix of primigravida	1 overarching super-ordinate	Strengths: methodology explained in
McNamara,	exploring the	adopted for this study-	and multigravida	theme found of unconscious	detail and justified, evidence of
P.M. (2017)	lived experience	authors argue this	women	collusion. Participants do not	researcher reflexivity in sensitivity of
Unconscious	of women who	methodology "gives voice"	BMI ranges from 30 to	receive adequate information	topic and considerations for not
collusion: An	have a BMI ≥30	to participant experience.	48	from healthcare professionals	harming participants, appropriate
interpretative	kg/m². A bio-	Inclusion criteria included	Age range between	regarding increased BMI or	referral system to health services
phenomenologi	psycho-social	women with a BMI	21-41	weight management in	sought prior to engaging in
cal analysis of	understanding	>30kg/m2 at booking	Most women received	pregnancy. Healthcare	interviews, extensive use of verbatim
the maternity	of the lived	interview. Women	combined care, but a	professionals seem to collude	quotes throughout findings, extensive
care	experience of	excluded if they had	few received private	with women to avoid	lit review, limitations acknowledged
experiences of	women to	preterm delivery or baby	or hospital care only	challenging discussions	by the authors
women with	identify how	admitted to NICU, or	Most women had a c-	regarding risks of obesity in	Limitations: study only conducted in 1
obesity (BMI >	best to support	stillbirth. Women recruited	section but a few	pregnancy. Possibly related to	hospital setting; transferability
30kg/m2).	them	on the postnatal ward. 34	delivered vaginally	avoidance on participants' part	limited. Demographic details don't
Conducted in	throughout	women informed of the	Ethnicity/race data not	and/or may be linked with	include ethnicity and SES qualities so
Ireland.	their childbirth	study, 15 agreed to	collected	healthcare professionals'	difficult to identify whether sample
	experience	interview. Semi-structured	SES data not collected	reluctance to communicate	size is representative of the
Quality		interviews conducted with		issues relating to increased	population or diverse- authors do not
assessment:		15 women		BMI.	discuss this
good quality					
Cunningham J.,	Explore	Exploratory qualitative	3 women were	3 themes identified – feeling	Strengths: extensive use of verbatim
Endacott, R.	experiences of	design	primiparous and 8	judged, knowledge gap, doing	quotes throughout findings, findings
and Gibbons, D.	pregnant	Purposive sampling	were	your best. pregnant women	relate to the wider body of literature
(2018)	women with a	Inclusion criteria includes	multiparous. All	with a raised BMI feel judged	and interpretation of findings
	raised BMI to	women with a raised BMI	interviewed during	by healthcare professionals in	plausible, evidence that there was

Appendix 3. Table of articles reviewed in the literature review described in chapter 3

C					
Communication	understand	(30kg/m2 or more) and be	their third trimester of	clinical encounters. Women	more than one person involved in
with health	whether their	pregnant at time of	pregnancy.	did not always have all the	data analysis, and use of member
professionals:	pregnancies	recruitment	Age range between	information to make informed	checking for clarity,
The views of	were affected	Exclusion criteria was	19–38 and all were	decisions about their care.	acknowledgement of limitations of
pregnant	by interactions	limited understanding of	White	Women did not consider	study including lack of diversity in
women with a	with healthcare	English	British	themselves obese and	sample as well as potential researcher
raised BMI.	professionals	31 women approached, 13	BMI range between	perceived midwives were	bias, recommendations for future
Conducted in		lost to follow up, 6	31.2–47.3 kg/m².	embarrassed to address their	practice and research outlined
England.		declined, 1 no longer		weight	Limitations: little evidence of research
		eligible as had undergone a			reflexivity, no conceptual framework
Quality		termination of pregnancy.			used, poor synthesis of ideas, lit
assessment:		Semi-structured interviews			review is minimal, epistemological
moderate		conducted with 11 women			grounding is absent
quality					
Dejoy, S.B.,	Study aims to	Qualitative design. IPA to	Participants allowed to	Three main themes found –	Strengths: evidence of dwelling in
Bittner, K., and	explore the	explore perspectives. In	self-define as "plus-	personalised care,	data-both authors discuss variant
Mandel, D.	experiences of	depth telephone interviews	size" although authors	depersonalised care, setting	themes and reach consensus, good
(2016)	women with	conducted with semi-	note all participants	the tone. Women report	evidence of researcher reflexivity,
A qualitative	obesity in the	structured interview guides	self-reported BMI	diverse maternity experiences,	acknowledgement of limitations of
study of the	maternity care	used. Purposive sampling	>30kg/m2. Mean self	some report appropriate and	study including lack of
maternity care	system	used, recruited from online	reported pre-	satisfactory care but most	intersectionality in sampling, study
experiences of	Weight stigma	communities for plus-size	pregnancy BMI 35.	reporting at least one negative	resonates with other findings,
women with	might be a	women in US. No inclusion	Mean age of 31.	encounter over the course of	interpretations are plausible,
obesity: "More	determinant of	or exclusion criteria	Almost equal mix of	the pregnancy. Interactions	recommendations for further practice
than Just a	poor birth	specified. Authors note that	primigravida and	with providers has	and research outlined, evidence that
Number on the	outcomes in	for IPA, sample size of 10-	multigravida women.	psychological and emotional	both authors involved in analysis, list
Scale".	women with	15 women is adequate.	Some ethnic diversity	effects on women with obesity	of themes, coding systems and
Conducted in	BMI >30 so to	16 interviews completed,	but 75% of women	and influenced the contact and	conceptual framework explicit
the United	optimise care	data saturation reached at	interviewed were	perceived quality of their care.	through tables in article
States.	and outcomes,	10 but 6 more interviews	white. Most women	Most participants expected	Limitations: no inclusion or exclusion
	we need to	done to respect the	identified as middle-	that they would be treated	criteria- possible that women
Quality	understand the	women's voices	class professionals or	differently by healthcare	included might have had BMI under
Assessment:	experience of	36 women agreed to	stay at home mothers	providers because of their	30 and therefore not obese,
Good quality	women using	participate, 16 women		weight.	

	the healthcare	were interviewed. The	with professional		participants allowed to self-define
	system.	remaining lost to follow up	spouses		their obesity
Dinsdale, S.,	Commissioned	Qualitative design.	Age range between 20	Three main themes found –	Strengths: evidence of data
Branch, K.,	evaluation by	Inductive approach used,	and 42	communication about	immersion by researchers, frequent
Cook, L. and	Middlesbrough	appropriate for pragmatic	Mix of primigravida	pathways, treating obese	discussions amonst team to develop
Shucksmith, J.	council. "What	research to answer policy	and multigravida	women with sensitivity and	themes, discuss data saturation and
(2016)	were women's	and practice questions.	women	respect, appropriate and	conclude disagreements about data
"As soon as	views and	Stratified random sampling-	National deprivation	accessible lifestyle services in	points. Research processes
you've had the	experiences of	180 women approached-	index calculated –	pregnancy and postpartum.	transparent. Themes and sub-themes
baby that's it"	the maternal	31 women responded to	most women fell	Difference in support and	development explicit through text-
a qualitative	obesity	invitation, 24 women	under Q1 or Q2 (Q1	advice noted between	boxes, disparity between planned and
study of 24	pathways?"	participated in semi-	being most deprived)	different pathways. Women on	actual sample clarified
postnatal		structured interviews.	Half of women had a	pathway 3 were aware they	Limitations: one of the authors also
women on their		Women who had a	BMI of 30-35, and	were receiving intervention	gatekeeper who randomly selected
experience of		miscarriage/stillbirth,	were on pathway 1 or	due to their BMI and the	suitable women rather than screening
maternal		women under 16 or could	2, half had a BMI>40	associated risk factors, unlike	all potential women– potential bias
obesity care		not speak English were	so were on pathway 3	women on pathway 1 or 2.	but not acknowledged by the authors,
pathways.		excluded.		Women not averse to risk	unclear that the study achieves its
Conducted in				management in their	study aims but instead investigates
North-East				pregnancy, are aware that	fidelity to the pathways offered by
England.				weight puts them at higher risk	the hospital, lit review is weak, no
				and desire effective weight	theory building or link between study
Quality				management advice and	and existing body of work
Assessment:				support from healthcare	demonstrated.
Poor quality				professionals.	
Furber, C.M.	Explore	Qual design - framework	BMI range between 35	Two sub-themes discussed in	Strengths: literature review is
and McGowan,	experiences	analysis method used.	and 54	depth in the paper –	comprehensive, interpretation of
L. (2011)	related to	Women excluded if BMI	Mix of primigravida	humiliation of being pregnancy	findings resonates with body of
A qualitative	obesity in	under 35, unable to speak	and multigravida, age	when obese, and the	literature, analysis linked to wider
study of the	pregnant	English, severe mental	range between 19-44	medicalisation of obesity when	literature, aims and purposes
experiences of	women with a	illness, learning difficulties,	All women had a	pregnant. Obese pregnant	achieved, researcher reflexivity
women who are	BMI >35kg/m2	or under 16 years old.	singleton pregnancy	women are aware of and	strong, good demonstration of
obese and	during	150 women eligible	All women were white	sensitive of their size.	potential bias and attempts to limit
	pregnancy,	women, 57 given	British, except one	Interactions with HCPs may	them through collaboration,

and an end to all	ار بر ما د	information 10 and 1		the supervised where the alternative structure of the set	
pregnant in the	labour and	information, 19 agreed to	who was white/Asian,	increase their distress about	limitations clearly outlined and
UK.	postpartum	participate.	mix of delivery modes,	this. Care of obese women is	considered, disparity in planning and
Conducted in		Semi-structured interviews	some had severe	usually medicalised because its	actual sample explained clearly
North England.		conducted face-to-face. 17	complications during	assumed that complications	Limitations: no rationale given for
		participants interviewed	pregnancy, approx.	will occur therefore women	using qual design, no explanation
Quality		twice, 1 lost to follow up,	half had complications	are expected to be accepting	given as to why women with BMI
Assessment:		and 1 had preterm birth	during labour	of this care however women	between 30-35 excluded from study
Moderately		before initial interview so		find this paradigm of care	when they should meet criteria, no
good quality		was interviewed after.		disempowering. HCPs should	discussion of epistemological
				be aware of psychological	grounding, framework analysis used
				implications of obesity and	but not discussed or explained.
				should be clear and honest in	
				their communication with	
				women	
Jarvie, R. (2017)	Explore the	Qualitative sociological	Ages ranged from 19	2 themes reported on – social	Strengths: methodology explained
Lived	lived	design. Purposive sampling	to 43. Most women	and economic stressors,	thoroughly, sampling strategy
experiences of	experiences of	used to recruit participants	were multigravida. The	stigma. Women experience a	explained, evidence of dwelling in
women with co-	women with co-	via diabetic clinics at 2 NHS	majority were born in	number of social and economic	data, extensive use of verbatim
existing BMI>30	existing	hospitals. 37 women	the UK, a few were	stressors that compromise	quotes, conclusions and
and gestational	maternal	initially recruited but 27	born abroad. The vast	their ability to manage	recommendations clearly borne from
diabetes	obesity BMI >30	women interviewed over	majority were	pregnancies complicated by	findings, recommendations made for
mellitus.	and GDM	63 interviews, narrative	employed, a couple	maternal obesity and GDM.	further research and practice, study
Conducted in	during	approach.	were unemployed.	Women of low SES with	correlates to wider body of evidence,
South-west	pregnancy and		Majority of women	obesity and GDM perceived	literature review is extensive and
England	the post-birth		were partnered.	HCPs recommendations	thorough, findings and conclusions
	period		Majority of women	around lifestyle change as	linked to aims and purpose of study
Quality			were of low SES, with	unrealistic due to constrained	Limitations: no evidence of
assessment:			low levels of	financial/social circumstances.	deviant/variant data and how this was
Excellent quality			education. Four	Frequent references to	resolved, some researcher reflexivity,
			women had	weight/lifestyle changes seen	not clear how the context of data was
			undertaken higher	as stigmatising and	retained during analysis, theme
			education. Some	counterproductive	development is not completely
			women's incomes		explicit in article

			were based on		
			government benefits.		
Keely, A.,	Explore	Qualitative design.	Demographics not	6 interrelated themes	Strengths: interpretation makes
Cunningham-	experiences,	Prospective serial interview	provided for all	identified – complexities of	sense, outlines further directions for
Burley, S.,	attitudes and	study. 53 women	participants – not	weight histories and	investigations, limitations clearly
Elliott, L.,	behaviours of	approached to take part. 14	explained. Age range	relationship with food,	outlined and reflected upon, some
Sandall, J. and	pregnant	women responded to	between 26-40. Mix of	resisting risk together, resisting	evidence of analysis interwoven with
Whittaker, A.	women with	follow up call and 12	primigravida and	stigma together, pregnancy as	existing theories and literatures, data
(2017)	BMI over 40.	women agreed to	multigravida women.	a pause, receiving dietary	analysis methodology is strong,
"If she wants to	Divil over 40.	participate. 11 women and	Most women	advice, postnatal intentions.	results and conclusions supported by
eatand eat		7 partners interviewed - 23	identified as white and	Social and cultural beliefs	evidence, lit review is comprehensive
and eatfine!		interviews conducted in	British, with 1	around pregnancy diet and	Limitations: little evidence of data
It's gonna feed		total. Semi-structured	exception. Most were	weight gain are deeply	immersion, no alternative
the baby":		interviews. Purposive	employed, with a	ingrained. Male partners might	explanations of phenomena given, no
Pregnant		sampling to achieve a	variety of skilled or	resist stigmatised risk on behalf	evidence of deviant data,
women and		sample that reflected	semi-skilled jobs.	of their partner. Women	demographic details missing for 4
partners'		childbearing women in	, ,	identify the postnatal period as	participants
perceptions and		Scotland regarding age,		an appropriate time to adopt	
experiences of		ethnicity and social class.		healthy behaviours.	
pregnancy with		Thematic content analysis			
a BMI >		used with interpretive			
40kg/m2.		approach. Goffman's			
Conducted in		theory of "spoiled" identity			
Scotland.		linked the themes together			
Quality					
Assessment:					
Good quality					
Knight-Agarwal,	Investigate the	Qual study. 16 women	Age, ethnicity or	4 themes found – obese during	Strengths: lit review diverse- uses
C.R., Williams,	perspectives of	interviewed. IPA used with	professions not	pregnancy as part of a longer	sources from various countries,
L.T., Davis, D.	pregnant	good justification for this	described. Majority of	history of obesity, lack of	methods section thorough, evidence
Davey, R.,	women with	use of methodology. Semi-	women multiparous.	knowledge of the key	of discrepancies between researchers
Shepherd, R.,	BMI >30	structured interviews	BMI ranged between	complications of obesity, poor	discussed and consensus reached.
Downing, A. and		conducted and	31.6 to 51.5. Most	communication about weight,	Evidence of more than one author

Lawson, K.	receiving	demographic data	women developed	and women are motivated to	involved in analysis.
(2016)	antenatal care.	collected. Women eligible	GDM in their	eat well during pregnancy and	Acknowledgement of limitations,
The		utilising self-reported BMI.	pregnancy.	want support. Authors suggest	including small geographical area.
perspectives of		Sampling strategy unclear.		that obese women should	Limitations: no justification for
obese women				receive specialist lifestyle	sampling size, possible bias by
receiving				interventions in the antenatal	allowing self-reporting of BMI as
antenatal care:				period. Extra support is	inclusion criteria, no evidence of
A qualitative				required to assist women in	researcher reflexivity, analysis not
study of				pregnancy achieve	interwoven with existing theories or
, women's				recommended weight goals.	relevant literature, conclusion is not
experiences.				Women felt advice given was	borne from findings, assumptions
Conducted in				not personalised.	made by authors not supported by
Australia.					evidence, very few demographic
					details
Quality					
Assessment:					
Moderately					
poor quality					
Lauridsen, D.S.,	Postnatal	Qualitative design.	Age, ethnicity or	Three phases identified and	Strengths: analysis interwoven and
Sandoe, P. and	interviews	Interpretative analysis	professions not	separated – being identified as	resonated with other literature,
Holm, L. (2018)	conducted 4-5	used. Recruited from a	described. Majority of	obese, encounters with HCPs,	conclusions supported by findings,
Being targeted	years after	convenience sample of	women were first time	reflections on long term	outlines further directions for
as a "severely	pregnancy to	women who participated in	mothers. Every	outcomes. Women differed	investigation, good evidence of
overweight	investigate their	3 other studies during	woman except one	over the categorisation of risk	researcher reflexivity, sampling
pregnant	recollected	pregnancy. 40 women	was partnered. Most	of obesity. Experiences of	strategy clear, evidence that
woman" – A	experiences of	approached. 21 women	women had	prejudice and interventions	alternative interpretations were
qualitative	being pregnant	agreed to participate. 21	undergone an	during pregnancy did not lead	discussed between authors
interview study.	and targeted as	interviews conducted with	extended period of	to any lasting lifestyle change,	Limitations: Initial lit review is poor
Conducted in	being severely	Danish mothers with pre-	education.	women challenge the idea of	and doesn't explicitly discuss
Denmark	overweight	pregnancy BMI >30,		pregnancy as a teachable	systematic reviews- refers to them as
		interviews conducted in		moment. Women recognised	studies, authors state data saturation
Quality		two parts.		the dilemma of being exposed	reached at 18 interviews, but then
Assessment:				to too much/little information	conducted 3 more to verify this
				about risks of obesity in	

Very good				pregnancy. Being categorised	
quality				as obese is stigmatising, even if	
				women agree to interventions	
Lee, J. (2020)	Autoethnograp	Qualitative design –	Author is Anglo-	Even with a relatively large	Strengths: researcher reflexivity is
"You will face	hic study	autoethnography	Australian who	amount of privilege and	strong throughout, moderate amount
discrimination":	exploring	Reflexive piece on her	identifies as	remaining critical of	of verbatim quotes and excerpts from
Fatness,	intersection of	experiences of being fat	cisgendered and	medicalised language around	field notes and observations used,
motherhood,	fatness,	and pregnant whilst	queer. Primarily lower	fatness, the author found	epistemological standing outlined
and the medical	pregnancy,	navigating the healthcare	socioeconomic	herself feeling ashamed about	early on and referenced throughout,
profession.	motherhood,	system in Australia	background but highly	her pregnant body after	findings resonate with wider
Conducted in	health and		educated	interactions with healthcare	literature, recommendations are
Australia	diabetes and		BMI not stated but	professionals. Holistic	generalisable to the population
	interactions		refers to herself as	assessment of womens' needs	Limitations: lit review is minimal,
Quality	with healthcare		"morbidly obese"	in pregnancy and compassion	wider literature is not discussed in
assessment:	professionals			is required in order to help	great detail, little evidence of analysis,
Moderately				women feel supported	no audit trail of methodology not
poor quality					clear how the context of data was
					retained during analysis
Lindhardt, C.L.,	Explore the	Qualitative design. IPA	No demographic data	Two themes discovered –	Strengths: clarity of focus, rationale
Rubak, S.,	experiences of	utilising Giorgi's	about participants	accusatorial response from	explained for methodology chosen,
Mogensen, O.,	pregnant	methodology. 29 women	discussed.	healthcare professionals, and	acknowledges some limitations with
Lamont, R.F.	women with	randomly selected from a		lack of advice and helpful	limited sample, work resonates with
and Joergensen,	BMI >30 of their	raised BMI clinic. 20		information about risks about	wider body of knowledge, results
J.S. (2013)	encounters with	suitable for participation		obesity in pregnancy. Pregnant	supported by evidence, researcher
The experience	healthcare	(non-Danish speakers		women with obesity	reflexivity present throughout
of pregnant	professionals.	excluded) and semi-		experience prejudice from	Limitations: exclusion criteria is
women with a		structured interviews		HCPs. Women treated with a	limiting (only Danish speakers) and
body mass		completed with 16 women.		lack of respect, and report lack	potentially adding bias, disparity
index >		Purposive sampling, data		of advice about risks of obesity	between planned and actual sample
30kg/m2 of		saturation occurring at 14		in pregnancy. Communication	not explained at all, analysis and
their		interviews but continued to		between obese pregnant	interpretation of findings does not
encounters with		complete last two		women and HCPs appear to be	match evidence given,
healthcare		interviews to represent all		lacking.	phenomenological method not used
professionals.		areas of the region			in analysis, no evidence of

Conducted in Denmark					competing/alternate explanations of phenomena
Quality					
Assessment:					
Average quality					
McPhail, D.,	Exploring the	Qualitative design. Post-	Majority of women	Two themes identified –	Strengths: evidence of dwelling in
Bombak, A.,	weight-related	structural feminist	were white except two	women at risk, women as risk.	data, extensive use of verbatim
Ward, P. and	healthcare	approach. 24 women	who were indigenous.	Women consistently told they	quotes in findings, lit review
Allison, J.(2016)	experiences and	interviewed. Authors	All were middle class	inhabit risky bodies that pose	thorough, evidence of researcher
Wombs at risk,	stigma of fat	acknowledge that	except two who were	fetal danger but do not	reflexivity throughout, authors
wombs as risk:	women	recruitment was difficult.	working class, one	understand details or basic	acknowledge limitations of study,
Fat women's	accessing	Methods section unclear-	with a disability. Two	information related to those	including lack of diversity despite
experience of	reproductive	coding and evolution of	identified as queer,	risks. Women are often denied	their efforts at being inclusive as
reproductive	care in pre-	themes noted.	the rest heterosexual.	midwifery care because	possible throughout recruitment,
care.	conception,			obesity is medicalised. Being	conclusions are plausible and
Conducted in	pregnancy and			informed of "high risk" status is	congruent with findings
Canada	birth.			internalised by women as	Limitations: no evidence that more
				being potentially bad mothers	than one author involved in analysis
Quality					of data, no evidence of consensus
assessment:					building or overcoming variant data,
Average quality					methodology is not clear, theme
					development unclear, no justification
					for sampling size or discussion of
					actual/ planned disparity in sampling
Mills, A.,	Explore the	Qualitative descriptive	Women's ages ranged	4 themes identified – being	Strengths: extensive use of verbatim
Schmied, V.A.	experiences of	method. Two hospital sites	between 25 and 42.	overweight and pregnant,	interview quotes in findings, analysis
and Dahlen,	overweight and	in Australia. 21 women	Most women were	being on a continuum of	interwoven with other relevant
H.G. (2013)	pregnant	recruited across both sites.	multiparous, a couple	change, get alongside us,	literature, resonates with existing
'Get al.ongside	women in	7 withdrawn/unable to	were primiparous.	wanting the same treatment as	literature, suggests further areas of
us', women's	Sydney,	contact so 14 women	BMIs ranged from 35.7	everyone else. Most women	study and clinical implications of
experiences of	Australia.	interviewed in total using	to 58.8	recognise weight as a concern	work, evidence of both researchers
being	Authors note a	semi structured interviews		for both themselves and their	involved in data analysis. Recruitment
overweight and	lack of	conducted.		babies. Discomfort stems from	process transparent

pregnant.	literature on			own perceptions of their	Limitations: methods are
Conducted in	obese women's			bodies or societal ideals rather	inappropriately mixed- thematic
Sydney,	experience of			than from HCPs. However,	analysis used instead of content
Australia	maternity care			HCPs struggle with how best to	analysis for qualitative descriptive
, 10001 0110				address obesity with women.	method, data saturation not
Quality				Women believe HCPs should	discussed, sampling size not justified,
Assessment:				address obesity but in a	no evidence of deviant data or how
Average quality				supportive and individualised	they were concluded, no evidence of
, weitage quanty				way	researcher reflexivity
Norris, G.,	Explore the	Qualitative design.	Mix of primigravida	1 superordinate theme – risk	Strengths: epistemological approach
Hollins Martin,	perceptions of	Interpretative	and primiparous	or no risk? 3 interrelated sub-	is strong, evidence that more than
C.J. and	risk and	Phenomenological Analysis	women	themes identified – emotional	one researcher involved in the data
Dickson, A.	potential	(IPA). Purposive sampling	BMI ranges between	consequences of her risky	analysis and evidence that divergent
(2020) An	impacts upon	used to recruit 7 women.	35.5 and 43kg/m2	position, recognition of high-	findings were discussed between
exploratory	pregnancy and	Inclusion criteria includes	Mix of employed and	risk complications- finally	authors, extensive use of verbatim
Interpretative	birth of women	women with BMI >35 at	unemployed women	sinking in?, accepting the risk	quotes, evidence of researcher
Phenomenologi	with a raised	time of booking and being		body	reflexivity, findings correlate to wider
cal Analysis	BMI (>35kg/m2)	>18 years of age. Exclusion		,	findings
(IPA) of		criteria includes women			Limitations: demographic details are
childbearing		with a known foetal			limited, recruitment strategy absent,
women's		abnormality or women with			recommendations do not align with
perceptions of		a psychological disorder			findings
risk associated					C C
with having a					
high Body Mass					
Index (BMI)					
Conducted in					
Scotland					
Quality					
Assessment:					
Good quality					

Nyman, V.M.K.,	Describe obese	Qual design.	Ages ranged between	5 themes found overall- being	Strengths: evidence that researcher	
Prebensen, A.K.	women's	Phenomenological	24 and 37 years. BMI	constantly aware of the obese	dwelled in the data, conclusions are	
and Flensner,	experience of	approach	ranged between 34	pregnant body, being exposed	plausible from findings, extensive use	
G.E.M. (2010)	encounters with	Sampling strategy –	and 50. Majority of	and scrutinised, negative	of verbatim interview quotes used,	
Obese women's	midwives and	Women with BMI> 30	women were	emotions and experiences of	methodology explained thoroughly,	
experiences of	physicians	included, regardless of	multiparous, 3 were	discomfort, humiliating	methods clearly documented in table	
encounters with	during	morbidities and parity	primiparous.	treatment, affirming	format, analysis woven in with	
midwives and	pregnancy and	approached in one hospital		encounters. Women	existing theories and other relevant	
physicians	childbirth	site. 16 women approached		experience constant	literature, resonates with other	
during		<ul> <li>10 agreed to interview.</li> </ul>		awareness of their bodies	knowledge and experience	
pregnancy and		Semi-structured interviews,		whilst pregnant and obese, and	Limitations: limitations not discussed	
childbirth.		women encouraged to		are cognisant to the scrutiny of	by authors, no further	
Conducted in		discuss their experiences		others. Obesity is stigmatising	recommendations for future research	
Sweden		openly and freely. Women		and humiliating treatment	or practice outlined, no evidence of	
		excluded if they could not	from HCPs amplifies this.		research reflexivity, no evidence of	
Quality		speak Swedish.		Conversely, affirmative	variant data or consensus building	
Assessment:				encounters alleviate	amongst authors, lit review is very	
Average quality				discomfort and provide a sense	short	
				of wellbeing. HCPs tend to		
				focus on providing care		
				somatically but women desire		
				individualised care in order to		
				optimise pregnancy		
				experiences.		

Stages	Essential Criteria	Specific Prompts
Scope and purpose	Clear statement of, and rationale for, research question/aims/purposes	<ul> <li>Clarity of focus demonstrated</li> <li>Explicit purpose given, such as descriptive/explanatory intent, theory building, hypothesis testing</li> </ul>
		Link between research and existing knowledge demonstrated
	Study thoroughly contextualised by existing literature	• Evidence of systematic approach to literature review, location of literature to contextualise the findings, or both
Design	Method/design apparent, and consistent with research intent	<ul> <li>Rationale given for use of qualitative design</li> <li>Discussion of epistemological/ontological grounding</li> <li>Rationale explored for specific qualitative method (e.g. ethnography, grounded theory, phenomenology)</li> <li>Discussion of why particular method chosen is most appropriate/sensitive/ relevant for research question/aims</li> <li>Setting appropriate</li> </ul>
	Data collection strategy apparent and appropriate	<ul> <li>Were data collection methods appropriate for type of data required and for specific qualitative method?</li> <li>Were they likely to capture the complexity/diversity of experience and illuminate context in sufficient detail?</li> <li>Was triangulation of data sources used if appropriate?</li> </ul>
Sampling strategy	Sample and sampling method appropriate	<ul> <li>Selection criteria detailed, and description of how sampling was undertaken</li> <li>Justification for sampling strategy given</li> <li>Thickness of description likely to be achieved from sampling</li> <li>Any disparity between planned and actual sample explained</li> </ul>
Analysis	Analytic approach appropriate	<ul> <li>Approach made explicit (e.g. Thematic distillation, constant comparative method, grounded theory)</li> <li>Was it appropriate for the qualitative method chosen?</li> <li>Was data managed by software package or by hand and why?</li> </ul>

## Appendix 4. Critical Appraisal Tool used in literature review adapted from Walsh and Downe (2005)

		<ul> <li>Discussion of how coding systems/conceptual frameworks evolved</li> <li>How was context of data retained during analysis</li> <li>Evidence that the subjective meanings of participants were portrayed</li> <li>Evidence of more than one researcher involved in stages if appropriate to epistemological/theoretical stance</li> <li>Did research participants have any involvement in analysis (e.g. member checking)</li> <li>Evidence provided that data reached saturation or discussion/rationale if it did not</li> <li>Evidence that deviant data was sought, or discussion/ rationale if it was not</li> </ul>
Interpretation	Context described and taken account of in interpretation	<ul> <li>Description of social/physical and interpersonal contexts of data collection</li> <li>Evidence that researcher spent time 'dwelling with the data', interrogating it for competing/alternative explanations of phenomena</li> </ul>
	Clear audit trail given	• Sufficient discussion of research processes such that others can follow 'decision trail'
	Data used to support interpretation	• Extensive use of field notes entries/verbatim interview quotes in discussion of findings Clear exposition of how interpretation led to conclusions
Reflexivity	Researcher reflexivity demonstrated	<ul> <li>Discussion of relationship between researcher and participants during fieldwork</li> <li>Demonstration of researcher's influence on stages of research process</li> <li>Evidence of self-awareness/insight</li> <li>Documentation of effects of the research on researcher</li> <li>Evidence of how problems/complications met were dealt with</li> </ul>

Ethical dimensions	Demonstration of sensitivity to ethical concerns	<ul> <li>Ethical committee approval granted</li> <li>Clear commitment to integrity, honesty, transparency, equality and mutual respect in relationships with participants</li> <li>Evidence of fair dealing with all research participants</li> <li>Recording of dilemmas met and how resolved in relation to ethical issues</li> <li>Documentation of how autonomy, consent, confidentiality, anonymity were managed</li> </ul>
Relevance and transferability	Relevance and transferability evident	<ul> <li>Sufficient evidence for typicality specificity to be assessed</li> <li>Analysis interwoven with existing theories and other relevant explanatory literature drawn from similar settings and studies</li> <li>Discussion of how explanatory propositions/emergent theory may fit other contexts</li> <li>Limitations/weaknesses of study clearly outlined</li> <li>Clearly resonates with other knowledge and experience</li> <li>Results/conclusions obviously supported by evidence</li> <li>Interpretation plausible and 'makes sense'</li> <li>Provides new insights and increases understanding</li> <li>Significance for current policy and practice outlined</li> <li>Assessment of value/empowerment for participants</li> <li>Outlines further directions for investigation</li> <li>Comment on whether aims/purposes of research were achieved</li> </ul>

Appendix 5. Ethical Approval granted for participant observations in December 2018 and ethical approval resubmission granted for interviews in June 2020

Notification of Non-Substantial/Minor Amendments(s) for NHS Studies

This template **must only** be used to notify NHS/HSC R&D office(s) of amendments, which are **NOT** categorised as Substantial Amendments.

If you need to notify a Substantial Amendment to your study then you MUST use the appropriate Substantial Amendment form in IRAS.

### Instructions for using this template

For guidance on amendments refer to <u>http://www.hra.nhs.uk/research-community/during-your-research-project/amendments/</u>

- This template should be completed by the CI and optionally authorised by Sponsor, if required by sponsor guidelines.
- This form should be submitted according to the instructions provided for NHS/HSC R&D at <u>http://www.hra.nhs.uk/research-community/during-your-research-project/amendments/which-review-bodies-need-to-approve-or-be-notified-of-which-types-of-amendments/</u>. If you do not submit your notification in accordance with these instructions then processing of your submission may be significantly delayed.

Full title of study:	REACH Pregnancy Circles Trial
IRAS Project ID:	228894
Sponsor Amendment Notification number:	5
Sponsor Amendment Notification date:	
	10/12/18
Details of Chief Investigator:	
Name [first name and surname]	Angela Harden
Address:	The University of East London
	Stratford Campus
	Water Lane

### 1. Study Information

	London, UK
Postcode:	E15 4LZ
Contact telephone number:	Tel: +44 (0)208 223 2167 Fax: +44 (0)208 223 4282 Mob: +44 (0)7961482404
Email address:	<u>a.harden@uel.ac.uk</u>
Details of Lead Sponsor:	
Name:	Professor Michael Seed, School of Health, Sport & Bioscience University of East London, Stratford Campus University House Romford Road London E15 4LZ
Contact email address:	Researchethics@uel.ac.uk
Details of Lead Nation:	
Name of lead nation delete as appropriate	England
If England led is the study going through CSP?	Yes / No
delete as appropriate	
Name of lead R&D office:	Barts Health NHS Trust - Joint Research Management Office (JRMO)

#### Summary of Amendment(s)

This template **must only** be used to notify NHS/HSC R&D office(s) of amendments, which are **NOT** categorised as Substantial Amendments. **If you need to notify a Substantial Amendment to your study then you MUST use the appropriate Substantial Amendment form in IRAS.** 

No.	Brief description of amendment (please enter each separate amendment in a new row)	Amendment applies to (delete/ list as appropriate)		List relevant sup including versior (please ensure a documents are s	R&D category of amendment (category A, B, C) <i>For office use</i> <i>only</i>	
		Nation	Sites	Document	Version	
1	Addition of two new sites to the trial:	England				
	1. East Suffolk and North Essex NHS Foundation Trust, Heath Road, Ipswich IP4 5PD					
	Site PI: Helen Smith					
	Helen.smith@ipswichhospital.nhs. uk					
	(Qualifications: Registered Midwife)					
	2. Southend Site PI: Hannah Smith Ellert					
	hannah.lawrence- smith@southend.nhs.uk					
	(Qualifications: Registered Midwife)					

2	Additional member of central research team – Vivian Holmes – research midwife/PhD student. <u>V.Holmes@uel.ac.uk</u>		
3			
4			

[Add further rows as required]

3. Declaration(s)

### **Declaration by Chief Investigator**

- I confirm that the information in this form is accurate to the best of my knowledge and I take full responsibility for it.
- I consider that it would be reasonable for the proposed amendment(s) to be implemented.

	Angela Haden	
Signature of Chief Investigator:		

Print name:

ANGELA HARDEN.....

Date:

10/12/18

#### **Optional Declaration by the Sponsor's Representative (as per Sponsor Guidelines)**

The sponsor of an approved study is responsible for all amendments made during its conduct.

The person authorising the declaration should be authorised to do so. There is no requirement for a particular level of seniority; the sponsor's rules on delegated authority should be adhered to.

• I confirm the sponsor's support for the amendment(s) in this notification.

Signature of sponsor's representative: .....

Print name:....

•

Drganisation:
---------------

Date:....

#### Amendment Categorisation and Implementation Information

#### Dear Professor Harden

IRAS Project ID:	228894
Short Study Title:	REACH Pregnancy Circles Trial : Version 1.0
Date complete amendment submission received:	10 Decembere 2018
Amendment No./ Sponsor Ref:	5
Amendment Date:	10 December 2018
Amendment Type:	Non-substantial
Outcome of HRA and HCRW Assessment	This email also constitutes HRA and HCRW Approval for the amendment, and you should not expect anything further.
Implementation date in NHS organisations in England and/or Wales	35 days from date amendment information together with this email, is supplied to participating organisations (providing conditions are met
S. martine and the second	For NHSHSC R&D Office information
Amendment Category	B

Thank you for submitting an amendment to your project. We have now categorised your amendment and please find this, as well as other relevant information, in the table above.

#### What should I do next?

Please read the information in IBAS, which provides you with information on how and when you can implement your amendment at NHS/HSC sites in each nation, and what actions you should take now.

If you have participating NHS/HSC organisations in any other UK nations please note that we will forward the amendment submission to the relevant national coordinating function(s).

If not already provided, please email to us any regulatory approvals (where applicable) once available.

#### When can I implement this amendment?

You may implement this amendment in line with the information in IRAS. Please note that you may only implement changes described in the amendment notice.

#### Information relating to the addition of new sites

This amendment also adds new participating NHS/HSC organisations to the study. The 35 day implementation date does not apply to the new sites. Please set up new sites as detailed below (as processes change from time to

If your study is supported by a research network, please contact the network as early as possible to help support set up of the new site(s).

For new sites in Northern reland and/or Scotland:	Please start to set up your new sites. Sites may not open until NHS/HSC management permission is in place.
	For studies which already have HRA and HCRW Approval: This email also constitutes HRA and HCRW Approval for the amendment, and you should not expect anything further. Please start to set up your new sites. Sites may not open until the site has confirmed capacity and capability (where applicable).
For new sites in England andior Wales:	For studies which do not we have HRA and HCRW Approval: HRA and HCRW Approval for the initial application is pending. You can start the process of setting up the new site but cannot open the study at the site until HRA and HCRW Approval is in place and the site has confirmed capacity and capability (where applicable).
	For studies with HRA Approval adding Weish NHS organisations for the first time. Please take this email to confirm your original HRA Approval inter is now extended to cover NHS organisations in Wales. You now have <u>HRA</u> and <u>HCRW Approval</u> . Please start to set up your new sites. Sites may not open until the site has confirmed capacity and capability (where applicable).

#### Who should I contact if I have further questions about this amendment?

If you have any questions about this amendment please contact the relevant national ocordinating centre for advice:

- England <u>hts amendments@chs.net</u>
   Nothern ireland <u>research.cateway@hscni.net</u>
   Scotland <u>nhsp.NRSPCC@nhs.net</u>
   Wales <u>research.cermssions@wales.nhs.uk</u>

Additional information on the management of amendments can be found in the IRAS puidance

#### User Feedback

The Health Research Authority is continually striving to provide a high quality service to all applicants and sponsors. You are invited to give your view of the service you have received and the application procedure. If you wish to

Please do not hesitate to contact me if you require further information.

#### Kind regards

Mrs Kirsten Peck HRA Approval Amendment Coordinator Health Research Authority Ground Floor | Skipton House | 80 London Road | London | SE1 6LH E bra amendments@nbs.net W. www.hra.nhs.uk

## **Amendment Categorisation and Implementation Information**

Dear Professor Harden,

IRAS Project ID:	228894			
Short Study Title:	REACH Pregnancy Circles Trial ; Version 1.0			
Date complete amendment submission received:	01 July 2020			
Amendment No./ Sponsor Ref:	NSA 26			
Amendment Date:	30 June 2020			
Amendment Type:	Non-substantial			
Outcome of HRA and HCRW Assessment	This email also constitutes HRA and HCRW Approval for the amendment, and you should not expect anything further.			
For NHS/HSC R&D Office information				
Amendment Category	C			

Thank you for submitting an amendment to your project. We have now categorised your amendment and please find this, as well as other relevant information, in the table above.

## What should I do next?

If you have participating NHS/HSC organisations in any other UK nations that are affected by this amendment **we will** forward the information to the relevant national coordinating function(s).

You should now inform participating NHS/HSC organisations of the amendment.

 For NHS organisations in England and/or Wales, this notification should include the <u>NHS</u> <u>R&D Office</u>, <u>LCRN</u> (where applicable) as well as the local research team.

## When can I implement this amendment?

You may implement this amendment **<u>immediately</u>**. Please note that you may only implement changes described in the amendment notice.

- England amendments@hra.nhs.uk
- Northern Ireland research.gateway@hscni.net
- Scotland <u>nhsg.NRSPCC@nhs.net</u>
- Wales <u>HCRW.amendments@wales.nhs.uk</u>

Additional information on the management of amendments can be found in the <u>IRAS</u> <u>guidance</u>.

### User Feedback

The Health Research Authority is continually striving to provide a high quality service to all applicants and sponsors. You are invited to give your view of the service you have received and the application procedure. If you wish to make your views known please use the feedback form available on the HRA website: <u>http://www.hra.nhs.uk/about-the-hra/governance/quality-assurance/</u>.

# Chelsea Phillips Approvals Administrator Health Research Authority Ground Floor | Skipton House | 80 London Road | London | SE1 6LH E.amendments@hra.nhs.uk W. www.hra.nhs.uk Sign up to receive our newsletter <u>HRA Latest.</u>

Ал	nendment Too				For office u					
				QC: No						
ection 1: Project information										
-										
Short project title*: IRAS project ID* (or REC reference if no IRAS project ID	irdes Trial									
is a vailable):										
Sponsor amendment reference number*:										
Sponsor amendment date* (enter as DD/MM/YY):										
Summary of amendment including just fication*:	nerview topic guides into 1 guide in a nested PhD study in the trial. This is nescales for this work following delays due to Covid19 pandemic.									
		0	Specific study	,						
Project type:		Research tissue bank								
r tojeve gipe.		Research database								
Has the study been reviewed by a UKECA-recognised Res	earch Ethics		e Yes	0.1	No					
Committee (REC) prior to this amendment?		,								
What type of UKECA-recognised Research Ethics Committe	NHS/HSC REC									
is applicable?:	Ministry of Defence (MoDREC)									
Is all or part of this amendment being resubmitted to the Re Committee (REC) as a modified amendment?	search Ethics	0	Yes	•	No					
Where is the NHS/HSC Research Ethics Committee (REC)	England	Wales	Scotland Nor	thern Ireland						
the study based?:	۲	0	0	0						
Was the study a clinical trial of an investigational medicinal OR does the amendment make it one?:	(	) Yes		No						
Was the study a clinical investigation or other study of a me		Yes		Vo.						
does the amendment make it one?:		,								
Did the study involve the administration of radioactive subst requiring ARSAC review, OR does the amendment introduc	tances, meretore ce this?:	Contract (1997)	Yes	ا ھ	No					
Did the study involve the use of research exposures to ionis (not involving the administration of radioactive substances) amendment introduce this?:	c		No							
Did the study involve adults lacking capacity OR does the a introduce this?:	mendment	0	Yes	ا ھ	No					
Did the study involve access to confidential patient informat	tion without			~	No					
consent OR does the amendment introduce this?:	(	/								
Did the study involve prisoners OR does the amendment in		(	) Yes	۲	No					
Did the study involve NHS/HSC organisations prior to this a			) Yes	0	No					
Did the study involve non-NHS/HSC organisations OR doe: introduce them?:	s the amendment	0	Yes		No					
		England	Wales	Scotland Nor	thern Ireland					
Lead nation for the study:		۲	0	0	0					
Which nations had participating NHS/HSC organisations pri	2									
amendment?	amendment? Which nations will have participating NHS/HSC organisations after this amendment?									

#### Section 2: Summary of change(s)

Please note: Each change being made as part of the amendment must be entered separately. For example, if an amendment to a dinical trial of an investigational medicinal product (CTIMP) involves an update to the Investigator's Brochure (IB), affecting the Reference Safety Information (RSI) and so the information documents to be given to participants, these should be entered into the amendment tool as three separate changes. A list of all possible changes is available on the "Giossaryof Changes" tab. To add another change, tick the "Add another change" box.

Change 1							
Area of change (select)*:	ParticipantProcedures						
Specific change (select - only available when area of change is selected first)*:	Procedures - Change to the procedures undertaken byparticipants where there is no increased risk to the participant (e.g. changing site visits to phone calls or postal questionnaires)						

228894\_NSA 26\_30Jun 2020\_Locked01Jul 20\_161714.pdf

V 2) in a nested PhD:	study in the trial. T	his is required to fit		
Applicability. Where are the participating NHS/HSC organisations located that will be affected by this change?*:				
	V 2) in a nested PhD following delays due t red that will be affected	V 2) in a nested PhD study in the trial. T following delays due to Covid19 panden England red that will be affected	V 2) in a nested PhD study in the trial. This is required to fit following delays due to Covid19 pandemic.           England         Wales           ted that will be affected	England Wales Scotland

Add another change:

Section 3: Declaration(s) and lock for submission								
Declaration by the Sponsor or authorised delegate								
<ul> <li>I confirm that the Sponsor takes responsibility for the completed amendment tool</li> <li>I confirm that I have been formally authorised by the Sponsor to complete the amendment tool on their behalf</li> </ul>								
Name [first name and sumame]*: Dr Kenneth Gannon								
Em all address*: researchethics@uel.ac.uk								
Lock for submission								
Please note: This button will only become available when all mandatory (*) fields have been completed. When the button is available, dicking it will generate a PDF copyof the completed amendment tool that can be included in the amendment submission. Please ensure that the amendment tool is completed correctly before locking it for submission.								

Lock for submission

After locking the tool, refer to the "Submission Guidance" tab for further information about the next steps for the amendment.

								F	Review	bodie	25								
		UK wide:				Eng	England and Wales:			Scotland:				Northern Ireland:					
	REC	Competent Authority MHRA - Medicines	Competent Authority MHRA- Devices	ARSAC	Radiation Assurance	UKSW Governance	REC (MCA)	CAG	HMPPS	HRAand HCRW Approval	REC (#MA)	рврр	SPS (RAEC)	National coordinating function	HSC REC	HS C Data Guardians	Prisons	National coordinating function	Cate
Change 1:	Ś																		
Overall reviews for the amendr	ment																		
Full review:	Ν																		
	Y																		

Appendix 6. Consent form

# **REACH Pregnancy Study**

# CONSENT TO TAKE PART IN RESEARCH STUDY

This study has been reviewed and approved by the NHS National Research Ethics Service.

Participant's statement

.....(NAME IN BLOCK CAPITALS),

Please sign your initials in the boxes if you agree that ...

This study has been explained to me through the information sheet and/or verbally
I have had the chance to ask questions about the research study
I understand that taking part in the research is voluntary and I can leave the research at any time
I understand that my taking part in the study is confidential and that a pseudonym will be used in any write-up of the research
I understand that an audio recording device will be used for data collection
I understand that a researcher will look at my hospital records to collect information about my care
I understand that if I leave the research study the information I have provided can still be used by the study team

Participant's Signature:....

Date:....

Interviewer's Signature:.....

Interviewer's Name (BLOCK CAPITALS):.....

Appendix 7. Participant observations guide



## Evaluation of the Pregnancy Circles

## **OBSERVATION GUIDE FOR TEST GROUPS**

#### AIMS:

- 1. To provide a 'thick description' of this aspect of the development of the group model of care
- 2. To develop understanding of how women and (where relevant) their partners/support persons respond to and participate in the group sessions
- 3. To develop understanding of staff confidence and preparedness to run groups in order
- 4. To inform any amendments needed for training and support for staff and information for service users, for the next phase of the implementation

#### Key questions to frame the note taking:

Non-participant observation.

Note – these are already to some extent analytical, so important to have these in mind, but try as much as possible just to note down **what you see and hear**, not your views or opinions or reactions during the sessions, or your ideas about why you see or hear things – this comes later in the analysis and is covered in 4.

The aim is to be semi-structured: open note taking, but with particular aims and questions in mind.

No names/patient-identifiable data to be noted down.

1. Record a basic but reasonably detailed description of how the group session is structured and delivered

2. How do participants appear to respond to the group model?
How active are participants in contributing?
Do they respond to midwives' or other participants' or questions?
Do they come up with their own questions, ideas, answers?
How do the women cope with the testing? Do they appear to enjoy it?
How do they respond to the length of the session?
To what extent do partners/support persons get involved?
Were there any language issues? How were they dealt with?

Is everyone involved at some point in the discussion?

- informal chit-chat amongst participants
- facial expressions
- body language
- activity
- 3. Any concerns?

Do they raise concerns they have?

If so, what kind of concerns?

Do they respond more positively to some activities rather than others?

Do you notice any change in response from beginning to end of the session? (particularly for first session)

At the end or afterwards:

4. Your own reactions as an observer

What is most noticeable to you?

Anything surprise you?

Did you observe what you expected?

Appendix 8: Topic Guides for interviews



# Evaluation of the Pregnancy Circles: TOPIC GUIDE FOR INTERVIEWS WITH FACILITATING MIDWIVES

Written consent taken for interview to be audio taped. Confidentiality to be discussed, in particular, assurance given that any criticism of the service will not affect the woman's on-going care and will only be fed back to the service providers as part of an anonymised report.

## MIDWIVES WHO FACILITATE PREGNANCY CIRCLES

Do you think the Pregnancy Circles help to improve women with a high BMI experiences of antenatal care?

PROMPT: more time spent with midwives, other women, increased social capital, less isolation, less marginalisation

Do you think Pregnancy Circles can improve outcomes for women with a high BMI?

PROMPT: access to education, 2 midwives to check, double check and perform referrals

Do you think group antenatal care provides a safe space for women with a high BMI to discuss their concerns about pregnancy, labour and birth?

Do you think that you have changed your approach to delivering care for high risk women in group sessions in comparison to standard care appointments?

PROMPT: give examples of how care is different, time spent with women, referral process, language used, information dissemination

Do you feel like you need more training to support women with a high BMI in GANC?

PROMPT: reflective sessions, pre-reg training, supervision, mandatory training?

Do you think that group antenatal sessions are appropriate for women with a high BMI?

*PROMPT: give examples of when this has worked well, hasn't worked well, women have been transferred back to 1-2-1 care, their observations of women's interactions in the group* 



# TOPIC GUIDE FOR INTERVIEWS

Consent taken for interview to be audio taped. Confidentiality to be discussed, in particular, assurance given that any criticism of the service will not affect the woman's on-going care from any healthcare provider. Partners/support persons and baby/children welcome to be present.

## POSTNATAL 1-1 INTERVIEW WITH WOMEN

Tell me a bit about when you discovered you were pregnant

*PROMPT:* conception – any problems, referrals to specialist services pre-pregnancy, first contact with HCP and antenatal care

What are your thoughts and feelings about having been part of Pregnancy Circles?

*PROMPT: satisfaction with group model and how it was conducted, contents, convenience, would you do it again or recommend it to another person?* 

Tell me a bit about how you felt about your body during pregnancy...

PROMPT: pregnancy symptoms, body changes, identity, relationship to body, discussed in the circle

Tell me a bit about discussing concerns or issues you had in pregnancy

PROMPT: diet, exercise, body image, weight gain, referrals to specialist services, discussed in the circle

Tell me a bit about your relationship with your midwife...

PROMPT: continuity of care, trust, midwife-mother relationship

Tell me a bit about your labour and birth...

PROMPT: pain relief, mode of delivery, complications

Tell me a bit about what's happening now with the baby and being a mother

*PROMPT:* motherhood identity, loneliness/isolation, connected to other mums, feeding, sleep, postpartum body

Is there anything else you would like to add?

# References

Agha, M. and Agha, R. (2017) The rising prevalence of obesity: part A: impact on public health, International journal of surgical oncology, 2(7), pp. e17. doi: 10.1097/IJ9.000000000000017.

Alfirevic, Z., Devane, D., Gyte, G.M.L. and Cuthbert, A. (2017) Continuous cardiotocography (CTG) as a form of electronic fetal monitoring (EFM) for fetal assessment during labour, *Cochrane Database of Systematic Reviews*, Issue 2. Art. No.: CD006066. DOI: 10.1002/14651858.CD006066.pub3

Alspaugh, A., Suarez Baquero, D.F.M., Mehra, R., Lanshaw, N., Joseph, J., Combs, M., Spiller, K., McLemore, M.R. and Franck, L.S. (2023) "Patients want to see people that look like them": Aspiring midwives of color as resistance to racism through concordant care in the United States, *SSM - Qualitative Research in Health*, 3: 100226

Altman, M.R., Oseguera, T., McLemore, M.R., Kantrowitz-Gordon, I., Franck, L.S. and Lyndon, A. (2019) Information and power: women of color's experiences interacting with health care providers in pregnancy and birth. *Social Science & Medicine*, 238: 112491.

Al Wattar, B., Dodds, J., Placzek, A., Beresford, L., Spyreli, E., Moore, A., Gonzalez Carreras, F.J., Austin, F., et al (2019) Mediterranean-style diet in pregnant women with metabolic risk factors (ESTEEM): A pragmatic multicentre randomised trial, *PLoS Med*, 16(7): e1002857. doi: 10.1371/journal.pmed.1002857.

Al Wattar, B., Honess, E., Bunnewell, S., Welton, N.J., Quenby, S., Khan, K.S., Zamora, J. and Thangaratinam, S. (2021) Effectiveness of intrapartum fetal surveillance to improve maternal and neonatal outcomes: a systematic review and network meta-analysis, *Canadian Medical Association Journal*, 193(14): E468–E477.doi: 10.1503/cmaj.202538

Amir, L.H. and Donath, S. (2007) A systematic review of maternal obesity and breastfeeding intention, initiation and duration, *BMC Pregnancy Childbirth*, 7(9). doi: 10.1186/1471-2393-7-9.

Amorim Adegboye, A.R. and Linne, Y.M. (2013) Diet or exercise, or both, for weight reduction in women after childbirth, *Cochrane Database Syst Rev*, CD005627. doi: 10.1002/14651858.CD005627.pub3

Anderson, E. S. (2005) Feminist epistemology: an interpretation and a defense, in Cudd, A. E. and Andreasen, R. O. (eds.) *Feminist theory: a philosophical anthology*. Oxford: Blackwell Publishing, pp. 188–209.

Andersson, E., Christensson, K. and Hildingsson, I. (2013) Mothers' satisfaction with group antenatal care versus individual antenatal care--a clinical trial, *Sexual & reproductive healthcare*, 4(3), pp. 113-120. doi: 10.1016/j.srhc.2013.08.002.

Aphramor, L. and Gingras, J. (2011) Reproducing Inequalities: Theories and Ethics in Dietetics in Unnithan-Kumar, M. and Tremayne, S. (eds) *Fatness and the Maternal Body*. New York: Berghahn Books, pp.205-23.

Aquino, M.R.J.V., Olander, E.K. & Bryar, R.M. (2018) A focus group study of women's views and experiences of maternity care as delivered collaboratively by midwives and health visitors in England, *BMC Pregnancy Childbirth*, 18(505) https://doi.org/10.1186/s12884-018-2127-0

Atkinson, S. and McNamara, P.M. (2017) Unconscious collusion: An interpretative phenomenological analysis of the maternity care experiences of women with obesity (BMI >30kg/m2), *Midwifery*, 49(3), pp.54-64. https://doi.org/10.1016/j.midw.2016.12.008

Aughey, H., Jardine, J., Moitt, N., Fearon, K., Hawdon, J., Pasupathy, D., Urganci, I., NMPA Project Team and Harris, T. (2021) Waterbirth: a national retrospective cohort study of factors associated with its use among women in England, *BMC Pregnancy and Childbirth*, 21: 256

Aveyard, H. (2014) *Doing a literature review in Health and Social Care*. 3<sup>rd</sup> ed. Berkshire: Open University Press.

Ayers, S., Bond, R., Bertullies, S. and Wijma, K. (2016) The aetiology of post-traumatic stress following childbirth: a meta-analysis and theoretical framework. *Psychological Medicine*, 46(6): pp. 1121-34. doi: 10.1017/S0033291715002706.

Bacon, L., and Aphramor, L. (2011) Weight Science: Evaluating the Evidence for a Paradigm Shift, *Nutrition Journal*, 10(9) https://doi.org/10.1186/1475-2891-10-9

Baer, H., Singer, M. and Susser, I. (2013) *Medical Anthropology and the World System: Critical Perspectives*. 3<sup>rd</sup> ed. California: Praeger.

Baxter, J., Buchler, S., Perales, F. and Western, M. (2015) A life changing event: First births and men's and women's attitudes to mothering and gender divisions of labor. *Social Forces*, 93: pp. 989–1014. doi: 10.1093/sf/sou103.

Bever Babendure, J., Reifsnider, E., Mendias, E., Moramarco, M.W., and Davila, Y.R. (2015) Reduced breastfeeding rates among obese mothers: a review of contributing factors, clinical considerations and future directions. *International Breastfeeding Journal*, 10(21) https://doi.org/10.1186/s13006-015-0046-5

Bhattarai, N., McMeekin, P., Price, C. and Vale, L. (2016) Economic evaluations on centralisation of specialised healthcare services: a systematic review of methods, *BMJ Open*, 6: e011214. doi:10.1136/ bmjopen-2016-011214

Blaylock, R., Trickey, H., Sanders, J and Murphy, C. (2022) WRISK voices: A mixed-methods study of women's experiences of pregnancy-related public health advice and risk messages in the UK, *Midwifery*, 113: 103433 https://doi.org/10.1016/j.midw.2022.103433

Bloom J. (1990) The relationship of social support and health. *Social Science & Medicine* 30(5): pp. 635–637.

Blüher, M. (2020) Metabolically Healthy Obesity, *Endocrine Reviews*, 41(3), pp. 405-420. https://doi.org/10.1210/endrev/bnaa004

Bordo, S. (1993) *Unbearable Weight*. 1<sup>st</sup> ed. Berkeley: University of California Press.

Braun, V. and Clarke, V. (2006) Using thematic analysis in psychology, *Qualitative Research in Psychology*, 3(2), pp. 77-101. DOI: 10.1191/1478088706qp063oa

Braun, V. and Clarke, V. (2021) Can I use TA? Should I use TA? Should I *not* use TA? Comparing reflexive thematic analysis and other pattern-based qualitative analytic approaches, *Counselling and Psychotherapy Research*, 21(1), pp. 37-47. https://doi.org/10.1002/capr.12360

Burkhauser, R.V. and Cawley, J. (2008) Beyond BMI: the value of more accurate measures of fatness and obesity in social science research, *Journal of Health Economics*, 27(2), pp 519-29. DOI: 10.1016/j.jhealeco.2007.05.005

Byerley, B. M. and Haas, D. M. (2017) 'A systematic overview of the literature regarding group prenatal care for high-risk pregnant women', *BMC Pregnancy & Childbirth*, 17(329), doi: 10.1186/s12884-017-1522-2.

Campbell, F., Johnson, M., Messina, J., Guillaume, L., and Goyder, E. (2011) Behavioural interventions for weight management in pregnancy: A systematic review of quantitative and qualitative data. BMC Public Health, 11(491)

Campbell, D. and Bawden, A. (2021) Up to 8,700 patients died after catching Covid in English hospitals. *The Guardian*. Available at: https://www.theguardian.com/world/2021/may/24/up-to-8700-patients-died-after-catching-covid-in-english-hospitals [accessed 6<sup>th</sup> August 2023]

Capper, B., Ford, J. and Kelly, M. (2023) Has the pandemic resulted in a renewed and improved focus on heath inequalities in England? A discourse analysis of the framing of health inequalities in national policy, *Public Health in Practice*, 5: 100382. doi: 10.1016/j.puhip.2023.100382

Care Quality Commission (CQC)(2022) *Maternity Survey 2022*. Available at: https://www.cqc.org.uk/publication/surveys/maternity-survey-2022 [accessed 1<sup>st</sup> October 2023]

Catling, C.J., Medley, N., Foureur, M., Ryan, C., Leap, N. and Teate, A. (2015) Group versus conventional antenatal care for women. *Cochrane Database of Systematic Reviews,* Issue 2. CD 007622. <u>https://doi.org/10.1002/14651858.cd007622.pub3</u>

Chiumento, A., Machin, L., Rahman, A. and Frith, L. (2018) Online interviewing with interpreters in humanitarian contexts, *International Journal of Qualitative Studies on Health and Well-being*, 13:1, DOI: 10.1080/17482631.2018.1444887

Church, S. (2019) Developing a reproductive identity: the experiences of pregnant midwives. *MIDIRS Midwifery Digest*, 29(1): pp 40-45

Chwah, S.R., Reilly, A., Hall, B., O'Sullivan, A.J. and Henry, A. (2016) Engagement with and outcomes of a Midwifery-led intervention group for pregnant women of high body mass index, *Obstetric Medicine*, 9(3), pp.120-125.

Clemons, J.H., Gilkison, A., Mharapara, T.L., Dixon, L. and McAra-Couper, J. (2021) Midwifery Job Autonomy in New Zealand: I do it all the time. *Women and Birth*, 34(10), pp30-37.

Collins, C.T., Fereday, J., Pincombe, J., Oster, C., Turnbull, D. (2010) An evaluation of the satisfaction of midwives' working in midwifery group practice. *Midwifery*, 26(4): pp. 435–41.

Cordell, G. and Ronai, C.R., (1999) 'Identity Management among Overweight Women Narrative Resistance to Stigma' in Sobal, J. and Maurer, M. (eds) *Interpreting Weight: The Social Management of Fatness and Thinness*. New Brunswick: Aldine Transaction. Pp. 29-47

Coxon, K., Scamell, M. and Alaszewski, A. (2012) Risk, pregnancy and childbirth: What do we currently know and what do we need to know? An editorial, *Health, Risk & Society*,14(6), pp.503-10 https://doi.org/10.1080/13698575.2012.709486

Crenshaw, K. (1991) Mapping the Margins: Intersectionality, Identitiy Politics, and Violence against Women of Color, *Stanford Law Review*, 43(6), pp.1241-1299.

Cunningham, J., Endacott, R. and Gibbons, D. (2018) Communications with health professionals: The views of pregnant women with a raised BMI, *British Journal of Midwifery*, 26(9). https://doi.org/10.12968/bjom.2018.26.9.598 Curtis, E., Jones, R., Tipene-Leach, D., Walker, C., Loring, B., Paine, S-J. And Reid, P. (2019) Why cultural safety rather than cultural competency is required to achieve health equity: a literature review and recommended definition, *International Journal for Equity in Health*, 18(174)

Cyna, A. M., Crowther, C. A., Robinson, J. S., Andrew, M. I., Antoniou, G., Baghurst, P., (2013) Hypnosis antenatal training for childbirth: a randomised controlled trial, *British Journal of Obstretrics and Gynaecology*, 120: pp. 1248-59.

Dahlen, H. G. (2014) Managing risk or facilitating safety? *International Journal of Childbirth*, 4: pp66 -8 https://doi.org/10.1891/2156-5287.4.2.66

Darko, N. (2021) Engaging Black and Minority Ethnic Groups in Health Research: 'Hard to Reach'? Demystifying the Misconceptions, Bristol: Bristol University Press

Darvill, R., Skirton, H., and Farrand, P. (2010) Psychological factors that impact on women's experiences of first-time motherhood: a qualitative study of the transition, *Midwifery*, 26(3), pp.357-66. doi: 10.1016/j.midw.2008.07.006.

Davis, D-A. (2019) *Reproductive Injustice. Racism, Pregnancy, and Premature Birth*. New York: New York University Press

De Brún, A., McCarthy, M., McKenzie, K., and McGloin, A. (2014) Weight stigma and narrative resistance evident in online discussions of obesity, *Appetite*, 72, pp. 73-81. doi: 10.1016/j.appet.2013.09.022.

Deherder, E., Delbaere, I., Macedo, A., Nieuwenhuijze, M.J., Van Laere, S. and Beeckman, K. (2022) Women's view on shared decision making and autonomy in childbirth: cohort study of Belgian women, *BMC Pregnancy Childbirth*, 22(551) doi: 10.1186/s12884-022-04890-x

DeJonckheere, M. and Vaughn, L.M. (2019) Semi structured interviewing in primary care research: a balance of relationship and rigour, *Family Medicine and Community Health*, 7:e000057. doi: 10.1136/ fmch-2018-000057

Dejoy, S. B., Bittner, K. and Mandel, D. (2016) A Qualitative Study of the Maternity Care Experiences of Women with Obesity: "More than Just a Number on the Scale", *Journal of Midwifery and Women's Health*, 61(2). doi: 10.1111/jmwh.12375.

Dencker, A., Premberg, Å., Olander, E.K., McCourt, C., Haby, K., Dencker, S., Glantz, A and Berg, M. (2016) Adopting a healthy lifestyle when pregnant and obese – an interview study three years after childbirth. *BMC Pregnancy Childbirth*, 16(201) https://doi.org/10.1186/s12884-016-0969-x

Denison, F. C., Aedla, N., Keag, O., Hor, K., Reynolds, R.M., Milne, A. and Diamond, A. (2018) Care of Women with Obesity in Pregnancy: Green-top Guideline No. 72, *British Journal of Obstetrics and Gynaecology*, 126(3), pp.e62-e106. doi: 10.1111/1471-0528.15386.

Dennis, C., Chung-Lee, L. (2006) Postpartum depression help-seeking barriers and maternal treatment preferences: A qualitative systematic review, *Birth*, 33(4), pp. 323–331.

Department of Health (2022) *Safe Staffing: The impact of staffing shortages in maternity and neonatal care: Report of the Baby Loss and Maternity All Party Parliamentary Groups.* Available at: https://www.sands.org.uk/sites/default/files/Staffing%20shortages%20-%20APPG%20report,%20Oct%2022%20(final).pdf [accessed 30<sup>th</sup> August 2023]

De Sousa Machado, T., Chur-Hansen, A. and Due, C. (2020) First-time mothers' perceptions of social support: Recommendations for best practice, *Health Psychology Open*, <u>https://doi.org/10.1177/2055102919898611</u>

Dieterich, R., Demirci, J. and Danford, C. (2020) Weight Stigma Related to Pregnancy: A Concept Analysis, *Advances in Nursing Science*, 43(2), pp.190-199. doi: 10.1097/ANS.00000000000297.

DeWalt, K. M. and DeWalt, B. R. (2010) *Participant observation: a guide for fieldworkers*. 2<sup>nd</sup> ed. Walnut Creek: AltaMira Press.

DiCicco-Bloom, B. and Crabtree, B. F. (2006) 'The qualitative research interview', *Medical Education*, 40(4), pp. 314–321. doi: 10.1111/j.1365-2929.2006.02418.x.

Dieterich, R. and Demirci, J. (2020) Communication practices of healthcare professionals when caring for overweight/obese pregnant women: A scoping review, *Patient Education and Counseling*, 103(10), pp. 1902-1912.

Dinsdale, S., Branch, K., Cook, L. and Shucksmith, J. (2016) "As soon as you've had the baby that's it..." a qualitative study of 24 postnatal women on their experience of maternal obesity care pathways', *BMC Public Health*, 16(625). <u>https://doi.org/10.1186/s12889-016-3289-1</u>

Diorgu, F.C. and George, A.N. (2021) Broader driver of disrespectful maternity care: power dynamics, *Obstetrics and Gynecology International Journal*, 12(3), pp.130-133.

Döblin, S., Seefeld, L. Weise, V., Kopp, M., Knappe, S., Asselmann, E., Martini, J. and Garthus-Niegel, S. (2023) The impact of mode of delivery on parent-infant-bonding and the mediating role of birth experience: a comparison of mothers and fathers within the longitudinal cohort study DREAM, *BMC Pregnancy and Childbirth*, 23(285)

Dodd, J.M., Grivell, R.M., Crowther, C.A. and Robinson, J.S. (2010) 'Antenatal interventions for overweight or obese pregnant women: a systematic review of randomised trials', *British Journal of Obstetrics and Gynaecology*, 117(11), pp. 1316-1326.

Dodd, R.V., Rafi, D., Stackhouse, A.A., Brown, C.A., Westacott, R.J., Meeran, K., Hughes, E., Wilkinson, P., et al (2023) The impact of patient skin colour on diagnostic ability and confidence of medical students, *Advances in Health Science Education*. doi: 10.1007/s10459-022-10196-6

Domi, R. and Laho, H. (2012) Anesthetic challenges in the obese patient, *Journal of Anesthesia*, 26, pp. 758–765.

Draper, E.S., Gallimore, I.D., Smith, L.K., Fenton, A.C., Kurinczuk, J.J., Smith, P.W., Boby, T. and Manktelow, B.N. on behalf of the MBRRACE-UK Collaboration (2020) *MBRRACE-UK Perinatal Mortality Surveillance Report, UK Perinatal Deaths for Births from January to December 2018*, Leicester: University of Leicester.

Duncan, L. G., Cohn, M. A., Chao, M. T., Cook, J. G., Riccobono, J. and Bardacke, N. (2017) Benefits of preparing for childbirth with mindfulness training: A randomized controlled trial with active comparison, *BMC Pregnancy and Childbirth*, 17(140)

Edmonds, J.K., Ivanof, J. and Kafulafula, U. (2020) 'Midwife Led Units: Transforming Maternity Care Globally, *Annals of Global Health*, 86(1), pp.44. DOI: http://doi.org/10.5334/aogh.2794

Edmondson, M.C. and Walker, S.B. (2014) Working in caseload midwifery care: the experience of midwives working in a birth Centre in North Queensland, *Women and Birth*, 27(1): pp31–6.

Egger, G. and Dixon, J. (2014) Beyond obesity and lifestyle: a review of 21<sup>st</sup> century chronic disease determinants, *Biomed Research International*, DOI: 10.1155/2014/731685

Ellis, S., Rosenblum, K., Miller, A., Peterson, K.E. and Lumeng, J.C. (2014) Meaning of the Terms "Overweight" and "Obese" Among Low-Income Women, *Journal of Nutritional Education and Behaviour*, 46(4): pp. 299–303. doi: 10.1016/j.jneb.2013.08.006

Ellis, J.A., Brown, C.M., Barger, B. and Carlson, N.S. (2019) Influence of Maternal Obesity on Labor Induction: A Systematic Review and Meta-Analysis, *Journal of Midwifery & Womens Health*, 64(1): pp.55-67. doi: 10.1111/jmwh.12935.

Elmir, R., Schmied, V., Wilkes, L. and Jackson, D. (2010) Women's perceptions and experiences of a traumatic birth: a meta-ethnography, *Journal of Advanced Nursing*, 66(10), pp. 2142–53.

Endres, L.K., Straub, H., McKinney, C., Plunkett, B., Minkovitz, C.S., Schetter, C.D., Ramey, S., Wang, C. et al (2015) Postpartum weight retention risk factors and relationship to obesity at 1 year, *Obstetrics and Gynecology*,125(1), pp. 144-152. doi: 10.1097/AOG.00000000000565.

Ertan, D., Hingray, C., Burlacu, E., Sterle, A. and El-Hage, W. (2021) Post-traumatic stress disorder following childbirth, *BMC Psychiatry*, volume 21(155)

Evans, B. and Colls, R. (2009) Measuring Fatness, Governing Bodies: The spatialities of the Body Mass Index (BMI) in Anti-Obesity Politics, *Antipode*, 41(5), pp.1051-1083. https://doi.org/10.1111/j.1467-8330.2009.00706.x

Fair, F., Furness, A., Higginbottom, G., Oddie, S. and Soltani, H. (2023) *Review of neonatal assessment and practice in Black, Asian, and minority ethnic newborns*. Available at:

https://www.nhsrho.org/wp-content/uploads/2023/07/RHO-Neonatal-Assessment-Report.pdf [accessed 22<sup>nd</sup> August 2023]

Ferguson, J.A., Daley, A.J., Parretti, H.M. (2019) Behavioural weight management interventions for postnatal women: a systematic review of systematic reviews of randomized controlled trials. *Obesity Review*, 20(6): pp. 829–41. doi: 10.1111/obr.12834.

Ferrari, N., Schmitz, L., Schmidt, N., Mahabir, E., Van de Vondel, P., Merz, W.M., Lehmacher, W., Stock, S. et al (2020) A lifestyle intervention during pregnancy to reduce obesity in early childhood: the study protocol of ADEBAR - a randomised controlled trial, *BMC Sports Science, Medicine and Rehabilitation*, 12(1), https://doi.org/10.1186/s13102-020-00198-5

Flaherty, S.J., Delaney, H., Matvienko-Sikar, K. And Smith, V. (2022) Maternity care during COVID-19: a qualitative evidence synthesis of women's and maternity care providers' views and experiences, *BMC Pregnancy Childbirth*, 22(438). https://doi.org/10.1186/s12884-022-04724-w

Flegal, K.M., Graubard, B.I., Williamson, D.F. and Gail, M.H. (2005) Excess Deaths Associated With Underweight, Overweight, and Obesity. *Journal of the American Medical Association*, 293(15): pp. 1861–1867. doi:10.1001/jama.293.15.1861

Flegal, K. M., Kit, B.K., Orpana, H. and Graubard, B. I. (2013) Association of All-Cause Mortality With Overweight and Obesity Using Standard Body Mass Index Categories, *Journal of the American Medical Association*, 309(1): pp. 71–82. doi:10.1001/jama.2012.113905

Foster, C. E. and Hirst, J. (2014) Midwives' attitudes towards giving weight-related advice to obese pregnant women, *British Journal of Midwifery*, 22(4), pp. 254–262. doi: 10.12968/bjom.2014.22.4.254.

Foucault, M. (2023) *The Birth of the Clinic*. 3<sup>rd</sup> ed. London: Routledge.

Foucault, M. (1988) *Power/Knowledge*. New York: Random House.

Fox, P. and Yamaguchi, C. (1997) Body image change in pregnancy: a comparison of normal weight and overweight primigravidas, *Birth*, 24(1): pp. 35–40. doi: 10.1111/j.1523-536x.1997.tb00334.x.

Fox, D., Coddington, R. and Scarf, V. (2022) Wanting to be 'with woman', not with machine: Midwives' experiences of caring for women being continuously monitored in labour, *Women and Birth*, 35(4), pp. 387-393

Furber, C.M. and McGowan, L. (2011) 'A qualitative study of the experiences of women who are obese and pregnant in the UK', *Midwifery*, 27(4), pp. 437–444. https://doi.org/10.1016/j.midw.2010.04.001

Furness, P.J., McSeveny, K., Arden, M.A., Garland, C., Dearden, A.M. and Soltani, H. (2011) 'Maternal obesity support services: a qualitative study of the perspectives of women and midwives', *BMC Pregnancy and Childbirth*, 11(69). https://doi.org/10.1186/1471-2393-11-69

Garces-Ozanne, A., Kalu, E.I. and Audas R. (2016) 'The effect of empowerment and selfdetermination on health outcomes', *Health Education and Behaviour*, 43(6), pp. 623–31. DOI: 10.1177/1090198116667665

Gard, M. and Wright, J. (2005) *The Obesity Epidemic. Science, Morality and Ideology.* 1<sup>st</sup> ed. London: Routledge.

Gibbins, K.J., Abel, D.E., Carletti, A.A., Morrison, T., Sullivan, E.L. and Marshall, N.E. (2023) Weight Bias in Obstetrics, *Current Obstetrics and Gynecology Report*, **12**, pp. 8–16 https://doi.org/10.1007/s13669-023-00348-9

Gillborn, S., Rickett, B. and Woolhouse, M. (2022) A Feminist Relational Discourse Analysis of mothers' voiced accounts of the "duty to protect" children from fatness and fatphobia, *Feminism & Psychology*, 32(2), pp. 224–245. DOI: 10.1177/09593535221074802

Goffman, E. (1963) Stigma: Notes on the Management of a Spoiled Identity. London: Penguin

Goisis, A., Sacker, A. and Kelly, Y. (2016) Why are poorer children at higher risk of obesity and overweight? A UK cohort study, *European Journal of Public Health*, 26(1): pp. 7-13. https://doi.org/10.1093/eurpub/ckv219

Golan, A., Wolman, I., Sagi, J.,Yovel, I. and David, M.P. (1994) Persistence of polyhydramnios during pregnancy--its significance and correlation with maternal and fetal complications, *Gynecologic and Obstetric Investigation*, 37(1): pp.18-20. doi: 10.1159/000292513.

Goldstein, R.F., Abell, S.K., Ranasinha, S., Misso, M., Boyle, J.A., Black, M.H. et al. (2017) Association of gestational weight gain with maternal and infant outcomes: a systematic review and meta-analysis, *Journal of the American Medical Association*, 317(21), pp. 2207–25.

Gore, S.A. Brown, D.M., West, D.S. (2003) The role of postpartum weight retention in obesity among women: a review of the evidence, *Annals of Behavioral Medicine*, 26(2): pp.149-59. doi: 10.1207/S15324796ABM2602\_07.

Gorlick, J.C., Gorman, C.V., Weeks, H.M., Pearlman, A.T., Schvey, N.A. and Bauer, K.W. (2021) "I Feel Like Less of a Mom": Experiences of Weight Stigma by Association among Mothers of Children with Overweight and Obesity, *Childhood Obesity*,17(1), pp. 68-75. doi: 10.1089/chi.2020.0199.

Graham M., Uesugi K., Olson C. (2016) Barriers to weight-related health behaviours: A qualitative comparison of the socioecological conditions between pregnant and post-partum low-income women, *Maternal & Child Nutrition*, 12, 349-361.

Gray, A. and Barnett, J. (2022) Welcoming new life under lockdown: Exploring the experiences of first-time mothers who gave birth during the COVID-19 pandemic, *British Journal of Health Psychology*, 27(2), pp. 534-552. doi: 10.1111/bjhp.12561.

Greenwood, B.N., Hardeman, R.R., Huang, L., Sojourner, A. (2020) Physician-patient racial concordance and disparities in birthing mortality for newborns, *Proceedings of the National Academy of Sciences of the United States of America*, 117(35), pp. 21194-21200, 10.1073/pnas.1913405117

Griffiths, A., Kingsley, S., Mason, Z., Tome, R., Tomkinson, M. and Jenkinson, B. (2023) Listening to larger bodied women: Time for a new approach to maternity care, *Women and Birth*, 36, pp. 397-400. https://doi.org/10.1016/j.wombi.2023.07.001

Gutin, I. (2018) In BMI We Trust: Reframing the Body Mass Index as a Measure of Health. *Social Theory of Health*, 16(3): pp.256–271. doi: 10.1057/s41285-017-0055-0

Hall, P.C. (1998) Mothering mythology in the late twentieth century: Science, gender lore, and celebratory narrative, *Canadian Woman Studies*, 18(2–3): pp. 337–345.

Hall, W. A., Tomkinson, J. and Klein, M. C. (2012) Canadian care providers' and pregnant women's approaches to managing birth, *Qualitative Health Research*, 22(5), pp. 575–586. https://doi.org/10.1177/1049732311424292.

Hankivsky, O. and Cormier, R. (2010) 'Intersectionality and Public Policy: Some Lessons from Existing Models', *Political Research Quarterly*, 64(1), pp.217-229. https://doi.org/10.1177%2F1065912910376385

Haraway, D. (1988) 'Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective', *Feminist Studies*, 14(3), pp. 575-599. https://doi.org/10.2307/3178066

Harding, S. (1991) *Whose science? Whose knowledge? Thinking from women's lives*. New York: Cornell University Press.

Harding, S. (1992) Rethinking Standpoint Epistemology: What is strong objectivity?, The

Centennial Review, 36(3), 437-470

Hargrove, T.W. (2018) Intersecting Social Inequalities and Body Mass Index Trajectories from Adolescence to Early Adulthood, *Journal of Health and Social Behaviour*, 59(1), pp. 56-73. https://doi.org/10.1177%2F0022146517746672

Hauff, L.E. and Demerath, E.W. (2012) Body image concerns and reduced breastfeeding duration in primiparous overweight and obese women. *American Journal of Human Biology*, 24(3): pp. 339–49.

Hauff, L.E., Leonard, S.A. and Rasmussen, K.M. (2014) Associations of maternal obesity and psychosocial factors with breastfeeding intention, initiation, and duration. *American Journal of* 

*Clinical Nutrition*, 99(3): pp. 624–34.

Healthcare Safety Investigation Branch (2023) *Assessment of risk during the maternity pathway.* Available at: https://hsib-kqcco125-media.s3.amazonaws.com/assets/documents/hsib-reportassessment-of-risk-during-the-maternity-pathway.pdf [accessed 8<sup>th</sup> August 2023] Healy, S., Humphreys, E. and Kennedy, C. (2016) Can maternity care move beyond risk? Implications for midwifery as a profession, *British Journal of Midwifery*, 24(3)

Henderson, J., Gao, H. and Redshaw, M. (2013) Experiencing maternity care: the care received and perceptions of women from different ethnic groups, *BMC Pregnancy Childbirth*, 13(196) https://doi.org/10.1186/1471-2393-13-196

Herndon, A.M. (2005) Collateral Damage from Friendly Fire?: Race, Nation, Class and the "War Against Obesity", *Social Semiotics*, 15(2), pp.127-141, DOI: 10.1080/10350330500154634

Heslehurst, N., Simpson, H., Ells, L.J., Rankin, J., Lang, R., Brown, T.J. and Summerbell, C.D. (2008) The impact of maternal BMI status on pregnancy outcomes with immediate short-term obstetric resource implications: a meta-analysis, *Obesity Reviews*, 9(6), pp. 635–683. doi: 10.1111/j.1467-789x.2008.00511.x.

Heslehurst, N., Russell, S., Brandon, H., Johnston, C., Summerbell, C. and Rankin, J. (2013) Women's perspectives are required to inform the development of maternal obesity services: a qualitative study of obese pregnant women's experiences, *Health Expectations*, 18(5), pp. 969– 981. doi: 10.1111/hex.12070.

Heslehurst, N., Dinsdale, S., Sedgewick, G., Simpson, H., Sen, S., Summerbell, C. and Rankin, J. (2015) An Evaluation of the Implementation of Maternal Obesity Pathways of Care: A Mixed Methods Study with Data Integration. *PLoS ONE*, 10(5), e0127122. https://doi.org/10.1371/journal.pone.0127122

Heslehurst, N., Dinsdale, S., Brandon, H., Johnston, C., Summerbell, C. and Rankin, J. (2017) Lived experiences of routine antenatal dietetic services among women with obesity: A qualitative phenomenological study, *Midwifery*, 49, pp. 47-53. doi: 10.1016/j.midw.2016.11.001.

Hollowell, J., Pillas, D., Rowe, R., Linsell, L., Knight, M. and Brocklehurst, P. (2014) The impact of maternal obesity on intrapartum outcomes in otherwise low risk women: Secondary analysis of the Birthplace national prospective cohort study, *British Journal of Obstetrics and Gynaecology*, 121(3), pp. 343–355. doi: 10.1111/1471-0528.12437.

Holton, S., East, C. and Fisher, J. (2017) Weight management during pregnancy: A qualitative study of women's and care providers' experiences and perspectives, *BMC Pregnancy and Childbirth*, 17(1). doi: 10.1186/s12884-017-1538-7.

Homer, C.S., Leap, N., Edwards, N. and Sandall, J. (2017) Midwifery continuity of carer in an area of high socio-economic disadvantage in London: A retrospective analysis of Albany Midwifery

Practice outcomes using routine data (1997-2009), *Midwifery*, 48, pp. 1-10. DOI: 10.1016/j.midw.2017.02.009

Hunter B. (2006) The importance of reciprocity in relationships between community-based midwives and mothers, *Midwifery*, 22(4), pp. 308-322. doi: 10.1016/j.midw.2005.11.002.

Hunter, B., Sanders, J. and Warren, L. (2015) *Exploring the Public Health Role of Midwives and Maternity Support Workers: Final Report*. Available at: https://www.rcm.org.uk/sites/default/files/RCM\_report\_ final.pdf.

Hunter, L., Da Motta, G., McCourt, C., Wiseman, O., Rayment, J., Haora, P., Wiggins, M. and Harden, A. (2018a) "It makes sense and it works": Maternity care providers' perspectives on the feasibility of a group antenatal care model (Pregnancy Circles), *Midwifery*, 66(July), pp. 56–63. doi: 10.1016/j.midw.2018.07.016.

Hunter, L., Da Motta, G., McCourt, C., Wiseman, O., Rayment, J., Haora, P., Wiggins, M. and Harden, A. (2018b) Better together: A qualitative exploration of women's perceptions and experiences of group antenatal care, *Women and Birth*, 32(4), pp. 1–10. doi: 10.1016/j.wombi.2018.09.001.

Hunter, B., Fenwick, J., Sidebotham, M. and Henley, J. (2019) Midwives in the United Kingdom: Levels of Burnout, Depression, Anxiety and Stress and Associated Predictors. *Midwifery*, 79:102526. doi: 10.1016/j.midw.2019.08.008.

Hutchison, E., Yoseph, R. and Wainman, H. (2023) Skin of colour: essentials for the nondermatologist, *Clinical Medicine Journal*, DOI: https://doi.org/10.7861/clinmed.2022-0335

Hyer, S., Davis, J.W., Slowik, J.L., Dove-Medows, E. and Giurgescu, C. (2023) A mixed methods systematic review of midwives' clinical practices related to prenatal care of women with obesity, *Midwifery*, 121: 103653 https://doi.org/10.1puhl016/j.midw.2023.103653

Ickovics, J. R., Kershaw, T., Westdahl, C., Magriples, U., Massey, Z., Reynolds, H. and Rising, S.S. (2007) 'Group prenatal care and perinatal outcomes: a randomized controlled trial', *Obstetrics and gynecology*, 110(2), pp. 330-339. doi: 10.1097/01.AOG.0000275284.24298.23.

Ickovics, J. R., Earnshaw, V., Lewis, J. B., Kershaw, T. S., Magriples, U., Stasko, E., Rising, S. S., Cassells, A. et al (2016) 'Cluster Randomized Controlled Trial of Group Prenatal Care: perinatal Outcomes Among Adolescents in New York City Health Centers', *American journal of public health*, 106(2), p. 359-365. doi: 10.2105/AJPH.2015.302960.

Independent Maternity Review (2022) Ockenden report – Final: Findings, conclusions, and essential actions from the independent review of maternity services at the Shrewsbury and Telford Hospital NHS Trust (HC1219). Available at:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data /file/1064302/Final-Ockenden-Report-web-accessible.pdf [accessed 26<sup>th</sup> September 2023]

Institute of Medicine (IOM)(2009) *Weight Gain during Pregnancy: Re-examining the evidence*. Rasmussen, K.M. and Yaktine, A.L. (eds) Washington: National Academies Press

Jamshed, S. (2014) Qualitative research method-interviewing and observation, *Journal of Basic and Clinical Pharmacy*, 5(4), pp. 87. doi: 10.4103/0976-0105.141942.

Jardine, J., Relph, S., Magee, L.A., von Dadelszen, P., Morris, E., Ross-Davie, M., Draycott, T., and Khalil, A. (2020) Maternity services in the UK during the COVID-19 pandemic: a national survey of modifications to standard care. *BJOG*, 128(5): pp. 880–9. https://doi.org/10.1111/1471-0528.16547.

Jarvie, R. (2017) Lived experiences of women with co-existing BMI>30 and gestational diabetes mellitus, *Midwifery*, 49, pp.79-86. <u>https://doi.org/10.1016/j.midw.2016.12.009</u>

Javasinghe, S., Herath, M.P., Beckett, J.M., Ahuja, K.D.K, Street, S.J., Byrne, N.M. and Hills, A.P. (2022) Gestational weight gain and postpartum weight retention in Tasmanian women: The Baby-bod Study. *PLoSOne*. <u>https://doi.org/10.1371/journal.pone.0264744</u>

Johnson, S. (2002) 10 Narratives of the Pregnant Body: The Stories of Women in the Latter Stages of Pregnancy, in Milnes, K., Roberts, B. and Horrocks, C. (eds.) *Narrative, Memory and Life Transitions*. Huddersfield: University of Huddersfield, pp. 103-111.

Jones, C. and Jomeen, J. (2017) Women with a BMI  $\ge$  30 kg/m<sup>2</sup> and their experience of maternity care: A meta ethnographic synthesis, *Midwifery*, 53(Oct), pp. 87–95. doi: 10.1016/J.MIDW.2017.07.011.

Jordan, B. (1997) 'Authoritative Knowledge and Its Construction', in Davis-Floyd, R.E. and Sargent, C.F. (eds.) *Childbirth and Authoritative Knowledge*. Berkeley: University of California Press, pp. 55-79.

Kac, G., Benício, M.H., Velásquez-Meléndez, G., Valente, J.G. and Struchiner, C.J. (2004) Gestational weight gain and prepregnancy weight influence postpartum weight retention in a cohort of Brazilian women. *The Journal of nutrition*, 134(3): pp661–6.

Kailasam, M., Guo, W., Hsann, Y.M. and Yang, K.S. (2019) Prevalence of care fragmentation among outpatients attending specialist clinics in a regional hospital in Singapore: a cross sectional study, *BMJ Open*, 9:e022965. doi:10.1136/ bmjopen-2018-022965

Kalinowski, J., Wurtz, H., Baird, M. and Willen, S.S. (2022) Shouldering the load yet again: Black women's experiences of stress during COVID-19, *SSM Mental Health*, 2: 100140, https://doi.org/10.1016/j.ssmmh.2022.100140

Karavadra, B., Stockl, A., Prosser-Snelling, E., Simpson, P. and Norris, E. (2020) Women's perceptions of COVID-19 and their healthcare experiences: a qualitative thematic analysis of a national survey of pregnant women in the United Kingdom, *BMC Pregnancy Childbirth*, 20(600) https://doi.org/10.1186/s12884-020-03283-2

Kartch, F. (2018) Narrative Interviewing. In Allen, M. (ed.) *The SAGE Encyclopedia of Communication Research Methods*. Thousand Oaks: SAGE Publications, pp.1073-1075.

Kawulich, B. B. (2005) Participant Observation as a Data Collection Method. *Forum Qualitative Sozialforschung Forum: Qualitative Social Research*, *6*(2). https://doi.org/10.17169/fqs-6.2.466

Kayem, G., Kurinczuk, J., Lewis, G., Brocklehurst, P. and Knight, M. (2011) Risk Factors for Progression from Severe Maternal Morbidity to Death: A National Cohort Study. *Plos One*. https://doi.org/10.1371/journal.pone.0029077

Keely, A., Cunningham-Burley, S., Elliott, L., Sandall, J. and Whittaker, A. (2017) "If she wants to eat...and eat and eat...fine! It's gonna feed the baby": Pregnant women and partners' perceptions and experiences of pregnancy with a BMI >40kg/m2, *Midwifery*, 49, pp.87-94. https://doi.org/10.1016/j.midw.2016.09.016

Keenan, J. and Stapleton, H. (2010) 'Bonny babies? Motherhood and nurturing in the age of obesity', *Health, Risk & Society*, 12(4), pp.369–83. https://doi.org/10.1080/13698571003792926

Kerrigan, A., Kingdon, C. and Cheyne, H. (2015) 'Obesity and normal birth: A qualitative study of clinician's management of obese pregnant women during labour', *BMC Pregnancy and Childbirth*, 15(1), pp. 1–11. doi: 10.1186/s12884-015-0673-2.

Kim, S.J., Aye, Y.M., Panyarachun, D., Hong, S.A. and Chang, Y-S. (2023) Social support for postpartum women and associated factors including online support to reduce stress and depression amidst COVID-19: Results of an online survey in Thailand, *PloSOne*, https://doi.org/10.1371/journal.pone.0289250

Kinshella, M-L.W., Moore, S.E., and Elango, R. (2021) The missing focus on women's health in the First 1,000 days approach to nutrition, *Public Health Nutrition*, 24(6): pp. 1526–1530. doi: 10.1017/S1368980020003894

Kinser, P., Jallo, N., Moyer, S., Weinstock, M., Barrett, D., Mughal, N., Stevens, L and Rider, A. (2021) "It's always hard being a mom, but the pandemic has made everything harder": A qualitative exploration of the experiences of perinatal women during the COVID-19 pandemic. *Midwifery*, 109, <u>https://doi.org/10.1016/j.midw.2022.103313</u>

Kirkegaard, H., Bliddal, M., Støvring, H., Rasmussen, K.M., Gunderson, E.P., Køber, L., Sørensen, T.I.A. and Nøhr, E.A. (2021) Maternal weight change from prepregnancy to 18 months postpartum and subsequent risk of hypertension and cardiovascular disease in Danish women: A cohort study. *PLoS Med*, 18(4): e1003486.

Kirkham, M. (2010) *The midwife-mother relationship*. 2<sup>nd</sup> ed. London: Bloomsbury Academic

Kirkup, B. (2022) *Reading the signals, Maternity and neonatal services in East Kent – the Report of the Independent Investigation*. Available at:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data /file/1111992/reading-the-signals-maternity-and-neonatal-services-in-east-kent\_the-report-of-

the-independent-investigation\_print-ready.pdf [accessed 26<sup>th</sup> September 2023]

Knight, M., Bunch, K, Vousden, N., Morris, E., Simpson, N., Gale, C., O'Brien, P., Quigley, M. Et al (2020) Characteristics and outcomes of pregnant women admitted to hospital with confirmed SARS-CoV2 infection in UK: national population-based cohort study, *British Medical Journal*, 369, <u>https://doi.org/10.1136/bmj.m2107</u>

Knight, M., Bunch, K., Tuffnell, D., Shakespeare, J., Kotnis, R., Kenyon, S. and Kurinczuk, J.J. (Eds.) on behalf of MBRRACE-UK (2020) *Saving Lives, Improving Mothers' Care - Lessons learned to inform maternity care from the UK and Ireland Confidential Enquiries into Maternal Deaths and Morbidity 2016-18.* Oxford: National Perinatal Epidemiology Unit, University of Oxford.

Knight, M., Bunch, K., Tuffnell, D., Patel, R., Shakespeare, J., Kotnis, R., Kenyon, S. and Kurinczuk, J.J. (Eds.) on behalf of MBRRACE-UK (2021) *Saving Lives, Improving Mothers' Care - CORE report lessons learned to inform maternity care from the UK and Ireland Confidential Enquiries into Maternal Deaths and Morbidity 2017-19.* Oxford: National Perinatal Epidemiology Unit, University of Oxford.

Knight, M., Bunch, K., Patel, R., Shakespeare, J., Kotnis, R., Kenyon, S. and Kurinczuk, J.J. (Eds.) on behalf of MBRRACE-UK (2022) *Saving Lives, Improving Mothers' Care Core Report - Lessons learned to inform maternity care from the UK and Ireland Confidential Enquiries into Maternal Deaths and Morbidity 2018-20.* Oxford: National Perinatal Epidemiology Unit, University of Oxford.

Knight-Agarwal, C.R., Williams, L.T., Davis, D., Davey, R., Shepherd, R., Downing, A. and Lawson, K. (2016) 'The perspectives of obese women receiving antenatal care: A qualitative study of women's experiences', *Women and Birth*, 29(2), pp.189-195. https://doi.org/10.1016/j.wombi.2015.10.008

Knox, S., Crowther, S., McAra-Couper, J. and Gilkison, A. (2018) Health policy and its unintended consequences for midwife-woman partnerships: Is normal pregnancy at risk when the BMI measure is used? *New Zealand College of Midwives Journal*, 54, https://doi.org/10.12784/nzcomjnl54.2018.4.30-37

Kominiarek, M., Gay, F. and Peacock, N. (2015) 'Obesity in Pregnancy: A Qualitative Approach to Inform an Intervention for Patients and Providers.', *Maternal & Child Health Journal*, 19(8), pp. 1698–1712. doi: 10.1007/s10995-015-1684-3.

Kominiarek, M.A., Crockett, A., Covington-Kolb, S., Simon, M. and Grobman, W.A. (2017) Association of Group Prenatal Care with Gestational Weight Gain, *Obstetrics & Gynecology*, 129(4), pp.663–70. doi: 10.1097/AOG.00000000001940. Kominiarek, M.A., Lewkowitz, A.K., Carter, E., Fowler, S.A. and Simon, M. (2019) Gestational weight gain and group prenatal care: a systematic review and meta-analysis, *BMC Pregnancy and Childbirth*, 19(18)

Kukla, R. (2006) Ethics and Ideology in Breastfeeding Advocacy Campaigns, *Hypatia*, 21(1), pp. 157-80.

Lau, C., Rogers, J.M., Desia, M., Ross, M.G. (2011) Fetal programming of adult disease: Implications for prenatal care, *Obestrics and Gynecology*, 117(4), pp. 978-985 doi: 10.1097/AOG.0b013e318212140e.

Lauridsen, D.S., Sandoe, P. and Holm, L. (2018) Being targeted as a "severely overweight pregnant woman" - A qualitative interview study, *Health Expectations*, 21(5), pp.878-886. DOI: 10.1111/hex.12681

Lavender, T. and Smith, D. M. (2016) Seeing it through their eyes: A qualitative study of the pregnancy experiences of women with a body mass index of 30 or more, *Health Expectations*, 19(2), pp. 222-233. doi: 10.1111/hex.12339.

Laverack, G. (2004) *Health Promotion Practice*. 1st ed. London: Sage Publications.

Lawson, A.K. and Marsh, E.E. (2017) Hearing the Silenced Voices of Underserved Women -The Role of Qualitative Research in Gynecologic and Reproductive Care, *Obstetrics and Gynecology Clinics of North America*, 44(1): pp109–120. doi: 10.1016/j.ogc.2016.11.005

Lazar, J., Boned-Rico, L., Olander, E.K. and McCourt, C. (2021) A systematic review of providers' experiences of facilitating group antenatal care. *Reproductive Health*, 18(180) https://doi.org/10.1186/s12978-021-01200-0

Leahy-Warren, P., McCarthy, G. and Corcoran, P. (2012) First-time mothers: social support, maternal parental self-efficacy and postnatal depression, *Journal of Clinical Nursing*, 21(3-4): pp. 388-97. doi: 10.1111/j.1365-2702.2011.03701.x.

Lee, E.J. (2008) Living with risk in the age of 'intensive motherhood': Maternal identity and infant feeding, *Health, Risk & Society*, 10(5), pp. 467-477, DOI: https://doi.org/10.1080/13698570802383432

Lee, J. (2020) "You will face discrimination": Fatness, motherhood, and the medical profession, *Fat Studies*, 9(1), pp. 1-16, DOI: 10.1080/21604851.2019.1595289

Lifestyles Team, NHS Digital (2019) *Health Survey for England 2018*. London: NHS Digital, part of the Government Statistical Service. Available at: https://digital.nhs.uk/data-and-information/publications/statistical/health-survey-for-england/2018/summary (Accessed: 27 February 2021)

Lindhardt, C.L., Rubak, S., Mogenson, O., Lamont, M.F. and Joergenson, J.S. (2013) The experience of pregnant women with a body mass index > 30 kg/m2 of their encounters with health professionals, *Acta Obstetricia et Gynecologica*, 92(9), pp.1101 – 1107. DOI: 10.1111/aogs.12186

Lindquist, A.C., Kurinczuk, J.J., Wallace, E.M., Oats, J. and Knight, M. (2015) Risk factors for maternal morbidity in Victoria, Australia: a population-based study, *BMJ Open*, 5(8). doi: 10.1136/bmjopen-2015-007903

Liu, R., Chao, M., Jostad-Laswell, A. and Duncan, L. (2017) Does CenteringPregnancy Group Prenatal Care Affect the Birth Experience of Underserved Women? A Mixed Methods Analysis, *Journal of Immigrant & Minority Health*, 19(2), pp. 415–422. doi: 10.1007/s10903-016-0371-9.

Lovell, H., Silverio, S.A., Story, L., Skelton, E. and Matthew, J. (2023) Factors which influence ethnic minority women's participation in maternity research: A systematic review of quantitative and qualitative studies, *Plos One*, https://doi.org/10.1371/journal.pone.0282088

Lupton, D. (1999) Risk and the ontology of pregnant embodiment. In: Lupton, D. (ed) *Risk and sociocultural theory: New Directions and Perspectives*. Cambridge: Cambridge University Press, pp. 59-85.

Mackintosh, N., Rance, S., Carter, W. and Sandall, J. (2017) Working for patient safety: a qualitative study of women's help-seeking during acute perinatal events, *BMC Pregnancy and Childbirth*, 17(232)

Maimburg, R.D., Vaeth, M., Durr, J., Hvidman, L. and Olsen, J. (2010) Randomised trial of structured antenatal training sessions to improve the birth process, *British Journal of Obstetrics and Gynaecology*, 117: pp. 921-928

Malterud, K., Siersma, V.D. and Guassora, A.D. (2016) 'Sample Size in Qualitative Interview Studies: Guided by Information Power', *Qualitative Health Research*, 26(13), pp.1853-1760. DOI: 10.1177/1049732315617444

Markovic, T.P., Muirhead, R., Overs, S., Ross, G.P., Louie, J.C.Y., Kizirian, N., Denyer, G., Petocz, P. et al (2015) Randomized Controlled Trial Investigating the Effects of a Low–Glycemic Index Diet on Pregnancy Outcomes in Women at High Risk of Gestational Diabetes Mellitus: The GI Baby 3 Study, *Diabetes Care*, 39(1), pp. 31–38. doi: 10.2337/dc15-0572.

Marmot, M. (2010) '*Fair Society, Healthy Lives (The Marmot Review)*', UCL Institute of Health Equity. Available at: http://www.instituteofhealthequity.org/projects/fair-society-healthy-lives-the-marmot-review (Accessed 27 February 2021)

Martin, E. (1987) The Woman in the Body. Boston: Beacon Press.

Maternity Action (2022) *Missing: reform of Shared Parental Leave.* Available at: https://maternityaction.org.uk/wp-content/uploads/Missing-reform-of-SPL-v2-23-08-22.pdf [accessed 27<sup>th</sup> September 2023]

Mazumdar, K., Sen, I. and Parekh, S., (2022) Vignettes of mothering through the pandemic: A gendered perspective of challenges and making meaning of motherhood in India, *Women's Studies International Forum*, 90,102539, https://doi.org/10.1016/j.wsif.2021.102539

McCall, L. (2005) 'The complexity of intersectionality', *Signs*, 30(3), pp. 1771–1800. https://doi.org/10.1086/426800

McCann, M. T., Newson, L., Burden, C., Rooney, J.S., Charnley, M. S. and Abayomi, J.C. (2018) 'A qualitative study exploring midwives' perceptions and knowledge of maternal obesity: Reflecting on their experiences of providing healthy eating and weight management advice to pregnant women', *Maternal and Child Nutrition*, 14(2). doi: 10.1111/mcn.12520.

McClain, D. (2019) *We Live for the We. The Political Power of Black Motherhood.* New York: Bold Type Books

McCourt, C. and Pearce, A. (2000) Does continuity of carer matter to women from minority ethnic groups?, *Midwifery*, 16(2), pp.145-54. doi: 10.1054/midw.2000.0204.

McGrory, S., Neill, R.D., Gillen, P., McFadden, P., Manthorpe, J., Ravalier, J., Mallet, J., Schroder, H., et al (2022) Self-Reported Experiences of Midwives Working in the UK across Three Phases during COVID-19: A Cross-Sectional Study, *International Journal of Environment Research and Public Health*, 19(20): 13000. doi: 10.3390/ijerph192013000

McLemore, M.R., Altman, N., Cooper, S., Williams, L.R., and, Franck, L. (2018) Health care experiences of pregnant, birthing and postnatal women of color at risk for preterm birth, *Social Science & Medicine*, 201, pp. 127-135, 10.1016/j.socscimed.2018.02.013 LaFrance, M.N., and McKenzie-Mohr, S. (2014) Women counter-storying their lives. In McKenzie-Mohr, S. and LaFrance, M.N. (eds) *Women voicing resistance: Discursive and narrative explorations.* London: Routledge, p1-15.

Marshall, A. (2019) *High BMI waterbirth – time for trusts to take the plunge?* AIMS Journal, 31(2)

McPhail, D., Bombak, A., Ward, P and Allison, J. (2016) Wombs at risk, wombs as risk: Fat women's experiences of reproductive care, *Fat Studies*, 5(2), pp.98-115. <u>https://doi.org/10.1080/21604851.2016.1143754</u>

McPherson, K., Marsh, T. and Brown, M. (2007) *Tackling obesities: future choices - project report.* London: The Stationery Office. Available at: http://www.foresight.gov.uk/Obesity/obesity final/Index.html [Accessed: 27 February 2021] Mills, A., Schmied, V.A. and Dahlen, H.G. (2013) 'Get alongside us', women's experiences of being overweight and pregnant in Sydney, Australia, *Maternal and Child Nutrition*, 9(3), pp.309 - 321. doi: 10.1111/j.1740-8709.2011.00386.x.

Molliqaj, V., Grezda, K., Goodman, D., Little, G., Rising, S. and Hoxha, I. (in preparation) Systematic review and meta-analysis on the effect of perinatal group care in clinical outcomes. PROSPERO 2021 CRD42021249962. Available at: https://www.crd.york.ac.uk/prospero/display\_record.php?ID=CRD42021249962

Moltrecht, B., Dalton, L.J., Hanna, J.R., Law, C and Rapa, E. (2022) Young parents' experiences of pregnancy and parenting during the COVID-19 pandemic: a qualitative study in the United Kingdom, *BMC Public Health*, volume 22(523)

Montgomery, E., De Backer, K., Easter, A., Magee, L.A., Sandall, J. and Silverio, S.A. (2023) Navigating uncertainty alone: A grounded theory analysis of women's psycho-social experiences of pregnancy and childbirth during the COVID-19 pandemic in London, *Women and Birth*, 36(1), pp. e106-e117. https://doi.org/10.1016/j.wombi.2022.05.002

Morse, J.M. (2009) Mixing Qualitative Methods, *Qualitative Health Research*, 19(11): pp. 1523-1524. https://doi.org/10.1177%2F1049732309349360

Morse, J.M. (2010) Simultaneous and sequential qualitative mixed methods designs, *Qualitative Inquiry*, 16(6), pp482-491. https://doi.org/10.1177%2F1077800410364741

Mueller, C.G., Webb, P.J. and Morgan, S. (2020) The Effects of Childbirth Education on Maternity Outcomes and Maternal Satisfaction, *Journal of Perinatal Education*, 29(1): pp. 16–22. doi: 10.1891/1058-1243.29.1.16

Munk-Olsen T, Laursen TM, Pedersen CB, Mors O, Mortensen PB (2006) New parents and mental disorders: a population-based register study, *Journal of the American Medical Association*, 296(21), pp. 2582–2589 doi:10.1001/jama.296.21.2582

Murphy, E. (1998) Food choices for babies. In *The nation's diet: The social science of food choice*, (ed): Murcott , A. pp. 250 – 266. Harlow: Addison Wesley Longman.

Murray, S.A., Kendall, M., Carduff, E., Worth, A., Harris, F.M., Lloyd, A., Cavers, D., Grant, L. and Sheikh, A. (2009) Use of serial qualitative interviews to understand patients' evolving experiences and needs, *British Medical Journal*, 339: b3702. doi: https://doi.org/10.1136/bmj.b3702

Murray-Davis, B., Darling, E.K., Berger, H., Melamed, N., Li, J., Guarna, G., Syed, M., Barrett, J. et al (2022) Midwives perceptions of managing pregnancies complicated by obesity: A mixed methods study, *Midwifery*, 105: 103225. doi: 10.1016/j.midw.2021.103225

Nair M., Kurinczuk, J.J., Brocklehurst, P., Sellers, S., Lewis, G. and Knight, M. (2015) Factors associated with maternal death from direct pregnancy complications: a UK national case–control study, *British Journal of Obstetrics and Gynaecology*, 122: pp.653–66.

Najmabadi, K.M., Tabatabaie, M.G., Vedadhir, A.A. and Mobarakabadi, S.S. (2020) The marginalisation of midwifery in medicalised pregnancy and childbirth: a qualitative study, *British Journal of Midwifery*, 28(11), https://doi.org/10.12968/bjom.2020.28.11.768

Nash, J.C. (2008) 'Re-thinking intersectionality', *Feminist Review*, 89(1): pp.1-15. doi:10.1057/fr.2008.4

National Health Service England (2023) *Three Year Delivery Plan for maternity and neonatal services*, NHS England: London. Available at: https://www.england.nhs.uk/wp-content/uploads/2023/03/B1915-three-year-delivery-plan-for-maternity-and-neonatal-services-march-2023.pdf [accessed 6<sup>th</sup> August 2023]

National Institute for Clinical and Health Excellence (NICE) (2010) *Weight management before, during and after pregnancy after pregnancy*, PH27. Available at: https://www.nice.org.uk/guidance/ph27 [Accessed: 20 September 2020]

National Institute for Clinical and Health Excellence (NICE) (2019) *Intrapartum care for women* with existing medical conditions or obstetric complications and their babies [I] Evidence reviews for obesity, NICE guideline NG121. Available at:

https://www.nice.org.uk/guidance/ng121/evidence/evidence-review-i-obesity-pdf-241806242772 [Accessed 15<sup>th</sup> October 2023]

National Institute for Clinical and Health Excellence (NICE) (2021a) *Antenatal care, NG201*. Available at: https://www.nice.org.uk/guidance/ng201/chapter/Recommendations#routineantenatal-clinical-care [Accessed: 20th September 2023]

National Institute for Clinical and Health Excellence (NICE) (2023) *Intrapartum care, NG235*. Available at: https://www.nice.org.uk/guidance/ng235/resources/intrapartum-care-pdf-66143897812933 [accessed 20<sup>th</sup> September 2023] National Institute for Clinical and Health Excellence (NICE) (2021b) *Inducing labour, NG207*. Available at: https://www.nice.org.uk/guidance/ng207/resources/inducing-labour-pdf-66143719773637 [accessed 15<sup>th</sup> October 2023]

Nehring, I., Schmoll, S., Beyerlein, A., Hauner, H. and von Kries, R. (2011) Gestational weight gain and long-term postpartum weight retention: a meta-analysis, *American Journal of Clinical Nutrition*, 94(5), pp. 1225-31. doi: 10.3945/ajcn.111.015289.

Newton, M.S., McLachlan, H.L., Willis, K.F. and Forster, D.A. (2014) Comparing satisfaction and burnout between caseload and standard care midwives: findings from two cross-sectional surveys conducted in Victoria, Australia. *BMC Pregnancy Childbirth*, 24:14(1).

Newton, M.S., McLachlan, H.L., Forster, D.A. and Willis, K.F. (2016) Understanding the "work" of caseload midwives: a mixed-methods exploration of two caseload midwifery models in Victoria, Australia. *Women and Birth*, 29(3): pp. 223–33.

Nguyen, T.T., Criss, S., Kim, M., De La Cruz, M.M., Thai, N., Merchant, J.S., Hswen, Y., Allen, A.M. et al. (2022) Racism During Pregnancy and Birthing: Experiences from Asian and Pacific Islander, Black, Latina, and Middle Eastern Women, *Journal of Racial and Ethnic Health Disparities, 30, pp1-11* doi: 10.1007/s40615-022-01475-4

NHS England (2016) *National Maternity Review: Better Births Improving outcomes of maternity services in England, A Five Year Forward View for maternity care.* London: NHS England. Available at: https://www.england.nhs.uk/wp- content/uploads/2016/02/national-maternity-review-report.pdf [accessed 18th November 2020]

NHS England (2020) 2020/21 National Tariff Payment System Guidance on the maternity pathway payment. Available at: https://www.england.nhs.uk/wp-content/uploads/2021/02/20-21NT\_Guidance\_on\_maternity\_pathway\_payment.pdf [accessed 19<sup>th</sup> August 2023]

NHS England (2021) *Performance Report*. Available at: https://www.england.nhs.uk/wp-content/uploads/2021/01/nhs-england-performance-report-2019-20.pdf [accessed 20<sup>th</sup> September 2023]

NHS England (2023) *Three Year Delivery Plan for maternity and neonatal services*. London: NHS England. Available at: https://www.england.nhs.uk/wp-content/uploads/2023/03/B1915-three-year-delivery-plan-for-maternity-and-neonatal-services-march-2023.pdf [accessed 10<sup>th</sup> October 2023]

Ni, P.K. and Siew Lin, S.K. (2011) The role of family and friends in providing social support towards enhancing the wellbeing of postpartum women: a comprehensive systematic review, *JBI Library of Systematic Reviews*, 9(10): pp. 313-370. doi: 10.11124/01938924-201109100-00001.

Nicholls, J.A., David, A.L., Iskaros, J., Siassakos, D. and Lanceley, A. (2021) Consent in pregnancyan observational study of antenatal care in the context of Montgomery: all about risk?, *BMC Pregnancy and Childbirth*, 21(102) https://doi.org/10.1186/s12884-021-03574-2

Nolan, M. (2015) Perceptions of risk: How they influence women's and health professionals' choices, *British Journal of Midwifery*, 23(8), https://doi.org/10.12968/bjom.2015.23.8.547

Norris, G., Hollins Martin, C.J. and Dickson, A. (2020 An exploratory Interpretative Phenomenological Analysis (IPA) of childbearing women's perceptions of risk associated with having a high Body Mass Index (BMI), *Midwifery*, 89, 102789. https://doi.org/10.1016/j.midw.2020.102789

Nursing and Midwifery Council (NMC)(2019) The Code. London: NMC.

Nursing and Midwifery Council (NMC)(2021) Practicing as a Midwife in the UK. London: NMC.

Nyman, V. M. K., Prebensen, Å. K. and Flensner, G. E. M. (2010) Obese women's experiences of encounters with midwives and physicians during pregnancy and childbirth, *Midwifery*, 26(4), pp. 424–429. doi: 10.1016/j.midw.2008.10.008.

O'Connor, D. (2016) *Saving Babies' Lives. A care bundle for reducing stillbirth*. Available at: https://www.england.nhs.uk/wp-content/uploads/2016/03/saving-babies-lives-car-bundl.pdf [Accessed 3rd March 2020]

O'Connor, D. B., Aggleton, J. P., Chakrabarti, B., Cooper, C. L., Creswell, C., Dunsmuir, S., Fiske, S.T., Gathercole, S et al (2020). Research priorities for the COVID-19 pandemic and beyond: A call to action for psychological science. *British Journal of Psychology*, 111(4), 603–629. https://doi.org/10.1111/bjop.12468

Office for National Statistics (2020) *Baby names in England and Wales: 2019.* Available at: https://www.gov.uk/government/statistics/baby-names-in-england-and-wales-2019 [accessed 1<sup>st</sup> August 2020]

Olander, E.K. and Atkinson, L. (2013) Obese women's reasons for not attending a weight management service during pregnancy, *Acta Obstetricia et Gynecologica Scandinavica*, 92(10), pp 1227-1230. https://doi.org/10.1111/aogs.12195

Olander, E.K, Berg, M., McCourt, C., Carlström, E. and Dencker, A. (2015) Person-centred care in interventions to limit weight gain in pregnant women with obesity - a systematic review, *BMC Pregnancy and Childbirth*, 15(50)

Olson, C. M., Groth, S.W., Graham, M. L., Reschke, J. E., Strawderman, M. S. and Fernandez, I.D. (2018) The effectiveness of an online intervention in preventing excessive gestational weight gain: The e-moms roc randomized controlled trial, *BMC Pregnancy and Childbirth*. 18(1), pp. 1–11. doi: 10.1186/s12884-018-1767-4.

Orbach, S. (2006) *Fat is a feminist issue*. 2<sup>nd</sup> ed. London: Arrow.

Oteng-Ntim, E., Varma, R., Croker, H., Poston, L. and Doyle, P. (2012) Lifestyle interventions for overweight and obese pregnant women to improve pregnancy outcome: systematic review and meta-analysis. *BMC Medicine*, 10(47)

Padmanabhan, U., Summerbell, C. D. and Heslehurst, N. (2015) A qualitative study exploring pregnant women's weight-related attitudes and beliefs in UK: the BLOOM study, *BMC Pregnancy and Childbirth*, 15(99) doi: 10.1186/s12884-015-0522-3.

Parker, G. (2014) Mothers at Large: Responsibilizing the Pregnant Self for the "Obesity Epidemic", *Fat Studies*, 3(2), pp.101-118, DOI: 10.1080/21604851.2014.889491

Parker, G. (2017) Shamed into health? Fat pregnant women's views on obesity management strategies in maternity care. *Women's Studies Journal*, 31(1): pp. 22-33.

Parker, G. and Pausé, C. (2018) Pregnant with possibility: Negotiating fat maternal subjectivity in the "War on Obesity", *Fat Studies*, 7:2, 124-134, DOI: 10.1080/21604851.2017.1372990

Patel, C., Atkinson, L. and Olander, E.K. (2013) An exploration of obese pregnant women's views of being referred by their midwife to a weight management service', *Sexual and Reproductive Healthcare*, 4(4): 139–140. doi: 10.1016/j.srhc.2013.10.006

Pearl, R.L. and Schulte, E.M. (2021) Weight Bias during the COVID-19 pandemic, *Current Obesity Reports*, 10(2): pp 181-190 doi: 10.1007/s13679-021-00432-2.

Penney, T.L. and Kirk, S.F.L. (2015) The Health at Every Size Paradigm and Obesity: Missing Empirical Evidence may help push the reframing obesity debate forward, *Americal Journal of Public Health*, 105(5), pp. e38-e42. doi: 10.2105/AJPH.2015.302552

Peter, M. and Wheeler, R. (2022) *The Black Maternity Experiences Report*. Available at: https://www.nhsbmenetwork.org.uk/wp-

content/uploads/2022/05/TheBlackMaternityExperienceReport.pdf [accessed 21<sup>st</sup> September 2023]

Petrou, S., Kupek, E., Vause, S. and Maresh, M. (2003) Antenatal visits and adverse perinatal outcomes: Results from a British population-based study, *European Journal of Obstetrics Gynecology and Reproductive Biology*, 106(1), pp. 40–49. doi: 10.1016/S0301-2115(02)00215-4.

Phelan, S. (2010) Pregnancy: a "teachable moment" for weight control and obesity prevention, *American Journal of Obstetrics and Gynecology*, 202(2), ppe1-8. doi:10.1016/j.ajog.2009.06.008.

Piccolo, O., Kinshella, M-L.W., Salimu, S., Vidler, M., Banda, M., Dube, Q., Kawaza, K., Goldfarb, D.M. and Nyondo-Mipando, A.L. (2022) Healthcare worker perspectives on mother's insufficient milk supply in Malawi, *International Breastfeeding Journal*, 17(14), doi: 10.1186/s13006-022-00460-1

Possamai-Inesedy, A. (2006) Confining risk: Choice and responsibility in childbirth in a risk society, *Health Sociology Review*, 15(4), pp. 406-414, DOI: <u>10.5172/hesr.2006.15.4.406</u>

Poston, L., Bell, R., Croker, H., Flynn, A. C., Godfrey, K.M., Goff, L., Hayes, L., Khazaezadeh, N. et al (2015) Effect of a behavioural intervention in obese pregnant women (the UPBEAT study): a multicentre, randomised controlled trial, *The Lancet. Diabetes & endocrinology*, 3(10), pp. 767–77. doi: 10.1016/S2213-8587(15)00227-2.

Prater, C., Cohen, L., Chau, E., Carter, E.B., Kuebee, B., Teepe, M. and Keegan, M. (2023) Perceived Discrimination During Prenatal Care at a Community Health Center, *Journal of Racial and Ethnic Health Disparities*, 10(3): pp. 1304–1309. doi: 10.1007/s40615-022-01315-5

Preis H, Mahaffey B, Heiselman, C. and Lobel, M. (2022) The impacts of the COVID-19 pandemic on birth satisfaction in a prospective cohort of 2,341 U.S. Women. *Women and Birth*, 35(5):458-65. doi: 10.1016/j.wombi.2021.10.004

Public Health England (2019) *Health of women before and during pregnancy: health behaviours, risk factors and inequalities: An updated analysis of the maternity services dataset antenatal booking data.* London: Public Health England. Available at:

https://assets.publishing.service.gov.uk/media/5dc00b22e5274a4a9a465013/Health\_of\_women \_before\_and\_during\_pregnancy\_2019.pdf [accessed 9<sup>th</sup> October 2023]

Public Health England (2020) *The Health Protection (Coronavirus, Restrictions) (England) Regulations 2020.* London: Public Health England. Available at: https://www.legislation.gov.uk/uksi/2020/350/introduction/made [accessed 6<sup>th</sup> August 2023]

Puhl, R. M., & Heuer, C. A. (2010) Obesity stigma: Important considerations for public health. *American Journal of Public Health*, 100(6), pp. 1019-1028.

Puhl, R.M. and King, K.M. (2013) Weight discrimination and bullying, *Best Practice and Research. Clinical Endocrinology and Metabolism*, 27(2), pp. 117-27. doi: 10.1016/j.beem.2012.12.002.

Raatikainen, K., Heiskanen, N. and Heinonen, S. (2007) Under-attending free antenatal care is associated with adverse pregnancy outcomes, *BMC Public Health*, 7, pp. 1–8. doi: 10.1186/1471-2458-7-268.

Race Disparity Unit (2021) *Final report on progress to address COVID-19 health inequalities. Appendix C: Ethnic minority experiences of COVID-19.* Available at: https://www.gov.uk/government/publications/final-report-on-progress-to-address-covid-19health-inequalities/appendix-c-ethnic-minority-experiences-of-covid-19#risk-and-perception-ofrisk [accessed 4<sup>th</sup> September 2023]

Ramachenderan, J., Bradford, J. and McLean, M. (2008) Maternal obesity and pregnancy complications: A review, *Australian and New Zealand Journal of Obstetrics and Gynaecology*, 48(3), pp. 228–235. doi: 10.1111/j.1479-828X.2008.00860.x.

Rayment-Jones, H., Murrells, T. and Sandall, J. (2015) An investigation of the relationship between the caseload model of midwifery for socially disadvantaged women and childbirth outcomes using routine data--a retrospective, observational study, *Midwifery*, 31(4), pp. 409-17. doi: 10.1016/j.midw.2015.01.003.

Rayment-Jones, H., Harris, J., Harden, A., Khan, Z. and Sandall, J. (2019) How do women with social risk factors experience United Kingdom maternity care? A realist synthesis, *Birth*, 46(3), pp.461-474. https://doi.org/10.1111/birt.12446

Raymond, J. E., Foureur, M. J. and Davis, D. L. (2014) Gestational Weight Change in Women Attending a Group Antenatal Program Aimed at Addressing Obesity in Pregnancy in New South Wales, Australia, *Journal of Midwifery and Women's Health*, 59(4), pp. 398–404. doi: 10.1111/jmwh.12089.

Razurel, C., Kaiser, B., Sellenet, C., and Epiney, M. (2012) Relation between perceived stress, social support and coping strategies and maternal well-being: A review of the literature, *Women & Health* 53(1): pp. 74–99. DOI: 10.1080/03630242.2012.732681

Reed, R., Sharman, R. and Inglis, C. (2017) Women's descriptions of childbirth trauma relating to care provider actions and interactions. *BMC Pregnancy and Childbirth*, 17(21). DOI 10.1186/s12884-016-1197-0

Reid, J. (2007) Centering Pregnancy<sup>®</sup>: A Model for Group Prenatal Care, *Nursing for Women's Health*, 11(4): pp. 382-388. <u>https://doi.org/10.1111/j.1751-486X.2007.00194.x</u>

Relph, S. and NMPA Project Team (2021) NHS Maternity Care for Women with a Body Mass Index of 30 kg/m2 or Above: Births between 1 April 2015 and 31 March 2017 in England, Wales and Scotland. London: RCOG.

Renfrew, M.J., McFadden, A., Bastos, M.H., Campbell, J., Channon, A.A., Cheung, N.F, Delage Silva, D.R.A., Downe, S., et al (2014) 'Midwifery and quality care: Findings from a new evidenceinformed framework for maternal and newborn care', *The Lancet*, 384(9948): pp.1129–1145. DOI: 10.1016/S0140-6736(14)60789-3

Reppond, H.A., and Bullock, H.E. (2019) Reclaiming "good motherhood": US mothers' critical resistance in family homeless shelters, *Feminism and Psychology*, 30(1) https://doi.org/10.1177/0959353519870

Riessman, C.K. (1993) Narrative Analysis. California: SAGE Publications Ltd.

Riessman, C.K. (2008) Narrative Methods for the Human Sciences. California: SAGE Publications.

Riley, V., Ellis, N., Mackay, L. and Taylor, J. (2021) The impact of COVID-19 restrictions on women's pregnancy and postpartum experience in England: A qualitative exploration, *Midwifery*, 101: 103061. doi: 10.1016/j.midw.2021.103061

Rockliffe, L., Peters, S., Heazell, A. E. P., and Smith, D.M. (2021) Factors influencing health behaviour change during pregnancy: A systematic review and meta-synthesis, *Health Psychology Review*, *15*(4), pp. 613–632. doi: 10.1080/17437199.2021.1938632

Rodríguez-Almagro, J., Hernández-Martínez, A., Rodríguez-Almagro, D., Quirós-García, J.M., Martínez-Galiano, J.M., Gómez-Salgado, J. (2019) Women's perceptions of living a traumatic childbirth experience and factors related to a birth experience, *International Journal of Environmental Research and Public Health*, 16(9):1654. doi: 10.3390/ijerph16091654 Rogozińska, E., Zamora, J., Marlin, N., Betran, A.P., Astrup, A., Bogaerts, A., Cecatti, J.G. Dodd, J.M., et al. (2019) Gestational weight gain outside the Institute of Medicine recommendations and adverse pregnancy outcomes: analysis using individual participant data from randomised trials, *BMC Pregnancy Childbirth* 19, 322. https://doi.org/10.1186/s12884-019-2472-7

Rowe, R., Knight, M. and Kurinczuk, J. J. (2018) Outcomes for women with BMI>35kg/m2 admitted for labour care to alongside midwifery units in the UK: A national prospective cohort study using the UK Midwifery Study System (UKMidSS), *PLoS ONE*, 13(12), pp. 1–18. doi: 10.1371/journal.pone.0208041.

Royal College of Midwives (RCM)(2014) *High Quality Midwifery Care*. Available at: https://www.rcm.org.uk/media/2354/high-quality-midwifery-care.pdf [accessed 26<sup>th</sup> September 2023]

Royal College of Midwives (RCM)(2015) *State of Maternity Services Report*. Available at: https://www.abenforj.com.br/site/arquivos/manuais/240.pdf [accessed 10<sup>th</sup> October 2023]

Royal College of Midwives (RCM) (2021a) *RCM Clinical Briefing Sheet – Waterbirth during the COVID-19 Pandemic.* Available at: https://www.rcm.org.uk/media/5166/waterbirth-in-a-time-of-covid.pdf [accessed 14<sup>th</sup> August 2023]

Royal College of Midwives (RCM)(2021b) *RCM Warns of Midwife Exodus as Maternity Staffing Crisis Grows.* Available at: https://www.rcm.org.uk/media-releases/2021/september/rcm-warns-of-midwife-exodus-as-maternity-staffing-crisis-grows/ [accessed 21<sup>st</sup> February 2022]

Royal College of Obstetricians and Gynaecologists (RCOG)(2016) Providing Quality Care for Women: A Framework for Maternity Care Standards. London: RCOG. Available at: https://www.rcog.org.uk/media/xt2fqcw0/maternitystandards.pdf [accessed 26<sup>th</sup> September 2023]

Saguy, A. C. and Riley, K. W. (2005) Weighing Both Sides: Morality, Mortality, and Framing Contests over Obesity, *Journal of Health Politics, Policy and Law*, 30(5), pp. 869–923. doi: 10.1215/03616878-30-5-869.

Sandall, J., Soltani, H., Gates, S., Shennan, A and Devane, D. (2016) Midwife led continuity models versus other models of care for childbearing women (Review), *Cochrane database of systematic reviews*, Issue 4. CD004667. doi: 10.1002/14651858.CD004667.pub5.

Sanders, J. and Blaylock, R. (2021) "Anxious and traumatised": Users' experiences of maternity care in the UK during the COVID-19 pandemic, *Midwifery*, 102: 103069. DOI: 10.1016/j.midw.2021.103069

Saukko, P. (2003) *Doing Research in Cultural Studies*. London: SAGE publications.

Saucedo, M., Esteves-Pereira, A.P., Pencolé, L., Rigouzzo, A., Proust, A., Bouvier-Colle, M., CNEMM study group and Deneux-Tharaux, C. (2021) Understanding maternal mortality in women with obesity and the role of care they receive: a national case-control study, *International Journal of Obesity*, 45: pp. 258–265 https://doi.org/10.1038/s41366-020-00691-4

Saultz, J.W. and Albedaiwi, W. (2004) Interpersonal continuity of care and patient satisfaction: a critical review, *Annals of family medicine*, 2(5): pp.445-51. doi: 10.1370/afm.91

Saultz, J.W. and Lochner, J. (2005) Interpersonal continuity of care and care outcomes: a critical review, *Annals of family medicine*, 3(2): pp.159-66. doi: 10.1370/afm.285.

Saw, L, Aung, W, and Sweet, L. (2021) What are the experiences of women with obesity receiving antenatal maternity care? A scoping review of qualitative evidence, *Women and Birth*, 34(5), pp. 435-446. https://doi.org/10.1016/j.wombi.2020.09.014

Sawtell, M., Wiggins, M., Wiseman, O., Mehay, A., McCourt, C., Sweeney, L., Hatherall, B., Ahmed, T. et al (2023) Group antenatal care: findings from a pilot randomised controlled trial of REACH Pregnancy Circles, *Pilot and Feasibility Studies*, 9(42)

Schmied, V.A., Duff, M., Dahlen, H.G., Mills, A.E. and Kolt, G.S. (2011) 'Not waving but drowning': a study of the experiences and concerns of midwives and other health professionals caring for obese childbearing women, *Midwifery* 27(4): pp. 424–30.

Sharma, J., O'Connor, M. and Jolivet, R.R. (2018) Group antenatal care models in low- and middle-income countries: a systematic evidence synthesis, *Reproductive Health*, 15(38)

Sherbourne, C. and Stewart, A. (1991) The MOS social support survey. *Social Science & Medicine* 32(6): 705–714.

Siegal, A.M., Tucker, A., Adkins, L.D., Mitchell, C., Brown, H.L. and Dotters-Katz, S. (2020) Postpartum Weight Loss in Women with Class-III Obesity: Do they Lose what they gain? *American Journal of Perinatology*, 37(1): pp. 53-58. doi: 10.1055/s-0039-1695778.

Siegel, S. (2018) Participant Observation, in Frey, B. (ed.) *The SAGE Encyclopedia of Education Research, Measurement, and Evaluation.* Thousand Oaks: SAGE Publications, pp. 1215-1216.

Small, K.A., Sidemotham, M., Fenwick, J. and Gamble, J. (2019) Intrapartum cardiotocograph monitoring and perinatal outcomes for women at risk: Literature review, *Women and Birth*, 33(5),DOI:https://doi.org/10.1016/j.wombi.2019.10.002

Sonmezer, E. (2020) Professional autonomy for midwifery in the contemporary UK maternity system: part 1. *BJM*, 28(12)

Squire, C. Davis, M., Esin, C., Andrews, M., Harrison, B., Hyden, L-C. & Hyden, M. (2014) *What is Narrative Research?* London: Bloomsbury Academic.

Smith, D. and Lavender, T. (2011) 'The maternity experience for women with a body mass index > 30kg/m2: a meta-synthesis', *BJOG*, 118(7), pp.779-789. DOI: 10.1111/j.1471-0528.2011.02924.x

Stange, K.C. (2009) The problem of fragmentation and the need for integrative solutions, *Annals of Family Medicine*, 7(2): pp.100-3. doi: 10.1370/afm.971.

Staton, L.J., Panda, M., Chen, I., Genao, I., Kurz, J., Pasanen, M., Mechaber, A.J., Menon, M. et al (2007) When race matters: disagreement in pain perception between patients and their physicians in primary care, *Journal of the National Medical Association*, 99(5), pp. 532-8.

Sterling B. S., Fowles E. R., Garcia A. A., Jenkins S. K., Wilkinson S., Kim M., and Walker L. O. (2009) Altered perceptions of personal control about retained weight and depressive symptoms in low-income postpartum women. *Journal of Community Health Nursing*, 26, 143-157.

Stoll, K. and Hall, W.A. (2013) Attitudes and Preferences of Young Women with Low and High Fear of Childbirth, *Qualitative Health Research*, 23(11) https://doi.org/10.1177/10497323135075

Strings, S. (2019) *Fearing the Black Body.* New York: New York University Press.

Suarez, A. and Yakupova, V. (2022) The impacts of the COVID-19 pandemic on birth satisfaction and birth experiences in Russian women, *Frontiers in Global Women's Health*, 3, https://doi.org/10.3389/fgwh.2022.1040879

Sutin, A.R., Stephan, Y. and Terracciano, A. (2015) Weight Discrimination and risk of mortality, *Psychological Science*, 26(11), pp.1803-11. DOI: 10.1177/0956797615601103

ten Hooper-Bender, P., de Bernis, L., Campbell, J., Downe, S., Fauveau, V., Fogstad, H., Homer, C.E., Kennedy, H.P., et al. (2014) Improvement of maternal and newborn health through midwifery, *The Lancet*, 384(9949), pp.1226-35. DOI: 10.1016/S0140-6736(14)60930-2

Thachuk, A. (2007) Midwifery, informed choice, and reproductive autonomy: A relational approach. *Feminism & Psychology*, 17(1), pp. 39–56 https://doi.org/10.1177/0959353507072911

Thangaratinam, S., Rogozińska, E., Jolly, K., Glinkowski, S., Roseboom, T., Tomlinson, J.W., Kunz, R., Mol, B.W. et al (2012) Effects of Interventions in Pregnancy on Maternal Weight and Obstetric

Outcomes, *Obstetrical & Gynecological Survey*, 67(10), pp. 603–604. doi: 10.1097/OGX.0b013e31826f78d9.

Thedinga, H.K., Zehl, R. and Thiel, A. (2021) Weight stigma experiences and self-exclusion from sport and exercise settings among people with obesity, *BMC Public Health*, 21(565)

Thomas, J. and Harden, A. (2008) Methods for the thematic synthesis of qualitative research in systematic reviews, *BMC Medical Research Methodology*, 8(45). https://doi.org/10.1186/1471-2288-8-45

Thomson, M. and Downe, S. (2010) Changing the future to change the past: women's experiences of a positive birth following a traumatic birth experience, *Journal of Reproductive and Infant Psychology*, 28(1): pp. 102–12.

Thomson, G., Cook, J., Crossland, N., Balaam, M-C., Byrom, A., Jassat, R. and Gerrard, S. (2022) Minoritised ethnic women's experiences of inequities and discrimination in maternity services in North-West England: a mixed-methods study. *BMC Pregnancy and Childbirth*, 22 (958)

Thorbjornsdottir KE, Karlsen IE, Dahl B, Røseth I. "Talk to me, not at me": obese women's experiences of birth and their encounter with birth attendants—a qualitative study. *Int J Qual Stud Health Well Being*. 2020; **15**(1):1845286.

Thornton P. L., Kieffer E. D., Salabarria-Pena Y., Odoms-Young A., Willis S. K., Kim H., Salinas M. A. (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, pp. 95-104.

Thurow, R. (2016) *The First 1000 days: A Crucial Time for Mothers and Children – and the World.* New York: Public Affairs.

Timmermans, S. and Berg, M. (2003) *The Gold Standard: The Challenge Of Evidence-Based Medicine.* Philedelphia: Temple University Press.

Tuncalp, O., Were, W.M., MacLennan, C., Oladapo, O.T., Gulmezoglu, A.M., Bahl, R., Daelmans, B., Mathai, M., et al (2015) 'Quality of care for pregnant women and newborns—the WHO vision', *British Journal of Obstetrics and Gynaecology*, 122(8): pp. 1045–1049. doi: 10.1111/1471-0528.13451.

Tyldesley-Marshall, N., Greenfield, S.M., Parretti, H.M., Jolly, K., Jebb, S. and Daley, A.J. (2021) The experiences of postnatal women and healthcare professionals of a brief weight management intervention embedded within the national child immunisation programme, *BMC Pregnancy Childbirth.* 21: 462. doi: 10.1186/s12884-021-03905-3

Unnithan-Kumar, M. (2011) Introduction: Corporeality and Reproduction: Understanding Fatness through the Diverse Experiences of Motherhood, Consumption and Social Regulation, in

Unnithan-Kumar, M. and Tremayne, S. (eds) *Fatness and the Maternal Body*. New York: Berghahn Books, pp.1-20.

Van Ha A.V., Zhao Y., Pham N.M., Nguyen C.L., Nguyen P.T.H., Chu T.K., et al. (2019) Postpartum weight retention in relation to gestational weight gain and pre-pregnancy body mass index: A prospective cohort study in Vietnam. *Obesity research & clinical practice*. 13(2): pp.143–9.

Vedam, S., Stoll, K., Martin, K., Rubashkin, N., Partridge, S., Thordarson, D., Jolicoeur, G. and the Changing Childbirth in BC Steering Council (2017) The Mother's Autonomy in Decision Making (MADM) scale: Patient-led development and psychometric testing of a new instrument to evaluate experience of maternity care, *PLoS One*, 12(2):e0171804. doi: 10.1371/journal.pone.0171804

Vedam S., Stoll, K., Taiwo, T.K., Rubaskhin, N., Cheyney, M., Strauss, M., McLemore, M, Cadena, M. et al (2019) The giving voice to mothers study: inequity and mistreatment during pregnancy and childbirth in the United States. *Reproductive Health*, 16(77)

Vermeulen, J., Bilsen, J., Buyl, R., De Smedt, D., Gucciardo, L., Faron, G. and Fobelets, M. (2022) Women's experiences with being pregnant and becoming a new mother during the COVID-19 pandemic, *Sexual and Reproductive Healthcare*, 32:100728. doi: 10.1016/j.srhc.2022.100728.

Vogels-Broeke, M., Daemers, D., Bude, L., de Vries, R. and Mieuwenhuijze, M. (2022) Sources of information used by women during pregnancy and the perceived quality. *BMC Pregnancy and Childbirth*, 22(109

Waldenström, U., & Turnbull, D. (1998). A systematic review comparing continuity of midwifery care with standard maternity services. *British Journal of Obstetrics & Gynaecology*, *105*(11), pp. 1160-1170. https://doi.org/10.1111/j.1471-0528.1998.tb09969.x

Walsh, D. and Downe, S. (2005) Appraising the quality of qualitative research', *Midwifery*, 22(2), pp.108-119. https://doi.org/10.1016/j.midw.2005.05.004

Walsh, D. (2006) Risk and Normality in Maternity Care: revisioning risk for normal childbirth. In: Symon, A. (ed) *Risk and Choice in Maternity Care*, Edinburgh: Churchill Livingstone.

Ward, P. and McPhail, D. (2019) Fat shame and blame in reproductive care: implications for ethical health care interactions', *Women's Reproductive Health*, 6(4), pp.225-241. https://doi.org/10.1080/23293691.2019.1653581 Warin, M., Turner, K., Moore, V. and Davies, M. (2008) 'Bodies, mothers and identities: Rethinking obesity and the BMI', *Sociology of Health and Illness*, 30(1), pp. 97–111. doi: 10.1111/j.1467-9566.2007.01029.x.

Warin, M., Moore, V. and Davies, M. (2011) The traffic in 'Nature': Maternal Bodies and Obesity, in Unnithan-Kumar, M. and Tremayne, S. (eds) *Fatness and the Maternal Body*. New York: Berghahn Books, pp.22-42.

Warin, M., Zivkovic, T, Moore, V. and Davies, M. (2012) Mothers as smoking guns: Fetal overnutrition and the reproduction of obesity, *Feminism and Psychology*, 22(3), https://doi.org/10.1177/0959353512445359

Warin, M. J. and Gunson, J.S. (2013) 'The Weight of the Word: Knowing Silences in Obesity Research', *Qualitative Health Research*, 23(12), pp. 1686-96. DOI: 10.1177/1049732313509894

Wdowiak, A., Makara-Studzińska, M., Raczkiewicz, D., Janczyk, P., Słabuszewska-Jóźwiak, A., Wdowiak-Filip, A. and Studzińska, N. (2021) Effect of Excessive Body Weight and Emotional Disorders on the Course of Pregnancy and Well-Being of a Newborn before and during COVID-19 Pandemic, *Journal of Clinical Medicine*, 10(4): 656. doi: 10.3390/jcm10040656

Weir, Z., Bush, J., Robson, S.C., McParlin, C., Rankin, J. and Bell, R. (2010) Physical activity in pregnancy: a qualitative study of the beliefs of overweight and obese pregnant women, *BMC Pregnancy and Childbirth*, 10(18)

Wen, L.M., Rissel, C and He, G. (2017) The Effect of Early Life Factors and Early Interventions on Childhood Overweight and Obesity 2016, *Journal of Obesity*, 3642818. doi: 10.1155/2017/3642818

West, R. and Bartkowski, J.P. (2019) Negotiating Patient-Provider Power Dynamics in Distinct Childbirth Settings: Insights from Black American Mothers, *Societies: 9*(2), 45. https://doi.org/10.3390/soc9020045

White, L.K., Kornfield, S.L., Himes, M.M., Forkpa, M., Waller, R., Njoroge, W.F.M., Barzilay, R.... and Gur, R.E. (2023) The impact of postpartum social support on postpartum mental health outcomes during the COVID-19 pandemic, *Archives of Women's Mental Health*, 26, p. 531–541

Wiggins, M., Sawtell, M., Wiseman, O., McCourt, C., Eldridge, S., Hunter, R., Bordea, E., Mustard, C. et al. (2020) 'Group antenatal care (Pregnancy Circles) for diverse and disadvantaged women: study protocol for a randomised controlled trial with integral process and economic evaluations', *BMC Health Services Research*, 20 (919), https://doi.org/10.1186/s12913-020-05751-z

Wildman, R.P., Munter, P. and Reynolds, K. (2008) The Obese without cardiometabolic risk factor clustering and the normal weight with cardiometabolic risk factor clustering: prevalence and correlates of 2 phenotypes among the US population (NHANES 1999-2004), *Archives of Internal Medicine*, 168(15), pp.1617–1624. doi:10.1001/archinte.168.15.1617

Wiles R. (1998) The views of women of above average weight about appropriate weight gain in pregnancy, *Midwifery*, 14(4), pp. 254–60. doi: 10.1016/s0266-6138(98)90098-5.

Women and Equalities Committee (2021) *Changing the perfect picture: an inquiry into body image.* Available at:

https://committees.parliament.uk/publications/5357/documents/53751/default/ [accessed 6<sup>th</sup> August 2023]

Wong, S.H.M., Gishen, F. and Lokugamage, A.U. (2021) 'Decolonising the Medical Curriculum': Humanising medicine through epistemic pluralism, cultural safety and critical consciousness, *London Review of Education*, 19(1). DOI: 10.14324/LRE.19.1.16

World Health Organisation (WHO) (2015) *The Global Strategy for Women's, Children's and Adolescents' Health (2016–2030). Every Women Every Child.* Available at: https://www.who.int/life-course/partners/global-strategy/globalstrategyreport2016-2030-lowres.pdf [Accessed 23<sup>rd</sup> March 2020]

World Health Organisation (WHO) (2016) WHO recommendations on antenatal care for a positive pregnancy experience. Available at: https://www.who.int/publications/i/item/9789241549912 [Accessed 1<sup>st</sup> February 2021]

World Health Organisation (WHO) (2020) *Obesity and Overweight*. Available at: https://www.who.int/news-room/fact-sheets/detail/obesity-and-overweight [Accessed 13<sup>th</sup> January 2021]

Wrottesley, S.V., Lamper, C. and Pisa, P.T. (2015) Review of the importance of nutrition during the first 1000 days: maternal nutritional status and its associations with fetal growth and birth, neonatal and infant outcomes among African women, *Journal of Developmental Origins of Health and Disease*, 7(2), pp. 144–162. DOI: 10.1017/S2040174415001439

Zhou, J., Havens, K.L., Starnes, C.P., Pickering, T.A., Brito, N.H., Hendrix, C.L., Thomason, M.E., Vatalaro, T.C. and Smith, B.A. (2021) Changes in social support of pregnant and postnatal mothers during the COVID-19 pandemic, *Midwifery*, 103: 103162. doi: 10.1016/j.midw.2021.103162