Identifying and managing perinatal anxiety: perspectives of healthcare practitioners. A qualitative study

Victoria Anne Silverwood

Master of Philosophy

October 2019

Keele University

Table of Contents

Declaration........ viii

Abstract........ ix

Acknowledgements........ x

List of abbreviations........ xi

List of figures and tables........ xiv

1 Background........ 1

1.1 Introduction........ 1

1.2 Introduction to myself as the author........ 2

1.2.1 Clinical and academic training........ 2

1.2.2 My interest in mental health in primary care........ 2

1.2.3 Reflexivity........ 3

1.3 Current research recommendations........ 4

1.4 Structure of perinatal mental health services in the UK........ 5

2 Literature review........ 8

2.1 Methods of literature review........ 9

2.2 Overview of perinatal mental health........ 10

2.2.1 Definition of perinatal mental health........ 10

2.2.2 Incidence and prevalence........ 10

2.2.3 Predisposing factors to perinatal mental health problems........ 11

2.2.4 The impact of perinatal mental health problems........ 12

2.2.4.1 How are women affected by PMH problems? 12

2.2.4.2 How does PMH in a mother affect her child(ren)? 12

2.2.4.3 Financial implications and costs to the National Health Service 14

2.3 Perinatal depression 15

2.4 Perinatal anxiety 17

2.5 Identification of perinatal mental health problems 20

2.5.1 Case-finding tools for perinatal mental health problems 20

2.5.2 Case finding tools for perinatal depression 23

2.5.3 Case finding tools for perinatal anxiety 25

2.5.4 Barriers to the identification of perinatal mental health problems 28

2.5.4.1 Individual patient level 28

2.5.4.2 Clinician level 29

2.5.4.3 System level 30

2.6 Management of women with perinatal mental health problems 31

2.6.1 Healthcare professionals 31

2.6.2 Psychological therapies for perinatal mental health problems 32

2.6.3 Technology 32

2.6.4 Antidepressants 33

2.6.5 Women's preferences 36

2.6.6 Family support 36

2.7 The research gap 38

2.8 Study aims and objectives 40

3 Methods 41

3.1 Philosophical position and methodological approach 41

3.2 Patient and public involvement and engagement 45

3.3 Justification of methodological approach in my study 47

3.3.1 The approach to the interview process 47

3.3.2 The approach to data analysis 48

3.3.3 Quality 51

3.4 Methods 53

3.4.1 Ethics 53

3.4.2 Topic guide 53

3.4.3 Participants and recruitment 54

3.4.4 Interviews 56

3.4.5 Data analysis 56

4 Results - Findings One: The concept of perinatal anxiety 58

4.1 Participant demographics 59

4.2 Perinatal anxiety as an unfamiliar concept 65

4.3 Perinatal anxiety as a ‘hidden problem’ 68

4.4 Barriers to the identification of perinatal anxiety 72

4.5 The use of case-finding tools vs. clinical intuition 76

5 Results - Findings Two: Organisation of care 80

5.1 Supporting women with perinatal anxiety 81

5.2 Fragmented care 88

5.3 Education, training and resources 93

5.4 Opportunities to improve care 98

6 Discussion 105

6.1 Introduction to discussion chapter 105

6.2 Study aims and objectives 106

6.3 Summary of findings 107

6.4 Comparison with existing literature 110

6.4.1 The concept of perinatal anxiety 110

6.4.2 Organisation of care 114

6.5 Strengths and limitations 121

6.5.1 Strengths 121

6.5.2 Limitations 122

6.6 Implications for clinical practice 124

6.6.1 Potential for improvements in patient care 124

6.6.2 Changes to healthcare professional training 125

6.6.3 Service organisation 125

6.7 Implications for policy 127

6.8 Recommendations for research 129

7 Reflections 131

7.1 My personal circumstances 132

7.2 Personal and professional development 134

7.2.1 What have I learnt? 134

7.2.1.1 The importance of organisation 134

7.2.1.2 Challenges with balancing clinical and academic work 135

7.2.1.3 Research training 136

7.2.1.4 Literature searching and critiquing 137

7.2.1.5 Academic writing skills 137

7.2.1.6 Data analysis 138

7.2.1.7 The process of completing the MPhil 138

7.2.2 Implications for my continued professional development 139

7.3 Reflexivity 141

7.4 Research process 146

7.4.1 Ethics 146

7.4.2 Scientific Foundation Board Grant 147

7.4.3 Patient and public involvement and engagement 148

7.4.4 Topic guide development 149

7.4.5 Recruitment and arranging interviews 149

7.4.6 Conducting interviews 150

7.4.7 Research team 151

7.5 Final thoughts 152

8 References 153

9 Appendices 182

9.1 Appendix One: COREQ (COnsolidated criteria for REporting Qualitative research) Checklist 182

9.2 Appendix Two: Ethical approval letters – Keele and HRA 184

9.3 Appendix Three: Topic guide for semi-structured interviews 189

9.4 Appendix Four: Invitation to participate letter 191

9.5 Appendix Five: Study Information Sheet for participants 192

9.6 Appendix Six: Participant consent form 195

9.7 Appendix Seven: Example of field notes 197

9.8 Appendix Eight: Example of initial analysis 199

9.9 Appendix Nine: Example of further analysis 203

9.10 Appendix Ten: Publication in the British Journal of General Practice (BJGP) ………………………………………………………………………………207

Declaration

This thesis is original work produced by Victoria Silverwood. It has not been submitted to this University or any other institution in support of any other degree or qualification.

Abstract

Background
Perinatal mental health (PMH) problems are those which occur during pregnancy or up to 12 months postpartum, and affect up to 20% of women. Perinatal anxiety (PNA) is at least as common as depression and can adversely impact on both mother and child. Despite this, research into anxiety has received less attention than depression. The National Institute for Health and Care Excellence (NICE) guidance on PMH (CG192) has identified PNA as a research priority. This study aimed to explore the perspectives and experiences of a variety of healthcare professionals (HCPs) in the identification and management of PNA.

Methods
This qualitative study took place across both primary and secondary care. Semi-structured interviews (n=23) utilising a topic guide with a range of HCPs were performed. Data was generated and analysed via an iterative approach using principles of constant comparison. A PMH patient and public involvement and engagement (PPIE) group were involved throughout the study.

Results
Twenty-three HCPs were interviewed: ten general practitioners, seven midwives, five health visitors and one obstetrician. Findings are presented within two chapters. The first findings chapter discusses 'The concept of PNA' with sub-themes of: PNA as an unfamiliar concept; PNA as a hidden problem; The identification of PNA and The use of case-finding tools vs. clinical intuition. The second findings chapter describes 'Organisation of care' with the following sub-themes: Supporting women with PNA; Fragmented care; Education, training and resources and Opportunities to improve care.

Conclusion
Awareness and understanding of PNA amongst HCPs is variable, with debate over what is 'normal' anxiety in pregnancy. Apparent reluctance of women to present means that PNA appears to be a 'hidden problem'. HCPs suggested that PNA can be challenging to identify with mixed views on the use and value of case-finding tools. A variety of ways in which to support women with PNA were discussed. Care for women diagnosed with PNA was reported to be fragmented and inter-professional communication was described as poor. There was some confusion around responsibilities and role boundaries. HCPs expressed concerns about a lack of formal education and training around PNA and PMH in general. Opportunities to provide good care for women with PNA were discussed and HCPs suggested that an integrated approach to PNA care would be beneficial. Implications for clinical practice and policy were identified including raising the profile of PNA amongst clinicians, improving HCP education and training and developing more integrated care pathways. Recommendations for further research include understanding women's' perspectives about PNA.

Acknowledgements

I would like to thank my supervisors Professor Carolyn Chew-Graham and Dr Tom Kingstone for their guidance and constant support throughout completing this MPhil. Their knowledge and experience has helped to guide the approach to and the structure of this thesis. I would also like to acknowledge Dr Bernadette Bartlam who provided supervisory support for a few months at the start of my study.

This research would not have been possible without the study participants who volunteered to take part, I am very grateful for their time and contributions. I would like to thank the Keele perinatal mental health patient and public involvement and engagement (PPIE) group for their involvement throughout my study. I would like to thank my fellow postgraduate research students and staff at the Institute for Primary Care and Health Sciences (iPCHS) at Keele for inspiration and support. I would like to acknowledge the Royal College of General Practitioners' for awarding me a Scientific Foundation Board grant to provide some additional financial support for conducting my study.

Special thanks go to my husband Jon Broad, as well as my family, for their support throughout the writing of this thesis.

List of abbreviations

- ACF - Academic Clinical Fellow
- ADHD – Attention Deficit Hyperactivity Disorder
- AFP - Academic Foundation Programme
- ANRQ – Antenatal Risk Questionnaire
- BMA - British Medical Association
- BJGP – British Journal of General Practice
- BUMPs – Best use of medicines in pregnancy advisory network
- CBT - Cognitive Behavioural Therapy
- CG192 - Clinical Guidance 192: Antenatal and postnatal mental health: clinical management and service guidance
- COREQ – Consolidate criteria for Reporting Qualitative research checklist
- CRN – Clinical Research Network
- FYFVMH - Five Year Forward View for Mental Health
- GAD - Generalised Anxiety Disorder
- GPs - General Practitioners
- HCPs - Healthcare professionals
- HRA - Health Research Authority
- HVs - Health Visitors
- IAPT - Improving Access to Psychological Therapies
- iPCHS - Institute for Primary Care and Health Sciences
- MCAP – Massachusetts Child Psychiatry Access Project for Moms
- MDT - Multi-disciplinary team
- MRes – Masters of Research

- MWs - Midwives
- NCT - National Childbirth Trust
- NHS – National Health Service
- NICE - National Institute for Health and Clinical Excellence
- NIHR – National Institute for Health Research
- Obs - Obstetricians
- OCD - Obsessive Compulsive Disorder
- PASS – Perinatal Anxiety Screening Scale
- PDQ – Prenatal Distress Questionnaire
- PGCE(MedEd) - Postgraduate Certificate in Medical Education
- PGDip(MedSci) - Postgraduate Diploma in Medical Sciences
- PhD - Doctorate of Philosophy
- PMH - Perinatal Mental Health
- PNA - Perinatal Anxiety
- PNAS - Poor Neonatal Adaptation Syndrome
- PND - Perinatal Depression
- PPHN – Persistent Pulmonary Hypertension of the New born
- PSAS – Postpartum Specific Anxiety Scale
- PTSD - Post Traumatic Stress Disorder
- RCT – Randomised Control Trial
- RCGP - Royal College of General Practitioners
- RCOG - Royal College of Obstetricians and Gynaecologists
- RESPOND – Randomised Evaluation of antidepressants and support for women with postnatal depression
- RWT – Royal Wolverhampton Trust

- SATH – Shrewsbury and Telford Hospitals
- SFB – Scientific Foundation Board
- SSOTP – Staffordshire and Stoke-on-Trent Partnership Trust
- ST3 – Specialty Trainee year three
- TK – Dr Tom Kingstone
- UHNM – University Hospital of North Midlands
- UK - United Kingdom
- WHO - World Health Organisation

List of figures and tables

Figure 1-1 Opportunities to identify PMH problems during the perinatal period.......... 6

Figure 2-1 Literature review initial strategy search terms 9

Figure 2-2 Case finding questions for PMH problems 21

Figure 3-1 Braun and Clarke Step-by-Step Guide to Thematic Analysis 49

Figure 3-2 Recruitment Flow chart.. 55

Figure 4-1 The Concept of PNA.. 64

Figure 5-1 Organisation of care themes 80

Table 1 GP Participants 60

Table 2 HV Participants 62

Table 3 MW Participants... 63

1 Background

1.1 Introduction

This thesis reports a qualitative research study investigating the experiences of healthcare professionals (HCPs) of diagnosing and managing perinatal anxiety (PNA).

This chapter will briefly introduce myself as the author, outline current research recommendations around Perinatal Mental Health (PMH) and perinatal anxiety (PNA) in particular and describe current perinatal care in the United Kingdom (UK).

1.2 Introduction to myself as the author

1.2.1 Clinical and academic training

I started this Master of Philosophy (MPhil) whilst I held a National Institute for Health Research (NIHR) Academic Clinical Fellow (ACF) post in General Practice and I qualified as a General Practitioner (GP) on 3rd March 2019. The four year ACF post provided protected research time in addition to clinical General Practice training. Along with a Postgraduate Diploma in Medical Sciences, this MPhil forms the basis of my ACF research experience and achievements. Whilst conducting my study I practised clinical medicine for half of my working week so this MPhil was undertaken on a part-time basis.

1.2.2 My interest in mental health in primary care

Clinically I have an interest in mental health in primary care and I am passionate about improving access to excellent quality care for patients. This interest prompted me to seek out research opportunities within mental health in primary care when I was selecting a study to complete for my MPhil. The Keele Institute for Primary Care and Health Sciences (iPCHS) is currently developing a research strand focussing on mental health and I was excited when the initial concept for a study about PNA was discussed with me by my supervisors as it meant that I could develop it further. I hope that I can make a meaningful contribution to the evidence base surrounding PMH by carrying out my study.

1.2.3 Reflexivity

I was pregnant whilst conducting the GP interviews and subsequently had some maternity leave so had a natural break after conducting some of the data collection in the study. (The midwife (MW) and health visitor (HV) interviews were all collected by Dr. Tom Kingstone (TK).) I feel that working in General Practice and being a Mum both provide me with alternative perspectives which are likely to have influenced my approach to my study. I reflect on these additional elements to my personal and professional lives in my reflection chapter of this MPhil.

1.3 Current research recommendations

The NHS Five Year Forward View for Mental Health (FYFVMH) (Farmer and Dyer 2016) recommends the provision of additional specialist and community PMH support across England by 2020/21. The development and implementation of evidence-based pathways that promote holistic care and integrated services for PMH are highlighted as priorities.

Within PMH, PNA is a common problem that has implications for mother, baby, and wider society (discussed in section 2.4 Perinatal anxiety). In their 'Clinical Guidance 192: Antenatal and postnatal mental health: clinical management and service guidance' (CG192) the National Institute for Health and Care Excellence (NICE) states that it is common for anxiety disorders to remain undiagnosed and therefore untreated. Therefore CG192 recommends the need for further research to develop effective psychological interventions to treat moderate to severe anxiety disorders in pregnancy.

Before interventions for management can be developed, it is important to understand the factors influencing current practice. Currently there is a limited evidence-base from which to draw appropriate identification and management options; therefore this MPhil explores the views of HCPs about current practice, and the barriers and facilitators to identification and management of women with PNA.

1.4 Structure of perinatal mental health services in the UK

During perinatal care women receive regular appointments with their MW, HV and GP. Figure 1-1 Opportunities to identify PMH problems during the perinatal period outlines the scheduled appointments that women should receive (it is indicated with an ‘F’ when an appointment occurs only in a woman’s first pregnancy). If women require further support additional appointments should be arranged to ensure that women receive appropriate support.

Care should be coordinated between necessary HCPs and individualised management plans should be developed. Women who are higher risk or experiencing more serious PMH problems that cannot be appropriately supported in the community should have appropriate and timely local access to specialist PMH services; however currently only 15% of localities provide this (Farmer and Dyer 2016). The majority of PMH problems are managed by primary care teams which includes MWs, HVs, GPs and the Improved Access to Psychological Therapies (IAPT) team, with only a minority of women being managed in secondary care (Department of Health 2014).

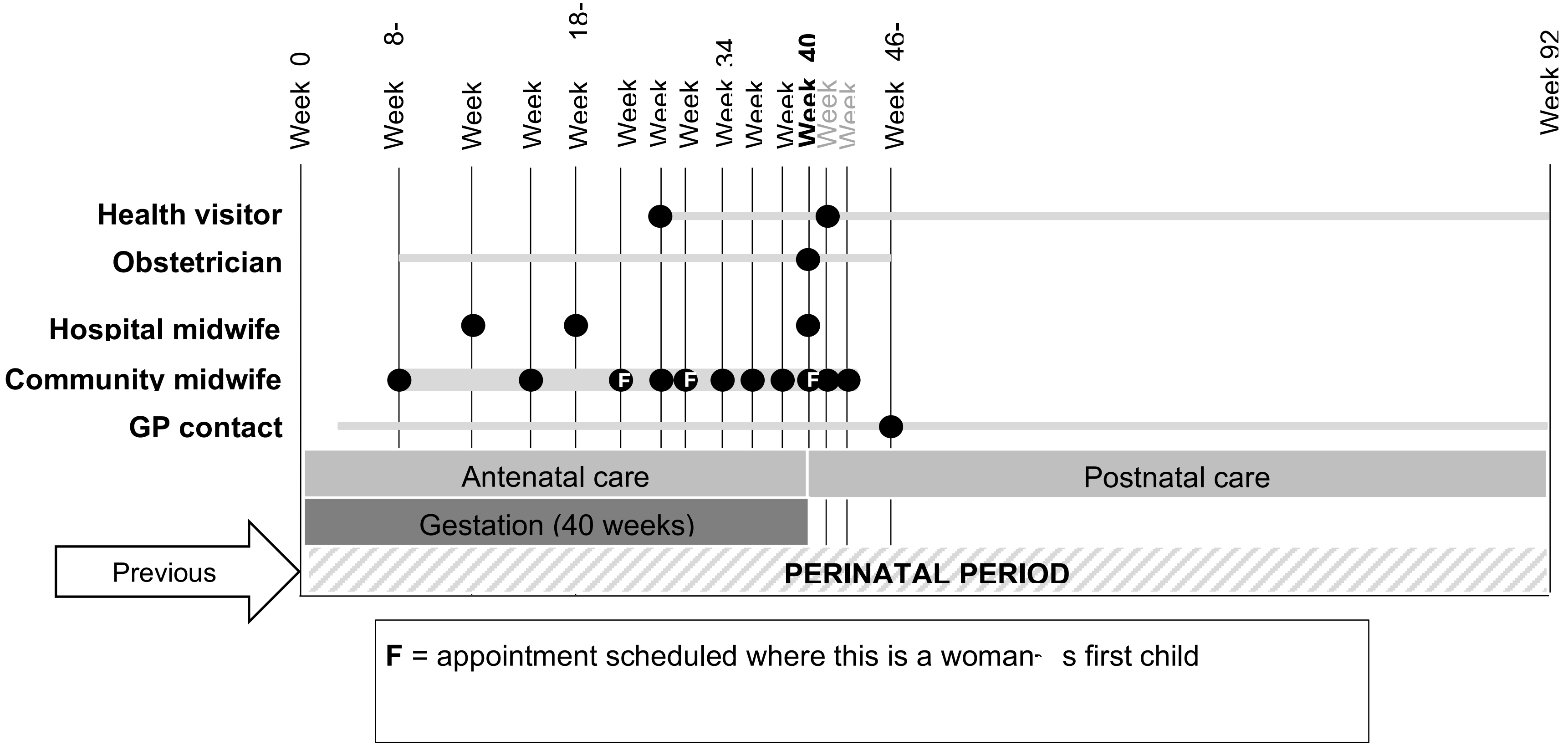


Figure 1-1 Opportunities to identify PMH problems during the perinatal period

It has been recommended that PMH services should be integrated across primary and secondary care and should be able to accurately diagnose, provide treatment and use a multi-disciplinary team (MDT) approach (Brockington, Butterworth and Glangeaud-Freudenthal 2017). It is also recommended that mental health trusts should also have specialist community teams for PMH (Oates and Cantwell 2011). Effective, integrated PMH services are one of the main goals of the FYFVMH, which states that by 2020/21 NHS England should aim to support at least 30,000 more women who are living with a PMH problem (Farmer and Dyer 2016). £365million will be invested between 2015/16 and 2020/21 and pathways are being introduced that will aim to reduce the variation in services that are available to women across different areas of the UK (NHS England 2018).

2 Literature review

This literature review will provide both a summary of the current clinical guidance and critique of the current evidence base from which that guidance is developed. It will also consider implications for clinical practice at both a population and individual patient level with regards to PMH.

This chapter is formed of several parts. Firstly, I will outline how the literature review was conducted. Following this, I will provide an overview of general PMH by defining PMH, discussing incidence and prevalence, and both the aetiology and impact of PMH. I will discuss both identification and management of PMH problems and the literature around this. Subsequently, I will discuss perinatal depression (PND) and will then focus on perinatal anxiety (PNA) which is the specific condition of interest in my study. I will outline the research gap and where my study adds to the current literature base. Finally, I will discuss my study's aims and objectives and outline how they were achieved.

2.1 Methods of literature review

A database search was conducted via PubMed to identify published literature and via Google to identify grey literature such as reports and clinical guidelines. Search terms are outlined in Figure 2-1 below. Individual papers and guidelines were read to gather information and key references were extracted to compile the literature review. References within these papers were reviewed and any papers of interest that had not been identified with the initial strategy were hand-searched, found and read. I read but chose not to include some papers in my literature review if they had been superseded by more up to date versions.

Figure 2-1 Literature review initial strategy search terms

Mental Health - Perinatal, Antenatal, Postnatal, Pregnan*

Anxiety - Perinatal, Antenatal, Postnatal, Pregnan*

Depression - Perinatal, Antenatal, Postnatal, Pregnan*

Anxiety – Management, Identification

Depression – Management, Identification

2.2 Overview of perinatal mental health

This section will provide an overview of PMH. It will include reference to current published literature, the current clinical guidelines for PMH in England and the United Kingdom (UK) and will refer to several key reports published in the UK around PMH.

2.2.1 Definition of perinatal mental health

PMH problems are those that occur or are prevalent during pregnancy and up to one year postpartum (O'Hara, Wisner and Asher 2014). Previously, pregnancy was regarded as a period in a woman's life where she could expect relative wellbeing (Kendall, Chalmers and Platz 1987); however it has since been recognised that the perinatal period can be a vulnerable time for women to develop PMH problems (NICE 2014).

2.2.2 Incidence and prevalence

Between 12.8% (Humphrey et al 2015) and 20% (Regan and Gregoire 2017) of women are known to experience a PMH problem, with the World Health Organisation (WHO) estimating that globally around 10% of women experience a mental health problem antenatally (2014). Non-psychotic mental disorders are acknowledged as being one of the commonest morbidities that can occur in the perinatal period (Howard et al 2014). The most common mental health problems are depression and anxiety disorders which includes generalised anxiety (GAD), obsessive-compulsive disorder (OCD), panic, social anxiety (O'Hara, Wisner and Asher 2014), and post-traumatic stress disorder

(PTSD) (NICE 2014). Anxiety has been reported to be commonly co-morbid with depression; for example, 66% of women with postpartum major depression also had an anxiety disorder (Wisner et al 2013). A meta-analysis has estimated community prevalence of PTSD as 3.1% but are noted to be as high as 15.7% in targeted samples (Grekin and O-Hara 2014), and significantly higher rates of OCD occur in pregnant and postpartum women than non-pregnant women (Russell, Fawcett and Mazmanian 2013a). Although rates for these conditions may appear to be rising, it has been noted that rates of seeking help for mental health problems in general have increased which leads to the false perception of increased incidence and prevalence (Bandelow and Michaelis 2015). It has been suggested that further work is required to more accurately describe the incidence of PMH disorders (Goodman et al 2014).

2.2.3 Predisposing factors to perinatal mental health problems

Those with a previous mental health problem or who suffer from poor physical health are identified to be more at risk of developing a PMH problem. Other risk factors include: recent stressful life events, limited support from partner and family around the woman, past or current history of abuse (emotional, physical or sexual) or neglect, younger women and those with medically complicated pregnancies (Buist 1998; Vesga-Lopez et al 2008). The causes of PMH disorders appear to be a complex interplay between biological, psychological and environmental risk factors (O'Hara, Wisner and Asher 2014). Socioeconomic inequality has strong links to greater incidence of PMH disorders and it has been suggested that targeted identification and management of this higher-risk group would help to reduce the effects of inequality and therefore resulting morbidity (Ban et al 2012).

2.2.4 The impact of perinatal mental health problems

2.2.4.1 How are women affected by PMH problems?

PMH disorders have been linked to a variety of adverse outcomes for women. A survey of 1500 women who had experienced a PMH problem and 2000 HCPs who work with women in the perinatal period (including primary care nurses, MWs and HVs) found that PMH can lead to social isolation, relationship problems, issues bonding with their babies and lack of confidence (Russell et al 2013b). Death due to maternal suicide occurred in 111 women in the UK between 2009 and 2014, making this the leading cause of direct maternal deaths occurring during the perinatal period (Knight et al 2016). Inadequate clinical management of PMH disorders have been linked to the death of 1 in 136 mothers in a recent national Australian report commissioned by the Australian government (Humphrey et al 2015).

2.2.4.2 How does PMH in a mother affect her child(ren)?

PNA and PND have both been linked to negative obstetric, foetal and neonatal outcomes however it is not clear of the absolute mechanism for this. One suggestion is that PNA and PND in pregnancy lead to increased levels of physiological stress in the mother which adversely affects the growing foetus, although this suggestion has limited medical data to support it (Alder et al 2007). A Greek study has suggested that other factors such as low socioeconomic status and lower educational attainment could be responsible for negative outcomes in patients with PMH problems, however this study was carried out with private patients so is not likely to be generalisable to all populations (Varela et al 2015).

PMH problems can lead to ongoing maternal mood problems that persist past the perinatal period. For parents who do go on to develop longer term mental health problems, Johnson et al (2001) suggest that they are more likely to adopt maladaptive parenting strategies and it is these rather than the mental health problem itself that is associated with negative mental health outcomes in the children. This suggestion comes from a study based in New York and although the sample of participants was deemed to be representative of parents across the United States it may not be generalisable to other parts of the world. A recent series of articles written by researchers with a combination of clinical and research PMH experience concludes that adverse effects on children are not inevitable; parenting, social support and the length and severity of parental disorder are the most important modifiable risk factors to reduce these (Howard, Piot and Stein 2014).

A recent, comprehensive systematic review (Stein et al 2014) concludes that although substantial, global evidence supports the link between PMH disorders and adverse childhood outcomes, this is not always inevitable. Suggested mechanisms for the associated adverse effects include interactions between genetics and biological and environmental pathways. These mechanisms are complex and have not been fully explored yet so are not fully conclusive. The quality of parenting appears to be crucial and paternal mental health also appears to be important. Stein et al’s review suggests that lower socio-economic status may have a greater effect than PMH on adverse childhood events (Stein et al 2014).

2.2.4.3 Financial implications and costs to the National Health Service

The economic costs of PMH problems have been reviewed by a team at the London School of Economics who estimated the annual cost to society and public services in the UK amounts to over £8billion annually (Bauer et al 2014). Although cost estimations like these have to be interpreted with some caution, the data used to reach this conclusion is quite extensive. It has been estimated that the aggregated lifetime costs of a woman with PND are over £75,000 which takes into account health and social costs for both the mother and child until the child is aged 18 (Bauer et al 2014). 70% of the costs to society as a result of PMH problems are due to the increased risk of childhood disorders such as psychological disturbance, behavioural or development problems (Stein et al 2014).

2.3 Perinatal depression

Perinatal depression (PND) is a widely investigated and reported condition and there is significant body of published literature available.[1] This includes both trials of interventions (Sharp et al 2010) and also of the perspectives of women and health care professionals (HCPs) (Chew-Graham et al 2008; Chew-Graham et al 2009; Goldsmith 2007; Shakespeare, Blake and Garcia 2003; Turner et al 2010).

The estimated worldwide prevalence of PND has been reported by a recent systematic review and meta-regression to be 11.9% (Woody et al 2017) meaning that a significant proportion of women will experience PND within their lifetime. It is well recognised, like with all other PMH problems, that PND is under-diagnosed and therefore under-treated (Coates et al 2004; Goodman and Tyer-Viola 2010). Co-morbid generalised anxiety is considered to be common and has been reported to occur in up to two thirds of women with PND (Wisner et al 2013).

Women's attitudes about the diagnostic process and regarding treatment for PND have also been reviewed by a variety of studies. Goodman (2009) reported results from a questionnaire with 509 American women in their final trimester of pregnancy. They found that barriers to receiving treatment included limited time availability (from both the woman's perspective and the HCPs), stigma and lack of available childcare support to enable them to attend appointments for care. They also discussed that most women would prefer to receive mental health treatment in their obstetric environment rather

---

[1] Postnatal depression is the more commonly known and widely used expression. For the purpose of this MPhil, I will use PND to mean perinatal depression, which covers the antenatal period as well as twelve months postpartum.

than a mental health environment and suggested that this was due to reduced stigma with accessing support in obstetric clinics.

2.4 Perinatal anxiety

Perinatal anxiety (PNA) is anxiety that occurs in the perinatal period during pregnancy and up to 12 months postpartum (O'Hara, Wisner and Asher 2014). In comparison with PND there is relatively scarce literature available that investigates and discusses PNA (Woolhouse et al 2009; Marchesi et al 2016), with a recent review declaring it to be 'somewhat neglected' (Brockington, Butterworth and Glangeaud-Freudenthal 2017, page 117). Prevalence estimations of PNA vary, however a recent, comprehensive meta-analysis suggests that the overall global prevalence of PNA is 15.2%, with higher rates of PNA occurring in low to middle income countries (Dennis, Falah-Hasani and Shiri 2017). A study of 357 pregnant women in Hong Kong reported that PNA was more common than PND in their sample, however given the size of this study the results need to be interpreted with caution (Lee et al 2007). It has been suggested that PNA levels are highest during the antenatal period in comparison to the postnatal period (Austin 2004). Symptoms of anxiety have also been described as infant and motherhood-related (Brockington, MacDonald and Wainscott, 2006).

There are a significant number of risk factors that have been identified for PNA. These include lack of partner or social support, history of abuse or domestic violence, personal history of mental illness, unwanted or unplanned pregnancy, adverse life events in life, high perceived stress, present/past pregnancy complications, pregnancy loss (Biaggi et al 2016) and having a medically complex pregnancy (Fairbrother et al 2017).

Anxiety during pregnancy has been linked to specific neuroendocrine changes that can occur in the pregnant woman’s brain (Huizink et al 2011) and a large, longitudinal study has suggested that appropriate intervention during pregnancy has the potential to reduce the exposure time of the foetus to these altered neuroendocrine states (O'Connor et al 2002). Evidence around the effects of PNA specifically on a developing foetus appears to be inconsistent (Ding et al 2014), however there is some evidence in longitudinal studies that demonstrate adverse effects on the child such as attachment disorders and insecure parent-child relationships (Manassis et al 1994), emotional/behavioural problems (O'Connor et al 2002), cognitive disorders in the teenage years and increased incidence of Attention Deficit Hyperactivity Disorder (ADHD) in children aged 8-9 (Van den Bergh and Marcoen 2004).

There is some evidence available that suggests parity is not directly related to the incidence of PNA (Fairbrother et al 2016). PNA has also been noted to result in adverse events for mothers as well as their children. A Swedish study identified an association between antenatal anxiety disorders with increased frequency of visits to obstetrics-gynaecology clinics (for fear of childbirth), caesarean delivery, and epidural analgesia (Andersson et al 2004).

A small number of studies have investigated how women access support for PNA. Fewer than half of pregnant women with anxiety symptoms discuss them with a HCP (Woolhouse et al 2009) and many do not receive any help for their anxiety (Goodman and Tyer-Viola 2010). Under half of women with mental health problems may have these problems identified (Howard et al 2014b) and of those who are detected only 10-15% receive treatment during pregnancy (Woolhouse et al 2009; Goodman and Tyer-

Viola 2010; Gavin 2015). Pregnant women report reluctance to self-refer or indicate mental health problems, awareness of stigma, or indicate a lack of time to receive treatment (Goodman 2009). A recent report that outlines the perspectives of pregnant women describes how many women who experience anxiety conditions feel that their symptoms were ignored or not treated seriously enough because they did not fit into the category of PND (Regan and Gregoire 2017).

2.5 Identification of perinatal mental health problems

This section will discuss the use of case-finding tools for PMH problems and will discuss barriers to identifying them. Identification of these problems means that women can subsequently be monitored or have treatment offered if indicated (NICE 2014; Austin 2004; Austin and Priest 2005). Early identification and intervention has been demonstrated to have a positive effect on reducing the impact of mental health problems and reduces the incidence of adverse outcomes for both mother and baby (Austin 2003).

2.5.1 Case-finding tools for perinatal mental health problems

It is acknowledged that routine case-finding is beneficial in order to identify women at risk of or who are experiencing PMH problems. Women should be routinely asked at their antenatal booking visit about their current mental health and any history of previous mental health problems should be discussed (Oates and Cantwell 2011). Specific, validated case-finding questions (please see Figure 2-2 Case finding questions for PMH problems) are recommended by NICE (2014) to be used at the pregnancy booking appointment for every woman.

Figure 2-2 Case finding questions for PMH problems

The following questions are recommended for use by NICE (2014) at the booking visit for each pregnant woman:

Whooley questions (Whooley et al 1997)

- During the past month, have you often been bothered by feeling down, depressed or hopeless?
- During the past month, have you often been bothered by having little interest or pleasure doing things?

2-item Generalised Anxiety Disorder Scale (GAD-2) (Kroenke et al 2007)

- Over the last 2 weeks, how often have you been bothered by feeling nervous, anxious or on edge?
- Over the last 2 weeks, how often have you been bothered by not being able to stop or control worrying?

A variety of assessments and case-finding tools exist for general PMH problems. The most comprehensive assessment is likely to be ‘The Stafford Interview’ (Brockington et al 2017). This was a tool designed for use by mental health professionals working with mothers in the perinatal period and addresses social, psychological and obstetric factors. Brockington, Butterworth and Glangeaud-Freudenthal (2017) describe the process of completing the tool as being therapeutic for patients; as many mothers find it a positive experience to discuss their problems and their mental health. It considers the transition period to parenthood and addresses areas such as planning and accepting of pregnancy, parturition and bonding between mother and infant; elements which the authors state have not previously been routinely explored by mental health care professionals.

Although the Stafford Interview is very comprehensive, it is not applicable for use in primary care and is instead suited to a specialist psychiatric assessment. Tools which could be used in a primary care setting include the Antenatal Risk Questionnaire (ANRQ) (Austin 2003; Austin 2013) and Prenatal Distress Questionnaire (PDQ) (Alderdice and Lynn 2016). The ANRQ is a self-report measure that addresses nine different psychosocial risk factors can be used during pregnancy (Austin 2003, Austin 2013) and provides a score that indicates the potential risk of a mother developing a PMH problem, with high scores being suggestive of increased risk of perinatal distress (Austin 2003; Austin 2013; Marnes and Hall 2013). The PDQ assesses perinatal stress and distress and the authors suggest that this could be a useful tool to prompt open conversation between women and their MWs about their mental health (Alderdice and Lynn 2016). Although the PDQ appears to have potential to help with case-finding for PMH problems, the authors have only tested it with women who are classed as having low risk pregnancies (suitable for standard MW care (NICE 2014)) so it is not clear if it would be suitable for use with women who had medically high risk pregnancies.

Case-finding questionnaires that women complete themselves can also be used and may be helpful (Austin 2004), however they should be used with caution as those currently used focus more on PND than PMH in general which means women who suffer other PMH disorders may not be identified (Brockington 2004). It is clear that once women are identified as being at risk of, or who are experiencing a PMH problem there should be mechanisms in place to refer women for support via specific, evidence-based pathways (Austin 2004) and such systems have been shown to improve outcomes (Marnes and Hall 2013).

2.5.2 Case finding tools for perinatal depression

The Edinburgh Postnatal Depression Scale (EPDS) has been described as the most commonly used case finding tool for PND (Woody et al 2017). It is a 10-item tool which was first developed in 1987 (Cox, Holden and Sagovsky 1987) and is recommended by NICE (2014) as one of the tools that can be used to assess the mood of women in the perinatal period. However, despite this recommendation there is evidence to suggest that it may not be a suitable tool to use. Shakespeare, Blake and Garcia (2003) conducted a qualitative study with 39 participants to investigate the acceptability of using the EPDS as a routine case-finding tool in the postpartum period. They found that just over half of participants (21/39) did not feel that the tool was acceptable. This was due to factors such as inadequacy of preparation by the HCP, limited feedback regarding the results, perceived inappropriate environment of the baby clinic to be asking those questions and HCPs having limited time to discuss issues. This diversity in opinion is important as the results provide us with explanations for the dissatisfaction; something which can drive development and change.

In contrast to this, a large American study demonstrated that the implementation of a new case-finding program called the Massachusetts Child Psychiatry Access Project for Moms (MCPAP) had generally positive participant feedback when survey data from the participants was reviewed (Byatt at al 2016). This disparity in the literature about case-finding demonstrates that there is some conflict around what is deemed clinically appropriate and what patients find acceptable.

It is important to ensure that case-finding is carried out at appropriate times in the perinatal period. NICE (2014) recommend that HCPs consider carrying out routine PMH case-finding at the booking visit with a MW and also in the early postnatal period. Austin and Lumley (2002) suggest that it is not feasible to try and predict the presence of depression in the postnatal period via antenatal case-finding, suggesting that it should be carried out at multiple occasions to improve detection of PND, reasoning which is supported by NICE's recommendation (2014).

Chew-Graham et al (2009) reported results from a multi-centre qualitative study that suggested that recognition of the context in which women present and ask for help is important. Women felt that is was important that HCPs try and understand a woman's personal and social circumstances before developing a management plan for her; ensuring that women are treated as individual's rather than receiving a standard care package. Additionally, this study also reports that a major barrier for not seeking help for their symptoms was anticipating that medication might be the only option for treatment. An additional qualitative study of 22 women who were taking part in the RESPOND[2] trial found that although listening visits by HVs were often helpful, the number that could be provided due to resource constraints was not always sufficient (Turner et al 2010). A purposive sampling approach was utilised to ensure that the researchers interviewed women from across the country in order to make their results more generalisable. This study raised questions as to whether HVs are 'best placed' to deliver listening visits as sometimes a poor relationship was established between

---

[2] RESPOND trial - Randomised evaluation of antidepressants and support for women with postnatal depression (Sharp et al 2010)

the woman and her HV. It also suggested that some HVs appeared to have overly demanding caseloads, which meant they had insufficient time to provide adequate support (Turner et al 2010).

2.5.3 Case finding tools for perinatal anxiety

Although there are a significant number of available tools for case-finding for generalized anxiety and depression, currently there is no specific, validated tool to specifically case-find for PNA that is recommended by NICE. Case-finding for anxiety disorders has not received the same attention as with PND (Matthey Fisher and Rowe 2013), and existing case-finding measures for PNA require further validation (Meades and Myers 2011). NICE (2014) suggest that HCPs use the GAD-2 at the booking visit or first contact and at subsequent contacts throughout pregnancy and the postnatal period, however, a recent qualitative study interviewing HVs from seven healthcare trusts across England suggests that some HCPs are unaware of the inclusion of the GAD-2 questions in the updated NICE guidelines (Ashford, Ayers and Olander 2017). In this study only one out of thirteen participants discussed this update to the guidelines. The authors clearly state that they achieved data saturation with thirteen participants meaning this is an important finding as it has serious implications for HV education and training updates. It has been suggested that a diagnosis of PND is prioritized over other PMH problems, which has the potential for anxiety to be undiagnosed and therefore be untreated (Matthey et al 2003).

The use of other, more generic anxiety tools, such as the Beck Depression and Anxiety Inventory (Beck et al 1988) and Depression Anxiety Stress Scales (DASS) (Lovibond and Lovibond 1995), have been criticised as they are unable to determine severity of PNA and therefore a specific tool for the perinatal period is needed (Somerville et al 2015). Meades and Myers (2011) conducted a review of anxiety measures that had been validated for use in the perinatal period and reviewed the General Health Questionnaire (GHQ) (Goldberg 1972), the State-Trait Anxiety Inventory (STAI) (Speilberger et al 1983) and the Hospital Anxiety and Depression Scales (HADs) (Zigmond and Snaith 1983). They expressed some concern with these measures; describing that within each tool there is significant overlap of questions that would identify PNA and PND symptoms. This means that the tools are not suitable to differentiate between a diagnosis of anxiety or depression but were more suitable for identifying general PMH problems instead.

A similar problem occurs with other case-finding tools. It has been suggested that the EPDS could be used to case-find for PNA as it contains some questions which address anxiety (Lappin 2001) however this has been criticised as a potential option. Whilst the EPDS is excellent at detecting PMH problems it is not specific enough to differentiate between PNA and PND (Matthey, Fisher and Rowe 2013).

The Perinatal Anxiety Screening Scale (PASS) has been developed specifically to try and rectify this issue (Somerville et al 2014). This 31 item self-report questionnaire measures four areas: General Worry and Specific Fears; Perfectionism, Control and Trauma; Social Anxiety and Acute Anxiety and Adjustment over the past month. It is intended that a higher score indicates greater severity of the condition and could be used for monitoring severity of symptoms over a period of time (Somerville et al 2015). Another tool which has been recently developed is the Postpartum Specific Anxiety

Scale (PSAS) (Fallon et al 2016). This 51 item measure for postpartum anxiety specifically has undergone preliminary validation and the authors suggest that their measure would be more sensitive than general anxiety assessment tools in the postpartum period in detecting mothers with specific maternal anxieties/worries. They argue that in general anxiety scales women may not meet the criteria for an anxiety disorder specifically and therefore may go undiagnosed. This will require further validation and critique before it can be considered appropriate and be recommended for use in clinical practice.

2.5.4 Barriers to the identification of perinatal mental health problems

It is recognised that there are a number of barriers to the identification of PMH problems. Research suggests that barriers exist at individual patient level, a clinician level and at a system levels (Coates et al 2004).

2.5.4.1 Individual patient level

Women report being concerned about stigma and the potential for them to have their baby taken away from them if they admitted to having PMH problems (Megnin-Viggars et al 2015). It was demonstrated in a survey of over 500 American women sampled across the United States that 96% felt there is stigma associated with seeking help for PMH problems (Goodman 2009). As this is a finding specifically about the American healthcare system from 2009 it may not be representative of current global culture around PMH problems however 96% is a very high proportion of the sample so I feel it is important not to disregard the finding. Lack of available facilities that allow women to feel comfortable in an environment to be willing to disclose PMH problems is another factor (Kingston et al 2015).

A recent nationwide UK survey of women, conducted by the Royal College of Obstetricians and Gynaecologists (RCOG) found that other barriers to women accessing support included difficulty accessing their GP, concerns around how busy HCPs currently are, and concerns that symptoms may be dismissed by HCPs. It has been suggested that women may also have concerns around HCPs knowledge and understanding about their PMH problems (Regan and Gregoire 2017).

Evans, Morrell and Spiby (2017) investigated the perspectives of women's views on anxiety and anxiety case-finding tools specifically during pregnancy; data demonstrated that women had mixed feelings regarding these. Participants in this study needed to self-identify as having experienced perinatal anxiety so had not necessarily received a formal medical diagnosis of having anxiety. Some women in the study felt that case-finding tools for anxiety were useful to act as prompts for discussion about feelings of anxiety but others worried that they may not be delivered in an appropriate manner and may not enable women to access appropriate and timely support. The authors suggested that after using anxiety detection tools, HCPs should allow adequate time to discuss any feelings that resulted from the assessment.

2.5.4.2 Clinician level

From a HCP perspective, there is evidence to suggest that HCPs (GPs, MWs and HVs) often feel that they lack the knowledge and skills to identify and manage PMH problems, and report they frequently seek help from specialist services (Russell et al 2013b). Limited training around PMH is a common disclosure and suggested as one of the causes of this by MWs, HVs and Obs in one study (Rothera and Oates 2011). GPs also express similar concerns about limited confidence in their knowledge and awareness of PMH problems (Khan 2015). The risk of GPs becoming deskilled as they do not routinely see antenatal patients has been demonstrated to lead to increased rates of poor communication, coordination of care and decision making (Oates and Cantwell 2011; Khan 2015). It has also been acknowledged that PMH does not feature heavily in the GP curriculum and could be prioritised more than currently (Khan 2015, NCT 2017). The importance of developing a positive relationship between the woman and her HCP has been described as having an impact on the quality of experience of treatment for women (Megnin-Viggars et al 2015).

Several papers report that both patients and HCPs may misinterpret psychiatric symptoms as a normal response to the physiological and psychosocial changes that occur during pregnancy (Bowen and Muhajarine 2006; Vesga-Lopex et al 2008). NICE (2014) highlights the importance of clinician awareness around this. The guideline suggests that some changes in mental state and functioning such as appetite fluctuation may represent a mental health problem as well as being a normal pregnancy state and suggest that this should always be considered.

There is evidence to suggest that if HCPs enquire about PMH symptoms, women are more likely to seek help throughout that period if they need it (Reilly et al 2014). These findings demonstrate that a key area for improvement with regards to HCP competency and confidence is improved HCP education and training around PMH problems (Russell et al 2013b).

2.5.4.3 System level

Problems with continuity of care from the antenatal to the postnatal period has been highlighted in a recent national maternity review ‘Better Births.’ Here women also reported that although their antenatal care felt very supportive they didn’t have access to as much support in the postnatal period and so felt quite vulnerable (NHS England 2016).

2.6 Management of women with perinatal mental health problems

Management options for PMH problems include a variety of options, some in primary care and some via more specialist secondary care PMH services. Recommended treatment strategies for PMH problems in primary care include: psychological interventions such as Cognitive Behavioural Therapy (CBT), treatment with anti-depressant therapy or a combination of the two (NICE, 2014). It has been recognised that there is less available evidence for treatment of PNA in comparison to PND (Marchesi et al 2016). The following section will outline the variety of management options for women with PMH problems.

2.6.1 Healthcare professionals

It has been suggested by a multi-variate analysis of a survey of Australian women that primary care professionals such as GPs, MWs and HVs can be an 'integral source of support' for women with PMH problems (Reilly et al 2014, page 27). It is important that women feel supported by their HCPs so that they feel able to talk openly and honestly about their feelings (Regan and Gregoire 2017).

MWs are usually the designated lead professional for women with no obstetric complications, and should act as a coordinator of care for all women (Chief Nursing Officers 2010). MWs and HVs in particular play a key role in diagnosing and managing PMH problems (Brockington 2004) and they are viewed as well placed in their roles to manage women throughout their pregnancy and beyond. NICE recommends that GPs should be the first line of assessment and management and be notified by any other HCP if they refer a woman specialist PMH services (NICE 2014).

2.6.2 Psychological therapies for perinatal mental health problems

NICE CG192 (2014) suggests that psychological therapies should be first line, with the option for taking medication alongside if needed for women with moderate to severe PMH problems. Beneficial psychological therapy options include treatments such as relaxation techniques and therapy such as CBT (Brockington 2004). Patients might be offered either individual support or group support depending on the severity of their symptoms. Women with mild-moderate symptoms can consider facilitated self-help whilst women with more severe symptoms can benefit from higher intensity psychological interventions such as CBT (NICE 2014).

Interventions such as CBT and techniques such as mindfulness have been demonstrated to be effective in treating PMH problems (Goodman et al 2014; Lavendar, Ebert and Jones 2016; O'Mahen et al 2013) as amongst other effects they appear to result in improved general emotional wellbeing in the perinatal period (Woolhouse et al 2014). It has been suggested that women who practice mindfulness have greater self-awareness and increased emotional intelligence surrounding their general mental health throughout their lives as well as during the perinatal period (Woolhouse et al 2014). There is some limited evidence in a 2011 Cochrane review that suggests the use of alternative therapies such as hypnotherapy, imagery and yoga may be helpful when treating PNA in particular (Marc et al 2011).

2.6.3 Technology

Technology has been demonstrated to hold potential for helping to both identify and manage PMH problems. A phase II randomised control trial (RCT) of 249 mothers found significant reduction in Edinburgh Prenatal Depression Scale (EPDS) scores and moderate effect in reducing anxiety scores after participants underwent a 12 session computer based behavioural activation programme (O'Mahen et al 2014). A recent systematic review of use of technology in managing PMH found that computer/internet based interventions may be helpful in PND but could find no evidence to support the use of them in other PMH conditions such as PNA. All papers included in the review had their quality reviewed and commented upon by two authors meaning that all results included in the review were sufficiently scrutinised. The authors of this review suggest that further work is needed to investigate the use of technology and how it could help manage PMH problems (Ashford, Olander and Ayers 2016).

2.6.4 Antidepressants

Psychotropic medication such as antidepressant medication is another option for treating PMH problems. A study in 2009 of pregnant American women found that women may be often reluctant to take medication during the antenatal period for any mental health condition because of potential risks to their developing babies (Goodman and Tyer-Viola 2010). Although this study was carried out in predominantly higher educated women of mid-high socio-economic status it seems reasonable to suggest that these concerns may be shared amongst women of all different educational and socio-economic backgrounds. A cohort study of 228,876 pregnancies found that during pregnancy approximately 3% of women in Europe and 10% in the USA take antidepressants (Hayes et al 2012).

The RESPOND trial (Sharp et al 2010) was a randomised control trial (RCT) of 254 women that compared antidepressant therapy to general supportive care via listening visits from HVs in those with PND. The authors concluded that early treatment with antidepressants can be beneficial in treating women with PND. Data showed that at the 4-week review point women were twice as likely to have improved if they had been randomised to have antidepressants rather than listening visits as their treatment. This study provides further evidence for the suggestion that using psychological therapies (in this case listening visits) as well as medication can be beneficial (NICE, 2014).

The debate about safety of medication during pregnancy and whilst breastfeeding has been discussed at length over recent years. Currently, ‘no psychotropic medication has a UK marketing authorisation specifically for women who are pregnant or breastfeeding’ (NICE 2014, page 7). It is acknowledged that the risks to the foetus with use of antidepressant medication during pregnancy are ‘difficult to assess’ due to the absence of RCT data for ethical reasons, however there is evidence that antidepressant medication can have cardio-toxic effects on developing babies (Howard et al 2014a, page 1783).

There are differences in opinion presented within the literature around risks of antidepressant use. A recent, thorough systematic review by Prady et al (2018) reviewed the link between antidepressant use in pregnancy and adverse effects in children and concluded that the currently available evidence is too limited to make any firm conclusions, suggesting that further research is necessary. Despite this, other researchers suggest that there may be a link between antidepressant use and adverse foetal outcomes, for example, a 2018 meta-analysis presents a statistically significant link between antidepressant use and reduced birth weight and as meta-analysis is considered to be one of the highest levels of evidence available these results should be considered (Zhao et al 2018). NICE (2014, page 21) recommends using the drug with the ‘lowest risk profile’ at the ‘lowest effective dose’ when medication is started. A

2017 systematic review of the recognition and management of PNA and PND by GPs found that sertraline is generally considered to be the lowest risk profile by GPs (Ford 2017a).

A comprehensive review of the risks associated with the use of profile of Selective Serotonin Receptor Inhibitors (SSRIs) during pregnancy suggest that sertraline and citalopram should be first-line treatments during pregnancy (Womersley, Ripullone and Aguis 2017). The authors also concluded that sertraline can be prescribed safely in breastfeeding women as drug levels in milk have been found to be low and currently there is no evidence to suggest it can cause complications. The review suggests that when taken antenatally, paroxetine and fluoxetine have the strongest link with negative outcomes (significant foetal malformations, persistent pulmonary hypertension of the new born (PPHN) and post-birth poor neonatal adaptation syndrome (PNAS)) and therefore should be avoided (Womersley, Ripullone, Aguis 2017).

Misri and Kendrick (2007) have previously argued that babies are either exposed to pharmacological side effects or the effects of perinatal mental illness; meaning that when choosing to prescribe or not to prescribe, risk is involved in either decision. This risk needs to be discussed with women so that they can make informed decisions about their care (NICE 2014). It has been reported that lack of consensus amongst HCPs about medication for existing mental health conditions during or after pregnancy can be a source of confusion for patients about their choices. The RCOG suggests that it would be helpful if all HCPs provided the same, evidence based advice to avoid this confusion and calls for improved training around this (Regan and Gregoire 2017).

2.6.5 Women’s preferences

Women’s preferences for treatment for PND specifically were investigated by Ride and Lancsar (2016) who interviewed 217 Australian women. They found that individual talking therapies were deemed to be the preferred treatment option for most perinatal women; with those who were pregnant or breastfeeding less likely to choose to take antidepressant medication. NICE CG192 clearly states that women should be allowed to have a key role in making decisions about their care and HCPs should ensure that women have all of the appropriate information to be able to make informed decisions (NICE 2014).

2.6.6 Family support

The importance of a well-established support network from family and friends is well documented (O’Hara, Wisner and Asher 2014). Positive social relationships can provide invaluable support during the perinatal period and women who don’t benefit from a support network are at greater risk of not only developing a PMH problem but also having greater levels of morbidity associated with it. It has been suggested that women should be encouraged by HCPs to build such a support network (O’Hara, Wisner and Asher 2014). Paternal support in particular has been demonstrated to have a significant effect on maternal health (Brockington 2004), however it is also important to consider that fathers themselves may also have mental health needs. 12% of fathers are reported to experience mental health problems (Regan and Gregoire, 2017) and this impact has not been investigated fully within the literature (Stein et al 2014). Interventions that promote interaction between mother and baby have been shown to be beneficial and support from voluntary groups and charities can be helpful during pregnancy and the postnatal period (Brockington 2004). Parenting courses and family therapy are another option available for women and families to choose from (Ride and Lancsar 2016).

2.7 The research gap

Significant research on perinatal depression exists, including aetiology and prevalence and incidence data (Gavin et al 2005; Woody et al 2017), trials of interventions (Sharp et al 2010) and of the perspectives of women and HCPs. (Chew-Graham et al 2008; Chew-Graham et al 2009). There is comparatively less published work on PNA and therefore for further research into PNA is indicated. This statement is supported by a systematic review and meta-analysis performed by Goodman, Watson and Stubbs (2016) of postnatal anxiety which summarised that further research into the identification and management of PNA was indicated. Although this study included 58 papers the authors state that there was a distinct lack of literature from which to perform the review. Despite this study only commenting on the postnatal period and therefore not covering the entire perinatal period, its findings and recommendations are still important as they have identified and clearly acknowledged a significant research gap.

Understanding what levels of anxiety are 'normal' or acceptable in the perinatal period would be helpful in the diagnostic process (Woolhouse et al 2009), and a greater understanding of the neurobiological changes seen in PNA would enable appropriate and effective treatment options to be developed (Pawluski, Lonstein and Fleming 2017). Tools to assess the relationship between the severity of PNA and the potential consequences of the condition (Bayrampour et al 2016) and development of technology to help with treating PNA could be beneficial (Ashford, Olander and Ayers 2016). Public health campaigns should have greater emphasis on PNA, as current campaigns appear to have been more successful in encouraging women with depression to seek help (Woolhouse et al 2009).

At the start of my study there was no published literature that discusses the perspectives of GPs around PNA in the UK (Ford et al 2017b), compared perspectives of multiple HCPs around PNA or reviewed care delivery across the entire perinatal period (Ashford, Ayers and Olander 2017; McGookin, Furber and Smith 2017). Ford et al (2017b) completed a systematic review of the recognition and management of PND and PNA by GPs and found that amongst the 13 papers included in the review (Prady et al 2016a; Prady et al 2016b), only two mentioned anxiety disorders and these were grouped along with PND rather than as independent problems. This review called for further research into the recognition and management of anxiety disorders. My study will therefore contribute evidence towards an important research gap.

2.8 Study aims and objectives

NICE CG192 (2014) recommends further research is needed in order to develop psychological interventions to identify and treat women with moderate to severe anxiety disorders in pregnancy. Before interventions can be developed, it is important to understand the factors influencing current practice.

The aim of my study was to explore the perspectives of a range of HCPs on perceived barriers and facilitators to the identification of perinatal anxiety in women by HCPs in primary and specialist care. The views of GPs, MWs and HVs are explored.

The objectives for my study include:

1. To explore HCP experiences of current practice in the provision of care to women with PNA
2. To identify barriers facing HCPs in the identification and management of women with PNA
3. To identify facilitators to support HCPs in the identification and management of women with PNA

3 Methods

3.1 Philosophical position and methodological approach

In this part of my thesis I state my philosophical position in relation to my study, which has informed the chosen methodology.

Epistemology is concerned with the nature of knowledge; how knowledge can be acquired and created and what is regarded as true knowledge about the social world. Within social research there are some fundamental philosophies which need to be considered and which oppose one another; positivism and interpretivism. Positivism advocates that the application of the methods of the natural sciences to social sciences is appropriate (Bryman 2016). This is based on the assumption that human behaviour is regulated by law and patterns and can be standardised. A positivist philosophy assumes that there is a ‘stable reality out there’ with a ‘potential right explanation,’ meaning that phenomena exist whether they are being investigated or not and their existence does not change if humans either have a ‘flawed’ understanding of them or understand them fully (Green and Thorogood 2009, page 13).

Interpretivism suggests that natural sciences methods cannot be used for social investigation as human behaviour does not follow set regulations and orders. Therefore, social researchers need to investigate and comprehend the world through the shared experiences of their participants and explanations can only be offered at the level of meaning rather than causation (Ormston et al 2014). This supports the notion of co-construction of knowledge; where learning is viewed as a social activity, learners' knowledge is developed via interaction such as discourse and there is no absolute right answers (Reusser and Pauli 2015). Interpretivism is concerned with understanding reality, accepting the subjective nature of it, rather than being able to explain reality (Green and Thorogood 2009). In my study I was seeking to understand individual HCPs thoughts and experiences of working with women with PNA, hence why I chose to take an interpretivist approach.

Qualitative research firmly aligns with interpretivism (Ormston et al 2014) and research questions that seek to explore, in order to understand, individual perceptions of the world rather than to explain the 'reality of the world' in objective terms (Green and Thorogood, 2009 page 14). With regards to the link between theory and research, there is debate surrounding the relevant roles of induction or deduction to guide information gathering and processing to support our understanding. A deductive approach builds upon previously established theoretical hypotheses, where new findings can be tested against an available body of data around that subject (Murphy and Dingwall 2003; Charmaz 2006). In contrast, an inductive approach uses a process of observation in order to consider and examine the presence of possible patterns and links (Ormston et al 2014).

Inductivism states that by gathering facts, knowledge can be accumulated which will subsequently inform laws (Bryman, 2016). Charmaz (2006, page 188) states that inductivism 'begins with study of a range of individual cases and extrapolates patterns from them to form conceptual categories.' As there are relatively few theories and hypotheses around PNA, due to a lack of research on the topic, a deductive approach would not have been possible in my study. An inductive approach was appropriate for my study as it allowed for the exploration of potential common elements to individuals shared experiences in order to develop themes within the data (Ormston et al 2014). In my study, I was seeking to explore the perceptions held by individual HCPs about PNA, whether different HCPs held shared understandings or not, and how they applied this understanding in a healthcare setting.

The aim of my study was to explore the perspectives of HCPs working with women with PNA. Although producing a definitive way of classifying qualitative methods is challenging (Patton 2002), generally they are accepted as ways to collect and analyse data that are ‘interpretative or explanatory in nature and focus on meaning’ (Noble and Smith 2014 page 2). Researchers with qualitative methods expertise conduct studies to better understand processes or phenomenon in their natural settings in order to try and understand them and studies aim to understand and present the participants’ perspectives and experiences (Hallberg 2006).

It is recognised that qualitative studies frequently produce large volumes of data to be analysed (Noble and Smith 2014) which are often required in health services research to be able to fully understand the complexity of a phenomena being studied (White, Oelke and Friesen 2012). Large volumes of data can lead to challenges in ‘establishing trustworthiness of the study’ (White, Oelke and Friesen 2012, page 244) so it is important to keep data well organised and follow a structured approach when analysing the data.

There are certain topics and research questions that are more suited to being investigated using qualitative methods; for example to explore topics where there is little current understanding, in order to make sense of complex situations or to gain insights and develop greater understanding of a phenomena (Morse and Richards 2002). It has been acknowledged for a number of years that qualitative research can identify the areas that need to be further investigated or explored and can also serve to provide context to results that quantitative methods cannot (Black 1994). It has been suggested that when researchers use qualitative methods to explore a research question they often learn more about a topic than they anticipated (Hammarberg, Kirkman and Lacey 2016).

In healthcare research qualitative methods can be helpful to understand phenomena such as patient experiences of health and illness, relationships and interactions with HCPs and the culture of an organisation (Barbour 2000). Qualitative methods were therefore an appropriate choice for investigating the research question posed in my study.

3.2 Patient and public involvement and engagement

INVOLVE is a national advisory group on Patient and Public Involvement and Engagement (PPIE) which is funded by and is part of the National Institute for Health Research (NIHR) was established in 1996 (NIHR 2019). It aims to support active and appropriate PPIE in health service, public health and social care research by gathering and disseminating expertise and recommendations around PPIE. INVOLVE defines PPIE as ‘research being carried out ‘with’ or ‘by’ members of the public rather than ‘to’, ‘about’ or ‘for’ them’ (NIHR 2019). Involvement specifically refers to where members of the public work with research institutions and are directly involved in research studies e.g. to identify certain processes within research such as research design, whereas engagement refers to the process in which information about knowledge about research is shared and disseminated.

It has been recognised that high quality PPIE can have a positive impact upon research (Blackburn et al 2018). PPIE can play an important role from the development of a research idea into a study design and submitting ethical applications and can also inform and assist the analysis process of qualitative data (Blackburn et al 2018). It is important that researchers and PPIE members can develop meaningful and effective working relationships which may lead to long term involvement in research (Jinks et al 2016). PPIE groups should be organised effectively, have adequate resourcing and dedicated administrative support to ensure they function well and so that PPIE members feels appropriately supported through the process (Jinks et al 2016).

My study had a maternal mental health PPIE group involved throughout its entirety. This consisted of three women with lived experience of a PMH problem. The group met at key points throughout the study which are outlined in the methods section of this chapter. They contributed to the development of the study as well as the study protocol and were able to provide input during the data analysis process.

3.3 Justification of methodological approach in my study

3.3.1 The approach to the interview process

Prior to commencing my study it was initially considered that around 40 HCPs would be interviewed which was an estimate to guide my research protocol and ethical application development. Sim et al (2018) discusses the issues with setting strict sample sizes prior to commencing a study, outlining that these are usually more suitable to deductive approaches rather than the inductive approach I used in my study. They suggest that it is preferable to provide an indication of the provisional upper limit of interviews to be completed prior to commencing a study, but revisiting this as necessary and justifying the final sample size using methods such as data saturation (Sim et al 2018). In my study the study team concluded that the interviews conducted produced plentiful data for analysis purposes; hence why 23 interviews were considered to be sufficient.

The concept of data saturation was first discussed by Glaser and Strauss (1967) in the context of ‘Grounded Theory’ (as explained below), however it is now considered appropriate to be used across a variety of qualitative methods. Data saturation is said to occur when there are no new themes emerging from the collected data which prompt new theoretical or clinical insights (Saunders et al 2018). It is accepted that data saturation is a method used to dictate the necessary sample size of a study (Morse 2015). One Obs agreed to be interviewed, which was insufficient to generate saturation within the sub-group, and so this data was not included in the overall analysis.

In my study I used semi-structured interviews to gather data from participants. This approach allows the researcher to capture the information outlined in the topic guide whilst ensuring that any new topics or information is also recorded (Bryman 2016). Other methods such as focus groups and direct observation, as performed in ethnographic studies, would not have been appropriate in my study as it was important that participants were able to express their individual views and allowed for in-depth comparison between the interviewees (Bryman 2016).

3.3.2 The approach to data analysis

The term data is commonly used to describe all of the information gathered via qualitative research techniques; Barbour (2000) suggests that qualitative researchers often report findings rather than evidence or data although the terms are often used interchangeably. In my study, analysis was conducted using an iterative approach; the topic guide was amended as the study progressed depending on emerging themes from the information gathered (Miles and Huberman 2014). Coding was guided by principles of constant comparison with thematic analysis (Hallberg 2006; Fram 2013).

Constant comparison involves coding and recoding of data as it is gathered in an iterative and inductive process (Glaser and Strauss 1967). Themes start to emerge from these codes and they can be subsequently adapted and amended as further data is gathered in order to organise and describe the data (Braun and Clarke 2006). Comparison is often the result of an interaction between the researcher and the data when conducting interviews and performing analysis (Strauss and Corbin 1998).

The application of the constant comparison method has not been clearly defined and many researchers are unsure how to apply it in their practice (Boeije 2002). Braun and Clarke (2006, page 4) argue that thematic analysis should be ‘considered a method in its own right’, as it is flexible in nature and therefore can be adapted and applied to qualitative research questions to provide a detailed and rich collection of data. Braun and Clarke provide a clearly defined ‘step-by-step guide to performing thematic analysis. These steps are outlined below in Figure 3-1 Braun and Clarke Step-by-Step Guide to Thematic Analysis, which provides a useful starting point to consider the steps to be taken in constant comparison thematic analysis (Braun and Clarke 2006).

Figure 3-1 Braun and Clarke Step-by-Step Guide to Thematic Analysis

1. Familiarise yourself with the data
2. Transcribe verbal data
3. Generate initial codes
4. Search for themes
5. Review themes
6. Produce a report of the themes

Another example of how constant comparison can work is demonstrated by Boeije (2002). She outlines a practical stepwise process for completing constant comparison that was used in a study which explored the experiences of patients with Multiple Sclerosis (MS) and their partners (Boeiji et al 1999). Similarly to the MS study where comparisons where made between couples, between patients with MS and between spouses there are multiple types of comparison within this PNA study. Comparisons are made within HCP groups and also between different HCP groups in order to inform the analysis.

Constant comparison is not to be confused with grounded theory which, arguably, is a type of research methodology consisting of several types: Classical, Straussian and Constructivist. Classical grounded theory was first described by Glaser and Strauss in 1967 and was subsequently adapted independently by Strauss. Classical grounded theory is typically used when very little is known about a topic and there are limited or no identified potential themes. It is closely aligned with positivism, as highlighted through use of language such as the ‘discovery of grounded theory’ as title of a publication (Glaser and Strauss 1967).

Advocates for grounded theory claim that existing knowledge can be suspended whilst collecting data so that data and codes are generated and then compared to existing literature (Kenny and Fourie 2015). In contrast, in constant comparison methods it is typical that researchers understand the relevant literature base prior to developing a study design (Charmaz 2006; Kenny and Fourie 2015). In my study, although the literature base around PNA is quite sparse, we do understand PND and some other PMH problems so the literature base for those was a helpful starting point.

More recently Charmaz (2006) has championed the constructivist approach to grounded theory which assumes that there are multiple co-existing realities as opposed to one true reality. She suggests that to fully understand an individuals’ perspective of an experience a researcher needs to be immersed in that individuals’ world and interviews should take place over multiple occasions in order to gain depth of insight (Charmaz 2004). However, this approach would also not be practical or feasible in health services research as it would be too labour intensive and therefore too costly which would be very difficult to justify.

It is important to note that due the flexible and fluid nature of the constant comparison method, different researchers working independently are not likely to follow an identical trajectory or reach the exact same conclusions (Glaser 1965). This is likely due to the difference in background and previous experience of the individual researchers which influences the approach they take (Glaser 1965), influence that can be described by the concept of reflexivity which is explained in further detail in the reflection chapter of this thesis. In my study, analysis was conducted in a team comprising clinicians and researchers with different backgrounds (clinical and sociology of health) and with members of the PMH PPIE team. This allowed for multiple perspectives on the data and increases the trustworthiness of analysis (Henwood and Pidgeon 1994).

3.3.3 Quality

There is debate within the research world about how to best judge quality in qualitative research. The perspective of realism argues that there is a single, indisputable social truth which is not influenced by social actors, researchers or the research process. This perspective aligns best with quantitative research such as those using statistical or mathematical methods where a calculated numerical value can be considered truth. In comparison, advocates of the 'anti-realist position' that qualitative research cannot, and should not be judged by the same measures such as validity, generalisability and reliability, as quantitative research (Mays and Pope 2000). It has been suggested that qualitative researchers should employ a variety of techniques to ensure improved quality.

These suggestions include respondent validation (where study participants' reactions to the analysis are included in the study findings), being reflexive (remaining sensitive to the way in which the researcher may have shaped the collected data) and fair dealing (where research designs explicitly incorporate a wide range of perspectives) (Mays and Pope 2000). However, anti-realists would argue that these techniques can be stifling and actually negatively impact upon the research process. For example, one could argue that fair dealing prevents researchers from understanding if there is a consensus opinion to be understood. In my study reflexivity was very relevant and was considered throughout; it is described in greater detail within the Discussion chapter of this thesis (Palaganas et al 2017). In my study I also used the 'Consolidated criteria for Reporting Qualitative research' checklist (COREQ) (see Appendix One) as a tool to ensure data trustworthiness (Tong, Sainsbury and Craig 2007).

3.4 Methods

This section will describe the methods that I used within my study, from gaining ethical approval, to developing the topic guide, recruiting participants, completing the interview process and finally data analysis.

3.4.1 Ethics

Ethical approval for the study was obtained from the Keele University Ethical Review Panel (Ref: ERP2308) and the Health Research Authority granted approval to conduct the research in NHS settings (IRAS REF: 211285). The ethical application process was completed by TK and myself. Please see Appendix Two for the ethical approval documents. The PMH PPIE group was involved with the development of the ethical application documents and approved them prior to submission.

3.4.2 Topic guide

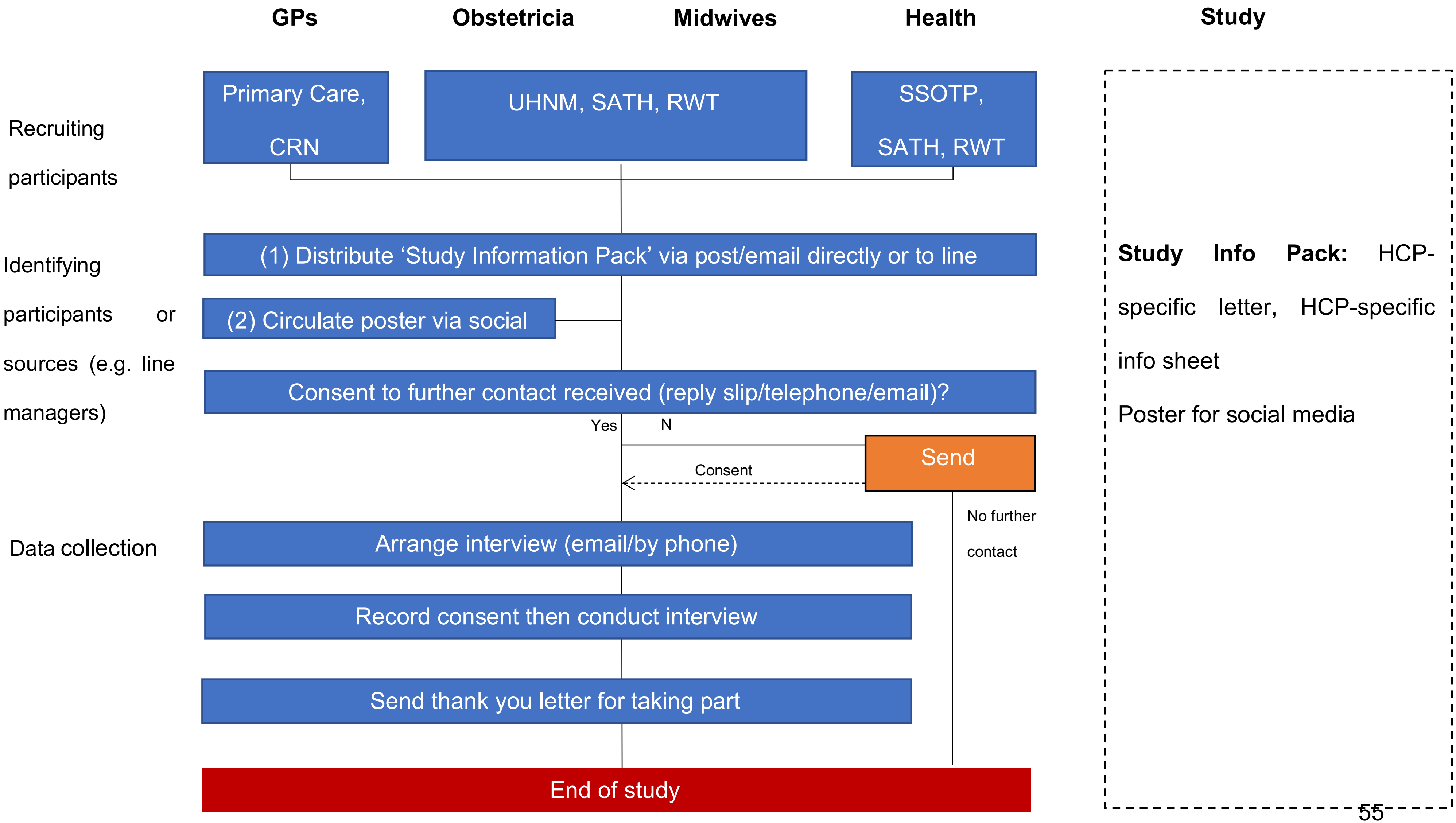
A topic guide was informed by our literature review and was developed in collaboration with the PMH PPIE group to ensure we addressed relevant and important topics. The same topic guide was used for every group of HCPs. This was modified as data collection and analysis proceeded, to include emerging themes to be checked out in subsequent interviews in an iterative process (Miles and Huberman 2014). Please see Appendix Three for an example of the topic guide used.

3.4.3 Participants and recruitment

The study took place across Staffordshire and Shropshire in primary and secondary care. A purposive sampling strategy (Ritchie and Lewis 2003) aimed to recruit different HCPs (GPs, Obs, MWs and HVs) involved in delivering care to women in the perinatal (ante and postnatal) period. Inclusion criteria included HCPs who were currently employed in the West Midlands. In total ten GPs, seven MWs, five HVs and one Obs were interviewed.

Multiple NHS sites were engaged to support recruitment including Staffordshire and Stoke-on-Trent Partnership Trust (SSOTP), Shropshire Community Health Trust (SCHT), University Hospitals of North Midlands (UHNM), Shrewsbury and Telford NHS Trust (SATH), and Royal Wolverhampton Trust (RWT). GPs were recruited with the support of West Midlands Clinical Research Network (CRN), and personal contacts. Information packs, including an invitation to participate (Appendix Four) and participant information sheet (Appendix Five), were distributed to potential participants. The research team arranged interviews with HCPs who returned ‘consent to contact’ forms or contacted the team directly. All participants completed two copies of a consent form, with one copy being retained by the research team and another for them to keep. (Appendix Six) GPs received financial reimbursement of their time according to British Medical Association (BMA) rates. Figure 3-2 Recruitment Flow chart outlines the recruitment process.

Figure 3-2 Recruitment Flow chart



3.4.4 Interviews

In my study data were collected using semi-structured interviews. These were predominantly face-to-face but involved some telephone interviews. I conducted all GP interviews and TK conducted all MW and HV interviews. Data collection concluded when data saturation (Saunders et al 2018) was achieved in GP, HV and MW datasets. Mean interview length was 41 minutes 46 seconds and total accumulated interview time was 15 hours 19 minutes.

Interviews were digitally recorded with consent, transcribed and anonymised prior to analysis using a unique participant identifier. I completed some of the transcription however as my maternity leave started the majority of the transcription was completed using a transcription service.

3.4.5 Data analysis

After each of my interviews I recorded field notes to outline my thoughts and reflections (please see Appendix Seven for an example of these). I also reviewed the transcriptions, made notes on my initial thoughts about them (Appendix Eight) and made some notes about any changes that I thought could be made to the topic guide.

Analysis of the data was performed using thematic analysis with principles of constant comparison (Hallberg 2006; Charmaz 2006). I read each transcript and discussed my thoughts with my supervisors and initial codes were refined with my supervisors until key themes were identified. (An example of this analysis is shown in Appendix Nine.)

Preliminary themes were shared and discussed with our PMH PPIE group to help guide the analysis process. Any variations in coding were discussed and agreed upon within research team meetings.

This chapter has outlined the research philosophy that my study was based upon and has described and justified the methods that I used in my study to gather data. The next two chapters will present my research findings, arranged into themes and sub-themes.

4 Results - Findings One: The concept of perinatal anxiety

The results of my study will be presented across two findings chapters entitled: 'The concept of PNA and 'Organisation of care'. This first results chapter will include tables of participants (Table 1 GP Participants, Table 2 HV Participants and Table 3 MW Participants) and discuss the following themes: 4.2 PNA as an unfamiliar concept; 4.3 PNA as a hidden problem; 4.4 The identification of PNA and 4.5 The use of case-finding tools vs. clinical intuition. Figure 4-1 The Concept of PNA outlines these themes.

4.1 Participant demographics

The following three tables, (Table 1 GP Participants, Table 2 HV participants, Table 3 MW participants) outline the demographics of the participants in my study.

Table 1 GP Participants

Identifier	Gender	Ethnicity	GP role	Years as a GP	Specialist training	Type of practice (as stated by individual)	Practice population	Specialist areas of interest	Length of interview (hr:min:sec)
GP001	Female	White British	GP Partner	15-20	GP training	Semi-rural	5-10,000	Elderly care	00:43:26
GP002	Female	White British	Salaried GP	<5	GP training, Dip Medical Sciences	Suburban	5-10,000	Mental health, women's health	00:39:36
GP003	Male	White British	GP Partner	15-20	GP training	Semi-rural	5-10,000	Research lead, palliative care, finance lead	00:33:11
GP004	Female	White British	Salaried GP	10-15	GP training	Semi-rural	10-15,000	Sexual health, women's health	01:03:26
GP005	Male	White British	GP Partner	25-30	PGCE Medical Education, Dip Royal College Obstetrics & Gynaecology	Suburban	10-15,000	Medical Education	01:05:22
GP006	Female	White Polish	GP Partner	10-15	Diploma Family planning	Semi-rural	5-10,000	DSFRH	00:37:48

GP007	Male	White British	Salaried GP	25-30	Cardiac ultrasound	Suburban	10-15,000	Medical education, cardiology	00:38:22
GP008	Male	White British	GP Partner	10-15	Member Royal College Physicians, Diploma Child Health, PGCert (MedEd), Diploma Tropical Medicine, BsC Genetics	Rural	5-10,000	Elderly care, complaints	01:12:21
GP009	Male	Indian	GP Partner	10-15	Diploma Occupational Health	Semi-rural	5-10,000	Orthopaedics, Mental health	00:29:18
GP010	Female	White British	Salaried GP	<5	BSc, Diploma Royal College Obstetrics & Gynaecology, Diploma Medical Sciences	Suburban	10-15,000	Academic primary care	00:52:23

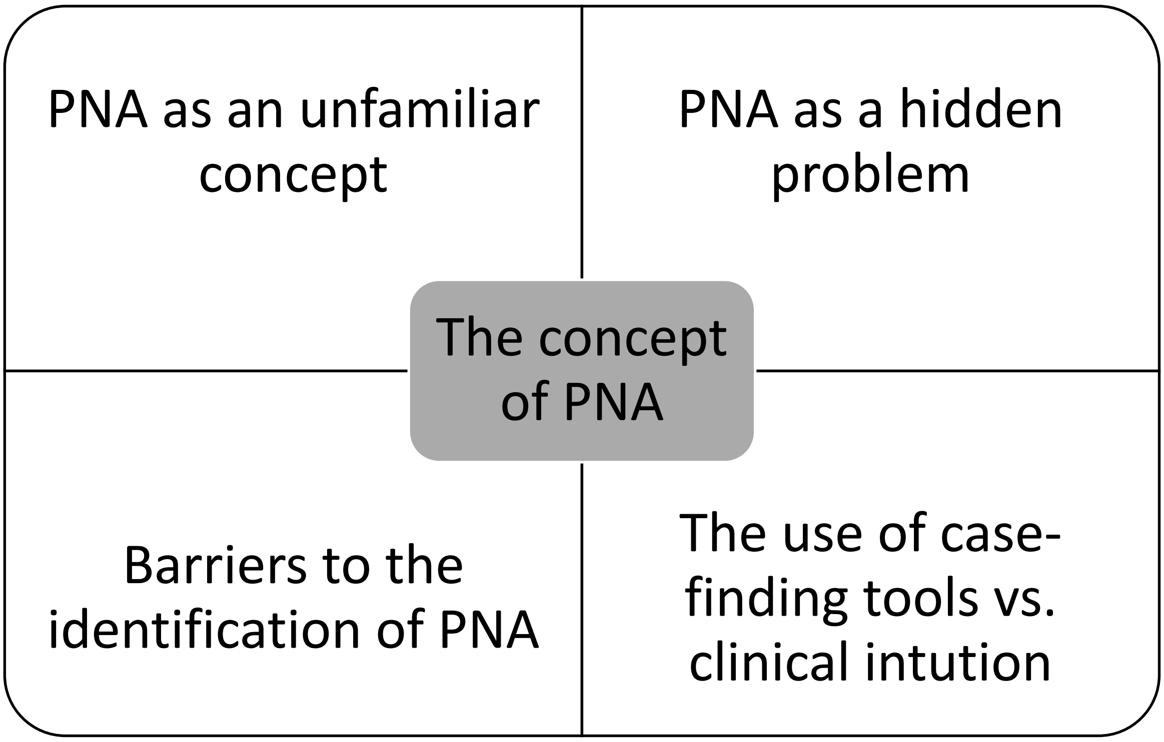
Table 2 HV Participants

Identifier	Gender	Age	Years as a HV	Type of area worked in	Type of interview	Length of interview (hr:min:sec)
HV001	Female	22	4	Children’s Centre attached to Primary School	Telephone	00:40:40
HV002	Female	62	30	Children’s Centre attached to Primary School	Telephone	00:24:18
HV003	Female	38	6	Community health centre	Telephone	00:39:57
HV004	Female	58	29	Community health centre	Telephone	00:32:35
HV005	Female	52	12	Community health centre	Telephone	00:53:29

Table 3 MW Participants

Identifier	Gender	Age	Specialist role/interest	Years as a MW	Interview type	Specialist areas of interest	Length of interview (hr:min:sec)
MW001	Female	50	Patient information	13	Face-to-face	Patient information for Women and Children's' service, Complaint investigation, Coordinator for de-briefing service for women after birth.	00:38:01
MW002	Female	51	Research/clinical midwife	25	Face-to-face	Research	00:28:00
MW003	Female	33	Clinical midwife	13	Face-to-face	Research	00:22:53
MW004	Female	34	Antenatal and postnatal care	8	Face-to-face	N/A	00:25:07
MW005	Female	59	Community/Public health midwife	12	Telephone	Public Health, Leadership and management	00:49:02
MW006	Female	59	Community midwife	9	Telephone	N/A	00:39:09
MW007	Female	53	Mental health	27	Face-to-face	Perinatal mental health	00:50:31

Figure 4-1 The Concept of PNA



4.2 Perinatal anxiety as an unfamiliar concept

Within my study HCPs described a range of perspectives when asked about their understanding of PNA as a clinical diagnosis. When prompted within the interview some HCPs provided what could be described as a clear definition of PNA as a medical diagnosis however others were uncertain that it existed:

> *"I mean it's a concept that I'm really not that much aware of either professionally or from reading"* (GP007)

> *"Any anxiety around the pregnancy within pregnancy and the postnatal period"* (MW006)

Anxiety was seen commonly as 'normal' or 'understandable' in the perinatal period, with most HCPs suggesting that some anxiety was to be expected:

> *"I think all mums, all pregnant mums are anxious, aren't they, about the future and how they're going to cope and I would put that down to a normal anxiety"* (HV002)

> *"I don't like to use the word normal but I think it's understandable anxiety"* (GP004)

HCPs commented that anxiety can be common in the general, non-pregnant population as well as PNA. Some HCPs expressed surprise at the prevalence of anxiety in general however other HCPs anticipated that levels of PNA would be quite high to mirror those of the general population:

> *"I was surprised about the amount of women that report they have anxiety when you ask them about it. Some of that is the normal anxiety, but I would say at least half of the women that I look after have some sort of anxiety"* (MW006)

> *"I think most people are affected by anxiety at some point"* (MW007)

One GP used the term 'pathological' to describe problematic anxiety, suggesting this was when symptoms began to affect a woman's everyday functioning. HCPs disclosed that it can be challenging to differentiate between 'normal' and 'pathological' PNA:

> *"We do recognise that pregnant women can be more anxious, and it's trying to identify when that might be becoming more pathological rather than, sort of normal"* (GP003)

> *"I think if that stops an individual from carrying on normal daily life. If it's stops someone to the point where they're staying in all the time - it's amazing what excuses people have come up with for things."* (HV003)

The association of anxiety symptoms associated with depression was discussed, with a range of perspectives expressed. Some HCPs acknowledged that they view PNA as a distinct clinical diagnosis:

> *“I think depression and anxiety are two completely different things and I don't think we recognised that before. I think we were, 'Are you depressed?' We asked people if they felt fine and I don't think we quantified it enough.”* (MW005)

Others acknowledge that their clinical focus was usually directed towards identifying depression and therefore they didn’t screen for anxiety symptoms:

> *“I’m trying to think when I’ve last seen a lady who just had anxiety . . . I think that’s very difficult to define but there are only a small number of women that would have pure anxiety and no mood disorder at all”* (GP005)
>
> *“When I first started studying perinatal mental health which is like about 15 years ago, and before that everything was under the umbrella of postnatal depression”* (MW007)

Along with PNA being an unfamiliar concept to HCPs, it can also be seen as a ‘hidden problem’ which will be discussed next.

4.3 Perinatal anxiety as a ‘hidden problem’

HCPs acknowledged that society’s expectations to have a positive perinatal experience are unrealistic and creates unnecessary pressure for women. This pressure can negatively influence women and make them hesitant to admit that they are struggling or finding pregnancy and motherhood challenging. This reluctance to consult results in PNA becoming a ‘hidden problem’:

> *“I think it’s, sort of, taboo, I think pregnancy, if we start with pregnancy, it’s perceived to be a joyful time and that everything should be absolutely fine and I’m having a baby and it’s lovely and for some people it’s not. And there is a lot of peer pressure, lots of social media stuff”* (HV001)

> *“It’s supposed to be what they’ve been, all their lives and it’s supposed to be brilliant. Whereas actually pregnancy isn’t brilliant a lot of the time”* (GP008)

Several GPs described that women may have a tendency to ‘normalise’ their symptoms which may be another reason to prevent them from seeking help:

> *“Yeah, I mean again, you might just normalise symptoms, if you’ve not been pregnant before or even every pregnancy is different. You might just think it’s part of being pregnant.”* (GP010)

> *“I suppose the barriers might be that they normalise anxiety; talking to colleagues and friends and they all get worried and think, ‘That’s normal. That’s what it’s all about’. They normalise it and then don’t come in.”* (GP005)

Some HCPs speculated about specific triggers for anxiety, with several GPs considering that pressure to establish breastfeeding could be significant and was potentially anxiety inducing:

> *“I’ve had lots of people who’ve been very anxious about feeding after baby is born, um, probably the one that is the most obvious in my mind was a woman who'd had twins and she was getting lots of pressure to breastfeed . . .”* (GP002)

> *“The mental health problems that arise surrounding that [establishing breastfeeding] I’m not sure whether that’s so well documented and it certainly feels significant. You have mums talking about the guilt of not being able to breast feed . . . and feeling like they’re being judged by healthcare professionals and other mums.”* (GP008)

The majority of HCPs from different HCP groups agreed that stigma about mental health still exists in everyday society. HCPs felt that women were worried about admitting to having PMH problems as they were scared of the potential consequences of such a disclosure. Fear of being classed as unsuitable to look after a child and having that child removed from their care was something that HCPs encountered quite frequently:

> *"I do think there is still bit of a barrier because I think a lot of parents know that we work quite closely with Social Services and I think there is, unfortunately, still a bit of a stigma around thinking, 'If I share with my health visitor that I'm not coping and I'm experiencing low mood, then...' It's quite an old-fashioned stigma but I do think it's still there. Unfortunately, they think we'll go back to Social Services and say, 'This mum isn't coping. She can't look after a baby'. Sadly, I think that's a big stigma which is still out there in society really. Maybe they see us as the baby police."* (HV005)

> *"Women feel like they are going to have their baby taken away"* (MW001)

In contrast with the majority, some HCPs did remark that current societal attitudes are shifting and that the stigma around disclosing mental health problems is reduced from previously:

> *"And people are quite open if they're on medication or they've been struggling because I don't think there's the taboo that there used to be before"* (MW005)

> *"Certainly, if you can approach the question in an understanding way and normalise it, then I think that helps reduce the stigma. I don't know. It's not something that I've noticed to be a major issue."* (GP010)

Stigma was identified here as a potential barrier to the identification of PNA The next theme will address further issues around this.

4.4 Barriers to the identification of perinatal anxiety

There was a general consensus amongst the HCPs that identification of PNA within a consultation can be challenging. HCPs expressed that they believed that some women were reluctant to raise concerns about PMH problems within a consultation and appeared to avoid disclosing their concerns unless they were directly asked about them:

> *"Obviously the women don't tell you everything so that would be a barrier is the actual women not kind of saying anything"* (MW007)

> *"I think the majority would not say a great deal unless they were specifically asked"* (MW002)

Opportunistic identification was agreed to be important in the diagnosis of PNA. HCPs agreed that the professional best placed for this was the MW in the antenatal period and HV in the postnatal period as they had more frequent contact with the woman:

> *"It may be that that woman we see every week for breast feeding support or indeed maternal mental health support, it maybe that she comes into clinic, to our open clinic every month to get her baby weighed, and I suppose it's that opportunistic contact that helps provide the bigger picture."* (HV001)

GPs felt that they didn't see women in the perinatal period regularly enough to develop sufficient relationships with them however it was still possible for them to identify PNA in consultations for other problems if they were alert to it:

> *"I suppose not seeing the patients as much as we maybe would like because yeah you often feel that care is kind of taken over. Although we asked for shared care I think you know patients are just happy, very happy to see the midwife which is brilliant [yeah] but I think we kind of lose touch a bit with them. So maybe we're not seeing them as regularly to pick up things . . . I think that's maybe a barrier not seeing them early enough, it's barriers to detecting [detecting] anxiety."* (GP004)

HCPs discussed that addressing women's mental health was not always a priority. Sometimes this was due to focussing on assessing the woman's physical health in the perinatal period. This GP describes the sort of issues that they would address in a six-eight week postnatal check, all of which review physical health:

> *"Um, contraception, mood, bleeding pattern, breast feeding or bottle feeding, an abdominal examination if they've got any bleeding or anything like that I might do a P.V examination. Also, if they had a, episiotomy or something and they had a wound, if they were worried about the healing we would check that as well . . . um, anything else . . ."* (GP002)

Sometimes the focus in appointments was on the baby as opposed to the mother. GPs in particular discussed that at the standard scheduled postnatal check for both mother and baby the focus was often directed towards reviewing the baby and it was important to prioritise assessment of the Mother:

> *"Yeah, yeah, even if it was a baby appointment, if it was baby's appointment I would obviously deal with baby first but would always, always have an eye on Mum and ask a few social questions really, more perhaps , if she has help nearby, if husband or partner is helping out, if she's getting sleep, how she's feeling . . . so I will always ask Mum even if it's baby's appointment but if it Mum's appointment then, um, certainly will, will try and establish how, how she is getting on."* (GP001)

> *"Sometimes I think again it feels we concentrate quite a bit on the baby at that six week check where I think it's really important to do the mother's check as well. And maybe it shouldn't be combined as such like that you know."* (GP004)

HCPs felt that along with them focussing on the baby's needs in appointments, mothers may also be doing the same. They expressed that it was important that they prioritised women because of this as well:

> *"I try not to focus on, you know, even if the baby comes in, I normally try and focus, and pay a bit of attention to Mum and check that they're doing alright, that's what I normally try and do . . .Yeah, yeah, even if it was a baby appointment, if it was baby's appointment I would obviously deal with baby first but would always, always have an eye on Mum and ask a few social questions*

> *really, more perhaps , if she has help nearby, if husband or partner is helping out, if she's getting sleep, how she's feeling."* (GP001)

> *"Their anxiety is all about the baby and they tend to put themselves last and maybe they don't look at their own emotional needs because they're so focused on the baby"* (HV005)

MWs and HVs acknowledged that particularly when women were being seen on a home visit, family and home circumstances could mean that they struggled to focus their attention solely on Mum and her mental health:

> *"There's so much going on in the house when you go and do a visit with other children and babies and stuff it's perhaps something that's not always discussed or picked up on"* (MW006)

> *"That's always difficult for women, particularly if they've got other children, find it difficult to talk because the needs of their children are paramount, of the other children. It's really hard to create a space for the women"* (HV001)

Along with some of the barriers to identification of PNA HCPs discussed the ways in which they would identify and monitor PNA which will be discussed next.

4.5 The use of case-finding tools vs. clinical intuition

HCPs discussed the clinical tools and validated questionnaires they were aware of for the identification and assessment of PMH problems, suggesting that these were focussed on depression, not on PNA:

> *"Not anxiety specific [tools]. The only things we've used in the past are the QOF[3] questionnaires, PHQs[4] and the Edinburgh Postnatal Depression Scale. Those focus on depression. Anxiety and depression often come together but we don't use anything which identifies anxiety in the absence of depression. There is no specific scale, rating or measurement. No, so there's nothing specific which addresses that."* (GP005)

There was disagreement about how helpful clinical tools were. GPs indicated that they didn't commonly use tools to assess anxiety but some remarked they would anticipate that their MW or HV colleagues might use the Edinburgh Postnatal Depression Scale (EPDS) to identify both depression and anxiety:

> *"It's the Edinburgh `postnatal score, or whatever, so I think there are scores out there but I think that maybe the HVs and the midwives use them, I don't personally. But I am aware of them."* (GP001)

---

[3] Quality Outcomes Framework

[4] PHQs Patient Health Questionnaires

Several participants felt that their own clinical expertise and professional judgement were preferable to using tools:

> *"I personally don't [use diagnostic tools] and I don't like mental health score cards and things where you have to get a number and then you are, then you're diagnosed as whatever. I think with experience and skill, you can pretty much pick it up yourself."* (GP007)

> *"I do use my clinical judgment probably even more than just following the Whooley questions and the EPDS score and I'm sure my colleagues do"* (HV005)

Several MWs and HVs also described including scores from assessment tools to support referrals to specialist mental health services. GPs suggested that they would complete these if necessary for a referral process but otherwise they didn't use them:

> *"I think it gives a bit of credibility. We used to find that we'd struggle to get people referred into the services...because we didn't use those and we'd be saying, oh this woman's a bit depressed…"* (MW007)

> *"I don't use scoring systems for anxiety and depression in non-pregnant women, I'm confident in my assessment. If it was required before a referral then obviously I would do it, but I'm, I think I'm good at this, so I don't feel like I need a scoring system"* (GP002)

Some HCPs suggested that women expressed opinions about the tools, and reported a range of experiences in using them:

> *"Some women look at me and say, "I'm not using those, that's just really weird". Yet other families think well, actually that's a great introduction…"* (HV001)

> *"And I also think that that type of model where you have a loads of questions and you tick off and then you come to a diagnosis at the end, I think that de-humanises [sic] the situation and I don't think that mums actually like that sort of thing in that situation [mmm]. I think if they've got a problem, I think they want to talk to somebody [mm-hmm] and not be treated in that way."* (GP007)

One perceived limitation of using scoring tools to assess PNA was that a woman might provide responses to generate a 'normal' score to avoid being identified or labelled as having a PMH problem:

> *"There are lots of tools we could be using but I think even with the tool, they can give the answers that they want to give really."* (HV002)

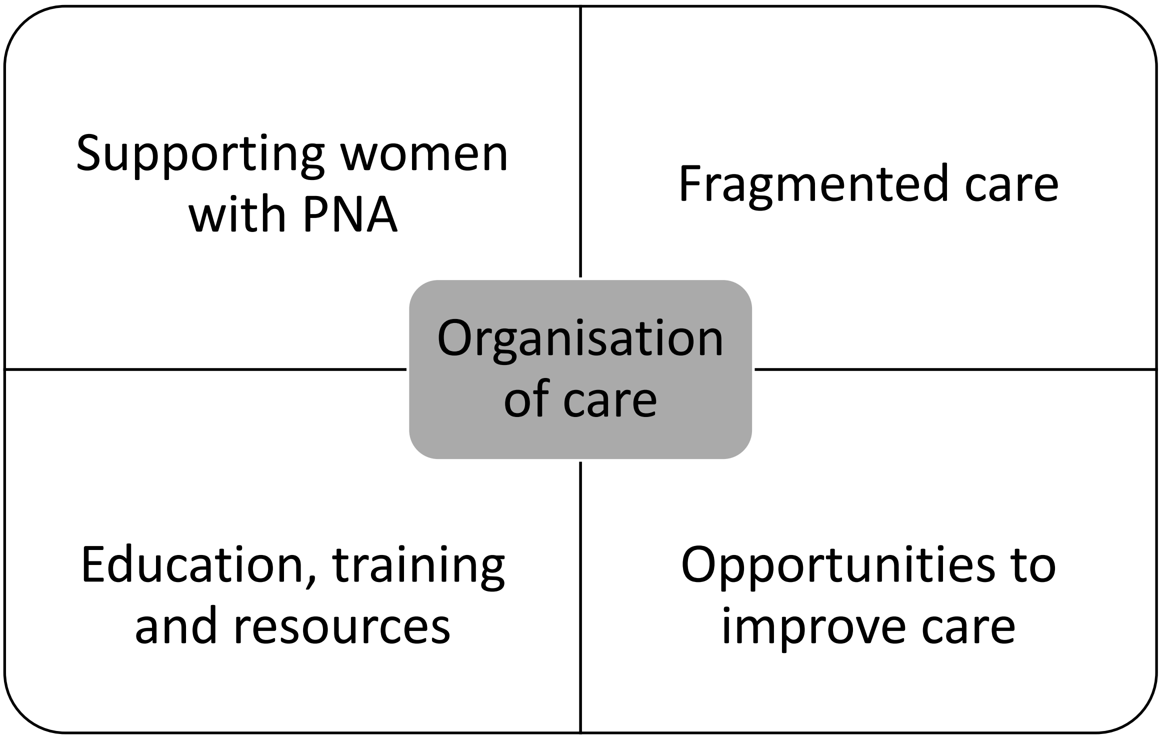
> *"We've got the Edinburgh postnatal but, again, it works sometimes. It does give you a score but sometimes the score can be low and you still know that the mum's not right, depends on what she chooses to say really . . . Very rarely have I found a mum that answers it honestly."* (HV004)

After discussing PNA as a concept it is important to consider how care is organised for women which will be reported in the following chapter which will present the second half of my study findings.

5 Results - Findings Two: Organisation of care

This second results chapter will outline how care for women with PNA is organised. It will discuss the following themes: 5.1 Supporting women with perinatal anxiety ; 5.2 Fragmented care; Education, training and resources and 5.4 Opportunities to improve care. Figure 5-1 Organisation of care themes illustrates these.

Figure 5-1 Organisation of care themes



5.1 Supporting women with perinatal anxiety

HCPs discussed the various ways in which they could support women identified as having PNA. They stressed the importance of trying to establish good rapport and relationships with patients to really try and understand their circumstances. Continuity of care between a specific HCP and a patient was seen as a particularly useful way to do this:

> *"We do develop quite a relationship with the ladies that we care for, and that trusting relationship means that they will speak to us about issues that they may have"* (MW003)

> *"But I suppose a lot of it is just forming some rapport, finding out where they're at, whether this is their first pregnancy and they're going to be in a very different place if it's their fifth."* (GP008)

Unfortunately, despite it being recognised as important, many HCPs expressed frustration that relational continuity is difficult to achieve with time pressures considered a major barrier for them to support women:

> *"I don't think we have the resources available to deal with it and it's the time factor that these visits take."* (HV004)
>
> *"You might be rushing so maybe you don't ask the questions that you would if you had more time and so you were trying to run from person to person and that*

> *woman deserves and needs more than what you can give her sometimes"* (MW005)

In contrast, GPs weren't certain that having more time to see perinatal women would be helpful. They discussed that their workload is already very challenging and adding in more requirements to see perinatal women more often would place further pressure on their clinical commitments:

> *"First of all, workload is high enough as it is and there's a GP crisis, so do I want to see more often and gain rapport? That would be nice but I seriously don't have the time."* (GP005)

HVs expressed that even though they would like more time with patients they are encouraged to focus on their core contacts and not add to their already challenging workload:

> *"I just think the trouble is with our service, there's so much pressure on our service now and now we're being streamlined even more. There are going to be even less health visitors in the new structure. The emphasis from our management is; 'You've got to focus on your core contacts. Everything else you do is superfluous' "* (HV005)

Although many HCPs offered support to women with PNA themselves, they often referred to specialist services such as the specialist mental health midwife or the perinatal psychiatry services:

> *"In more recent years actually we've now got specialist midwives, we've now got specialist psychologists and things who we can refer to [ok] so in the past you might pick it up but you didn't really know what to do with it [yeah] and it's got a lot better now."* (MW001)

> *"I think the mum and baby services are good. Um, and I think there can be an outpatient or inpatient which can accommodate different needs."* (GP001)

Many HCPs discussed referral and encouraging self-referral to local Improving Access to Psychological Therapies (IAPT) services:

> *"The main point of contact was a referral to IAPT which we have service to and pregnant ladies are seen quicker than they would be normally."* (GP004)

> *"Well, they can refer themselves for the counselling service"* (HV002)

All GPs, MWs and HVs, however, acknowledged that accessing theses specialist services could be challenging and women could experience long waiting times to see a specialist:

> *"However, they've got a really long waiting list and sometimes they can't get the women in to see them as quickly as they would like."* (MW004)

> *“Mental health services is quite . . . it’s not brilliant really from my perception of it. Certainly, accessing counselling and CBT and that sort of thing can be difficult and quite protracted.”* (GP003)

Treatment of PNA with medication was discussed by the majority of HCPs. There were some conflicts in the data regarding prescription of antidepressant and anti-anxiety medication. GPs were generally cautious to prescribe in the perinatal period but not opposed to it:

> *“Yeah it’s something you’ve got to be obviously more careful with, with pregnancy because obviously with the risks with using anti-depressants for example and obviously there are certain ones that are thought to be safer although I mean I think I always have to tell ladies that there are no guarantee’s with medication and we can’t be 100% sure that there’s no side effects or problems possible and but it’s a question of you know weighing the pros and cons and whether the risks of not treating are higher than the risks of possibly using medication.”* (GP003)

Some MWs expressed frustration that GPs either stopped medication or were hesitant to prescribe it which meant that women were not able to access potentially beneficial treatments for their PNA:

> *“We get a lot of women who come and their GPs have stopped medication so you know with the help of the BUMPs, ‘the best use of medication in pregnancy in the UK’, it’s an advisory service and the NICE, we are sort of sending them back to GPs to say look this is safer to be on than not on and things like that. Because obviously there’s risks to the foetus from stopping medication and it isn’t always apparent”* (MW007)

In contrast this this, in other interviews it was suggested that sometimes women were prescribed medication such as antidepressants because access to specialist services was so difficult:

> *“I think people are medicated sometimes as a quick fix when maybe the issues could be dealt with in a different way.”* (MW005)

HCPs discussed the importance of appropriate support from a woman’s family and friends. However, it was recognised that the structure of modern society has changed and access to helpful support from family and friends is not as readily available as in the past which means more women could feel unsupported or isolated:

> *“And that’s the social fabric which we live in in terms of the way it’s structured. So of course perinatal anxiety issues or any wellbeing of any pregnant woman as for any human being, if you have a close limit structure which is supportive it will definitely be very helpful.”* (GP009)

Although support from family and friends can be really helpful, HCPs did also consider that in some circumstances they could also have a negative impact on a woman's mental state and may not give accurate or helpful advice and support:

> *"Families and friends often have experiences of childbirth and feeding and things like that that are often not necessarily best practice, for example advice concerning breastfeeding and things."* (GP007)

Several HCPs mentioned the importance of considering the partner's mental health as this could have an effect on the family unit and contribute to the mother feeling anxious:

> *"So yeah that, I think it can silently impact on dad a little bit and maybe we need to ask dad a bit more how he's getting on as well"* (GP004)

> *"I could just tell by the way she was and the whole holistic side of it; the way the house was, the way she was, the way the baby was, the way the dad was"* (HV004)

An additional source of potential support was the third or voluntary, sector. HCPs discussed that along with health services, the third sector also has something to offer women and should be considered as a management option:

> *"So often I explain to them about other agencies that will be there long term, because that's the thing that they need, I think, sometimes is that continuity"* (MW005)

> *"I use things, as a sort of sign posting service, things like MIND and Maternal Mental Health Alliance, Anxiety UK, those sort of things, I tend to use but the only voluntary service that we work quite closely with at the moment is Home Start."* (HV001)

Whilst supporting women through PNA it is important to consider the impact that the structure of a Multidisciplinary team (MDT) may have on care that is provided. This is discussed in the next theme.

5.2 Fragmented care

HCPs discussed multidisciplinary working and its influence on patient care. Poor integration of services and poor communication were both identified as barriers to effective management of women with PNA that can result in fragmented care.

GPs reported that they rarely see pregnant women in the course of their daily work. Some GPs reported that they felt routine antenatal care was not part of their role, that they had lost clinical skills, and that pregnant women should be managed wholly by the MW:

> *"I mean the reason we're deskilled is because we don't do it anymore. But we don't get paid to do it and we don't have the time to do it. If we were to take on more of a role with antenatal care, then what would the midwives do?"* (GP010)

GPs felt that overall MWs delivered good quality antenatal care and so did not see a need for them to become more involved with this than currently:

> *"I've no desire to find out what goes on with that care because I'm happy with the midwives looking after the patients well enough; just in the same way that patients see a Nurse Practitioner, a Nurse or a Health Care Assistant. As long as they're seeing people within their skill set and looking after them well enough, then that's fine. I don't need to see all the people all the time and so I'm happy with that."* (GP005)

However, despite this, GPs admitted to some uncertainty regarding their understanding of the specific care their MW and HV colleagues actually delivered and admitted to making some assumptions about what they do:

> *"The main thing, I suppose, is postnatal depression, bleeding, infections and pelvic muscle exercise. I know the health visitor and the midwife have done that already or I assume they have. It's all changing now with health visitors being so sparsely divided now. I don't know that goes on but that's what I assume goes on. That's what used to go on."* (GP005)

HVs expressed that they felt MWs were responsible for looking after PMH throughout pregnancy and that their role commenced in the postnatal period:

> *"Well that's the midwife, really, in pregnancy because we don't want to encroach on her role and we've got enough to do once they've had the baby"* (HV004)

HCPs expressed concerns that they may be duplicating or overlapping work with their colleagues. MWs and HVs observed that the handover between them was not always streamlined and mean that at some points it was not clear who should be delivering care:

> *"There have been issues over the years about that kind of handover period"* (MW001)

> *"It depends, really, who's the best professional to deliver that intervention at the time, because, primarily, they come under the midwife's remit but obviously there's benefit to us being there"* (HV003)

Most HCPs described poor communication between different HCPs, with GPs, HVs and MWs. They observed that the quantity and quality of information received from each other was variable:

> *"If the person who sends them to see me hasn't made it clear to the patient or to me why they have expressed such as concern, that's a shame. Just a loss of a link in the chain really"* (GP001)

> *"Some GPs are great, they'll give you loads of information, and some GPs aren't so great and they just tick a box…When you've got a little more information it gives you a bit more of an in to ask more detailed questions"* (MW005)

GPs, MWs and HVs described how working in separate premises to one another can create a geographical barrier, which can limit the opportunities to develop effective working relationships with their colleagues:

> *"I think there's nothing like being co-located [yeah] to be fair, I know you don't have to be co-located to have good working relationships, but that was great I mean, obviously we didn't talk about clients specifically [yeah], but we knew they were there, we knew we could talk about things."* (HV001)

> *“It used to be very simple because the midwives and the district nurses were based in the health centre [mm-hmm] but they’ve now been centralised and you have to leave a massage on an answerphone [mm-hmm] to get into contact and that’s not as good as it used to be.”* (GP006)

However, even when HCPs were co-located and based in the same building it was acknowledged that inter-professional working communication between HCPs could still be limited despite working alongside each other:

> *“They [midwives] just tend to come in and have their own clinic. I think that’s running in parallel rather than you’re working with them”* (GP010)

> *“So no, I don’t think it’s made a huge difference. And the practice I was in weren’t very into health visitors anyway so even being in there, I wouldn’t say, they would perhaps use me if anybody was being difficult”* (HV002)

However, one HV expressed that it was possible to establish a close working relationships with their MW colleagues if they placed emphasis on it:

> *“We have close relationship with our midwife because we’ve worked hard to achieve that rather then it being you know, part of the service spec I suppose [yeah], yeah. And that’s something that I feel that could be improved”* (HV001)

In contrast to the benefits of being co-located with other HCPs, one HV reported they felt that being centrally located with other HV colleagues was beneficial as they could provide support to each other and respond to concerns raised by patients and other HCPs more quickly:

> *“So at least any concerns do get actioned quite quickly, whereas I suppose if you’re based in a GP practice and you’re maybe one or two health visitors, perhaps, or a couple that work part time, you haven’t always got the coverage”* (HV003)

HCPs discussed that other factors which could directly influence their ability to provide effective care included their clinical training and education and direct experience seeing women with PNA, the results of which are presented next.

5.3 Education, training and resources

HCPs discussed how their previous training (or lack of) around PNA and clinical experience affected the care they could offer to patients. Most GPs could not recall ever having any formal training in PNA:

> *"Not really, no just purely you know general practice training and I've never been on, I've never been on a course or been on a specific training, sort of had any specific training in that no I would have thought."* (GP003)

Some GPs recalled that the training they had experienced around PMH problems was focussed on PND and PNA wasn't really covered:

> *"Yes, yes, yes. I mean that's a, you know, so perinatal, postnatal depression and things, yeah. I mean yeah [mm-hmm], that's emphasised and, you know, it is a significant issue."* (GP007)

Even where educational resources are available they may not be accessed. For example, whilst some GPs were aware of and had used the Royal College of General Practitioners (RCGPs) PMH toolkit (Ladd and Santhanam 2015), several were unaware of it:

> *"I'm not aware of any training or toolkit to use available to identify or to access to improve our ability to cope with managing [PNA]."* (GP009)

One GP suggested that the toolkit could be useful for continued professional development purposes, however emphasised that they would usually only access toolkits if they had seen a patient with a specific problem and identified a learning need for themselves:

> *"I think that they're good. The problem is there are so many different toolkits. I tend to just access them if and when I see a patient that I'm unsure about something or if I need to do some CPD. If I saw a patient like this and I was uncertain about what to do, then that's probably the time I would access the toolkit because I tend to target my learning."* (GP010)

MWs reported that they have compulsory annual training which includes PMH training and felt that this was helpful in some ways:

> *"We have mandatory study days, and mental health is one of the issues so we have an update and talk every year as part of our mandatory study days on mental health, yeah"* (MW001)

However, most felt that this training wasn't actually sufficient to learn everything that they needed and lacked confidence in their knowledge about PNA:

> *"We have a clinical psychologist come in to speak and she's focussing a lot on anxiety and things this year… her session is always evaluated really well because it's so interesting, but it was only a few hours. I think it was only three hours or something. It's just not long enough"* (MW005)

HVs reported that they felt confident with supporting women with milder symptoms of PNA. They reported that having some training in techniques such as Cognitive Behavioural Therapy (CBT) improved their confidence regarding their clinical skills and the level of support they could offer women:

> *"It gave me a bit more confidence in my practice"* (HV001 when discussing CBT training)

> *"We had the CBT training, a three-day training that all health visitors had, and that was quite good"* (HV003)

HCPs expressed that they would be receptive to having more formal training in PNA (and PMH conditions in general) as it could be beneficial:

> *"I think we are well versed as we said at the start of the conversation in depression but anxiety, you know we could do a bit more looking at generalised anxiety, looking at the anxiety disorders"* (HV001 when discussing training about PNA)

> *"Maybe just an education on the signs we should be looking out for. Maybe something just as simple as a piece of paper documenting what the alarm bells are and the things we should be looking for. Just simple education for midwives and doctors."* (MW003)

It was felt that there was an expectation to be current and up to date with the latest evidence, even if formal training has not been delivered:

> *"I don't think you get extra training for that [Prescribing for PNA]. It's just, like, part of your training and then part reading up to make sure you pick the right one"* (GP006)

> *"You've got to be evidence based, you've got to be current, you've got to know what's available"* (HV001)

HCPs described that they often felt more comfortable dealing with women with PNA as they encountered more patients with PNA and therefore gained more clinical experience of managing it:

> *"I think my training is the experience…If you said to me, 'What training have you had, that makes you able to speak to a woman who's just told you she's going to kill herself?' I'd say, 'None'."* (MW005)

> "*I think you've got your experiential learning from a personal perspective and a clinical perspective. And I, but I feel probably a lot of my experience has come either once I've become a qualified GP or once I've been training as an actual GP, seeing patients and learning from those interactions and reflecting on how that's gone."* (GP008)

Despite the challenges and barriers to identifying and managing PNA, HCPs did discuss ways in which they felt care was good or made suggestions for changes to the services available. These are covered in the next theme.

5.4 Opportunities to improve care

HCPs discussed the importance of effective communication with women. GPs in particular discussed the discussed the different types of language used in consultations. Some suggested that it was better to ask questions about symptoms rather than directly asking about ‘anxiety’ or ‘mental health’:

> *“I probably wouldn’t use the term mental health, I don’t really use that term in, um, consultation. I might [use] the term panicky if I felt there was an anxiety element, I might say ‘have you had any panic attacks or felt stressed or panicky?’ I’d probably try and use more of a colloquialism or an informal term than, and I might use low mood rather than depression if I was making an assessment.” (*GP001)

All HCPs expressed that they feel comfortable enquiring about PMH and PNA in consultations with women. They described that it was important to foster an environment of openness so that women felt they could discuss their symptoms:

> *“I feel quite comfortable raising most things, to be fair, and I think that's experience as well…and because I feel more comfortable knowing what I do about it as well. It's definitely your own biases and influences and experience that makes you feel more comfortable or less comfortable approaching certain topics”* (MW005)

Despite all HCPs recognising the importance of remaining impartial and non-judgemental one MW highlighted that some members of her team can appear quite judgemental meaning not all HCPs achieve this:

> *"Yeah I think so, not all midwives, of course, but there are some midwives who I think are very judgemental"* (MW001)

It was considered crucial to make the most of scheduled contacts to opportunistically identify PNA; primarily MWs in the antenatal period and HVs in the postnatal period. Whilst as noted earlier, GPs reported that they did not regularly see women in the perinatal period, they felt that it would be possible for them to identify PNA in consultations for other problems if they were alert to it:

> *"it may be that that woman we see every week for breast feeding support or indeed maternal mental health support, it maybe that she comes into clinic, to our open clinic every month to get her baby weighed, and I suppose it's that opportunistic contact that helps provide the bigger picture"* (HV001)

One GP suggested that it might be helpful for GPs to have more scheduled contacts with women in the postnatal period. When discussing how important the six-eight week postnatal GP check is they suggested that a '12 week check' as a second postnatal appointment to review women would be helpful:

> *"I mean it would probably be helpful to have another one you know a 12 week or one later down the road." (*GP004)

Several GPs agreed with this and felt that it could be a sensible way to ensure that mothers receive appropriate support without creating too much additional demand on their time:

> *"I would think that that would really be, really be sensible step if we can incorporate it somehow to be a formal check is something that we would have checks and balances to say that it's happened otherwise it's completely in the mum's court to come and seek help [mmm] if they feel it's needed so yes that would definitely help."* (GP009)

> *"Yeah, that's a good idea. I'd probably make it optional. For some mums who are coping fine and are quite straightforward, they might not want that and I think, sometimes, just getting out of the house with a young baby can be quite difficult but certainly for those who need it and certainly if they've got mental health problems, then that would be a good idea."* (GP010)

HCPs discussed the importance of being alert to the possibility of PNA and having an awareness of management options to be able to describe to women and their families what support they are able to access:

> *"I think at the moment it's about having that general awareness although it could be a big part of our role. But I think at the moment it's a signposting service. It's about acknowledging it and trying to understand it and then having the ability to describe things for the family and moving it on, yeah."* (HV001)

> *"I think it's the same as any patient, you've just got to be on the lookout, keep your eye open for it."* (GP001)

It was suggested that practitioners could all benefit from specific training around PNA to improve their clinical skills and ensure that women received the same quality service from all:

> *"There's not an equality of service, really [yeah], and that some practitioners feel comfortable and I think that it's about perhaps be it a skill, your expertise, and your familiarity with"* (HV001)

It was suggested by some HCPs that more specific tools to identify and monitor PNA could be helpful within a consultation:

> *"Obviously, bearing in mind that scores aren't everything but maybe if we had some more effective tools to use, perhaps that would help us be more effective in our assessments" (HV005)*

> *"I suppose all tools help in terms of measuring anxiety and giving some feedback to the patient. Is my anxiety better or worse than it was two weeks ago? If you don't know, you don't know but if you've done a scale, then you can give somebody some feedback on whether treatments are helping or not and they can see whether the treatments are helping. Yeah, I think some tools would be helpful or a tool would be helpful." (GP005)*

GPs in particular reflected upon the emotional changes that may occur when becoming a mother. It was suggested that health services could place greater emphasis on preparing women for this:

> *"And I think because it's the first time of being pregnant I don't think you know what to expect and it's not necessarily discussed at antenatal, the sessions that you get antenatally. Whereas I think it should be actually yeah because I think, and often I mean taking personally now but friends have said, never knew what to expect emotionally and I think that's something that you're just not prepared for as well. So antenatally I think it would be brilliant to discuss that more."* (GP004)

It was identified that improved communication between HCPs would result in more accurate information being shared and could reduce the negative impact on patients' experiences:

> *"I think if we had a better way of communicating with our allied health professionals; with our MWs; with our GPs. If we had better communication which gave us a clearer picture of [a patient's] history, then that would help. It can be that we're going in to see a mum where there is a history but we've not really known about it, for whatever reason. I think there is room for improvement really with communication between professionals in that area"* (HV005)

HCPs discussed that using different electronic systems to record notes meant it was difficult to share information. One MW discussed the development and implementation of a specific proforma that could be shared which seems to be helping in her area:

> *"The proforma that I assess somebody in the service, the idea was that it was to put something in the front of the notes so that people could see instantly…a copy actually goes to the health visitor and we gain consent for it to go the health visitor. So actually it means that the health visitor goes in with a much better support system, they know more, the women don't have to repeat everything… And they certainly felt the benefit of actually having that information" (MW007)*

Although care overall appears to be fragmented for women with PNA, improved integration of services could be beneficial for patients. It was acknowledged that in one locality, the PMH service is improving specifically because HCPs are working more closely together:

> *"The service that we work with, the perinatal [mental health] service is just getting after all these years we're actually finally working together and it's really exciting at the moment that these things are changing."* (MV007)

Examples of good working relationships between colleagues was discussed by some HCPs. It was suggested that this should be more widespread:

> *"Yes we are, and that sort of, that's not a, it's accepted practice, [yeah] that both sides that, you know, we have close relationship with our midwife because*

> *we’ve worked hard to achieve that rather then it being you know, part of the service spec I suppose [yeah], yeah. And that’s something that I feel that could be improved.”* (HV001)

HCPs suggested that referral pathways and available referral services for specialist mental health support were often unclear. Several stated that it was only with experience that they began to understand the constantly changing clinical landscape and know where they could refer to appropriately, suggesting that if pathways were simplified it would be more straightforward to find appropriate support for patients:

> *“It’s improving, I think there’s more services out there than we realised, I think that a lot of my initial years took a lot of time to actually work out what was out there . . . So there’s a lot out there that people can access really depending on what the things are so we’re in the process of trying to put these things and get the money.”* (MW007)

Overall, although HCPs identified a significant number of issues with both the identification and management of PNA it is promising that there are lots of ideas for changes at different levels; from the education to the consultation to the current healthcare system. HCPs appeared optimistic that these changes could be implemented successfully and improve care for women with PNA.

6 Discussion

6.1 Introduction to discussion chapter

In this chapter I briefly describe why my study focussed on PNA and review the study aims and objectives. I summarise the findings of my study and compare these results to other available literature. I review the impact of PPIE upon my study, and discuss the implications for clinical practice, policy and research.

As previously discussed in my Background and Literature Review chapters, my MPhil study focussed on PNA as it is a common problem that has implications for mother, baby, and wider society. CG192 (NICE 2014) has recommended that further research into perinatal anxiety disorders is necessary to improve the evidence base and to inform improvements to current clinical practice. At the start of my study there was no published literature that investigated and compared the perspectives of multiple HCPs around the identification and management on PNA. A review by Ford et al (2017b) called for further research into the recognition and management of PNA, particularly in primary care. My study therefore fills an important research gap and provides fresh insights into HCPs and their experiences of PNA.

6.2 Study aims and objectives

The aim of my study was to explore the perspectives of a range of HCPs on perceived barriers and facilitators to the identification of PNA in women by HCPs in primary and specialist care. The views of GPs, MWs and HVs were explored.

The objectives for my study were:

1. To explore HCP experiences of current practice in the provision of care to women with PNA
2. To identify barriers facing HCPs in the identification and management of women with PNA
3. To identify facilitators to support HCPs in the identification and management of women with PNA

6.3 Summary of findings

My study reports perspectives from a variety of HCPs about the identification and management of PNA. The concept of PNA was discussed by participants. Many HCPs were unfamiliar with PNA as a specific clinical diagnosis which meant that there was variation between participants around their knowledge of PNA. HCPs reported that they anticipated it to be normal for women to experience some anxiety throughout the perinatal period however they suggested that differentiating between this ‘normal’ anxiety and more pathological anxiety could be challenging. HCPs considered reasons why women may choose not to present to them with PNA for support. Stigma around mental health conditions, pressure from within society to have a positive perinatal experience and women ‘normalising’ their symptoms were some of the reasons provided. The result of this means that PNA appears to be a ‘hidden problem’.

All HCPs agreed that the identification of PNA was challenging. Opportunistic identification of PNA within routinely scheduled contacts was recognised as being very important. There was consensus amongst the participants that the HCPs best placed for this were MWs in the antenatal period and HVs in the postnatal period due to the more frequently scheduled contact that they have with perinatal women. GP participants identified concerns that women were often less of a priority than their babies, particularly at the postnatal check.

There were mixed views around the use and value of case-finding tools for PNA. Most GPs and some HVs expressed that they felt tools were inferior to their clinical judgement. They were concerned that women didn’t like tools being used and could deliberately generate a normal score depending on their answers. MWs and some HVs, felt that tools could be useful and may increase credibility of their referrals to more specialist services.

A variety of ways in which to support women were discussed: continuity of care, developing a rapport with patients and prioritising mothers and their mental health were all seen as crucial. Specialist services for PNA were overall felt to be provide a good service for women but had long waiting times and therefore were difficult to access quickly.

There were tensions within the data around the prescription of medication to pregnant or breast-feeding women; GPs were often cautious when prescribing medication as they were worried about the effects on the developing foetus or breast-feeding child. This was a clear source of frustration for MWs who felt that GPs should know more about prescribing in the perinatal period. Concerns about current pressures on available services were common; some HCPs felt that they could not deliver the high quality care they would like to because of this. HCPs discussed the importance of appropriate social support from family and friends, expressing that they were often concerned about women who did not appear to have such support.

Care for women identified with PNA was reported to be fragmented, partly due to limited communication between HCPs. GPs reported rarely seeing patients during the perinatal period, relying on their MW colleagues to refer to them if their input was required. Co-location of HCPs could ameliorate some of these difficulties as ‘running in parallel’ appears to cause duplication of work and leads to lack of clarity around patient care.

Most HCPs expressed concern about the limitations of their previous training around PNA. Specific learning needs were identified, with an emphasis on interdisciplinary education. HVs appeared to be more comfortable than MWs in supporting women with milder PNA symptoms due to their previous training in methods such as CBT. All HCPs need to consider the role of others and try to coordinate care around the woman.

Opportunities to provide good care were discussed. It was suggested that HCPs could have more targeted training around PNA and that this would help with remaining alert to the possibility of PNA which would increase the chances of identification. Effective communication with women was seen as crucial; HCPs considered the type of language that they would use in a consultation and felt that it was important to remain non-judgemental. Some HCPs expressed that specific tools to identity and monitor PNA could be useful. Making the most of all scheduled contacts (see Figure 1-1 Opportunities to identify PMH problems during the perinatal period on page 6) was crucial to opportunistically identify PNA. HCPs expressed that a more integrated approach to patient care would be beneficial; improving communication between HCPs and simplifying referral pathways could help with this.

6.4 Comparison with existing literature

My study is the first to explore perspectives of a range of HCPs delivering perinatal care; the findings of which I will now compare to the current evidence base around PNA. Previous studies have explored perspectives about PNA of single professions (Ashford et al 2017; McGookin et al 2017; Noonan et al 2018a; Noonan et al 2018b) and there is literature that presents primary data around GPs and HVs perspectives in the assessment and diagnosis of postnatal depression (Chew-Graham et al 2008) but not in PNA. My study adds to the literature specifically around management of PNA in primary care, addressing the gap noted by Ford et al (2017a).

6.4.1 The concept of perinatal anxiety

In my study, HCPs demonstrate that they have varied understanding and experiences of managing PNA which supports previous literature around this (Ford et al 2017a; Ashford et al 2017; McGookin et al 2017). HCPs in my study also discussed having some difficulties differentiating between normal and pathological anxiety, something which has previously been reported by HVs in a previous qualitative study (Ashford et al 2017).

The RCGP 'Falling through the gaps' report has stated that 'low identification of need' (Khan 2015, page 14), often due to a focus on physical health, acts as a barrier to identifying PMH problems in general. This is a concept that HCPs in my study also discussed and findings from my study suggest that HCPs are aware of this which is important. My study also identified that HCPs sometimes feel that PND diagnosis and management is prioritised over other PMH problems such as PNA. This echoes findings by Matthey, Fisher and Rowe (2013) who performed a literature review of studies which reviewed the suitability of the EPDS tool to detect PNA. The authors suggested that because PND diagnoses are prioritised it is increasingly likely that PNA will be undiagnosed and therefore remain untreated.

HCPs in my study discussed the impact of stigma of mental health problems during the perinatal period and beyond with women with PMH problems. It has been reported previously from results of a cross-sectional study of 460 pregnant women in Canada that stigma around seeking help for mental health problems may act as barrier for women to present to HCPs (Kingston et al 2015).The Maternal Health Study was an Australian prospective cohort study of over 1500 pregnant women that explored how and why women seek help for postnatal anxiety and depression (Woolhouse et al 2009). The authors suggest that access to treatment for postnatal anxiety and depression is dependent on women seeking help for symptoms they are experiencing. My study adds to the literature around perception of stigma and calls for greater investment in public health campaigns to try to reduce this stigma.

It has been highlighted that both patients and HCPs may misinterpret psychiatric symptoms as a normal response to the physiological and psychosocial changes that occur during pregnancy (Bowen and Muhajarine 2006, Vesga-Lopex et al 2008). NICE (2014) highlights the importance of clinician awareness around this. The guideline suggests that some changes in mental state and functioning such as appetite fluctuation may represent a mental health problem as well as being a normal pregnancy state and suggest that this should always be considered. It is encouraging that HCPs in my study reflected upon the possibility of attributing signs and symptoms of anxiety to a physical cause. This awareness is important as it means that if HCPs perform a holistic assessment of women with PMH problems they will be able to offer appropriate support and management options.

In my study, HCPs expressed a variety of opinions with regards to the used of case-findings tools for PNA. There was a range of knowledge about which tools were recommended or might be considered appropriate. This is consistent with previous findings from Ashford et al (2017) who conducted a qualitative study with 13 HVs reviewing their views specifically around postpartum anxiety and found that some HVs are unaware of the GAD-2 screening questions in the current NICE guidelines (2014). In comparison to Ashford et al’s (2017) study I have been able to present perspectives across the whole perinatal period which adds to the literature base. In comparison to data collected about HVs, Ford et al (2017a) have previously reported via systematic review of the literature around GPs and the use of case-finding tools. Ford et al (2017a) found that although GPs were familiar with screening tools they didn’t always use them which is slightly different to the data captured about HVs and could suggest a difference in training between the different HCP groups.

Reasons for choosing not to use case-finding tools included professional preference to rely on clinical intuition, concerns about acceptability for women and the suggestion that women might generate ‘normal’ scores if they wished to avoid a diagnosis. A qualitative study of women’s perspectives of the use of case-finding tools by Shakespeare, Blake and Garcia (2003) reported similar views to this which demonstrates consistency in HCPs views despite the previous study being published several years prior to my study. Freed et al (2012) conducted a review of strategies to improve detection of PND and suggested that providers need to improve disclosure rates by making case-finding tools more acceptable and less stigmatised. Although Freed et al (2012) were discussing PND specifically, their findings are similar to the discussion of HCPs in my study around detection of PNA instead.

It is clear that there are significant gaps in the literature for evidence-based diagnosis procedures and management options for women with PMH problems (Marchesi et al 2016). Bauer et al (2014) recommended that PMH should be recognised as a major public health concern and call for further research to review potential interventions to reduce the burden on women and children from the negative impact of PMH problems. With the exception of PND, there is little existing research about the epidemiology or effectiveness of interventions for non-psychotic PMH disorders (Howard et al 2014) with evidence for interventions for other PMH conditions being somewhat neglected in the literature (Howard, Piot and Stein 2014). Although this is a major issue for PMH care, HCPs in my study did not really highlight any concerns around this.

A small number of studies have addressed interventions for PNA within the literature (Goodman et al 2014; Green et al 2015; Marchesi et al 2016). The impact of CBT based interventions on PNA appears to be promising with CBT appearing to contribute to a reduction in symptoms and improvement in everyday functioning for women with PNA as a result of CBT (Austin et al 2008; Goodman et al 2014; Green et al 2015). HCPs in my study agreed that psychological therapies were an important treatment option for women and reported frequently referring women for such therapy. This suggests that HCPs both recognise and understand the benefits of psychological therapies and will offer them to patients if indicated.

Uncertainty about prescribing medication in pregnancy was also discussed by some GPs. They felt that they did not have much experience or training of prescribing in the perinatal period. This is similar to previous work by Ford et al (2017a) who suggested that this uncertainty may be because the NICE CG192 (2014) do not recommend specific drugs as treatment options and instead discuss classes of antidepressant medication such as Selective Serotonin Reuptake Inhibitors (SSRIs), meaning that HCPs have to make the final decision. If a HCP does not feel confident in prescribing in the perinatal period then making this choice may not be within their professional competencies which could introduce problems for women accessing appropriate medication.

6.4.2 Organisation of care

My study outlined that HCPs do not always clearly understand role boundaries and responsibilities of other HCP groups. This lack of clarity was a theme which demonstrates corroboration with a previous qualitative study that investigated GP and HV perspectives of PND (Chew-Graham et al 2008). A previous qualitative study presented data that suggested that HVs see themselves as well placed identify and assess women’s psychological health (Jomeen et al 2013), something which data in my study supports. Alderdice, McNeill and Flynn (2013) reported in a systematic review of systematic reviews a lack of evidence to support or inform the role that MWs have in maternal mental health. In my study HCPs unanimously agreed that MWs were an appropriate HCP for women to seek support from so this is a direct contrast to previous literature and may therefore represent a new finding.

Availability of current PMH services has been heavily criticised both within my study and in published literature. Regan and Gregoire (2017) highlight that although clear clinical guidance exists from NICE (2014) in practise the available facilities are lacking. They estimate that across almost half of the UK pregnant women and new mothers have no access to the recommended levels of care (Regan and Gregoire 2017). Over 50% of GPs in a recent questionnaire expressed their frustrations about the limited access to specialist PMH care (Khan 2015). A recent review of studies reporting MWs experiences of supporting women with PMH problems by Noonan et al (2018a) suggests that MWs feel similar frustrations and discusses the importance of availability of appropriate services. My study therefore contributes further evidence to the literature base that lack of available support services is a source of frustration for HCPs and has a negative impact on patient care.

A comprehensive 2015 meta-synthesis highlights that fragmented healthcare appears commonplace, with regular occurrence of communication issues and organisational system failures, resulting in negative consequences for patients (Megnin-Viggars et al 2015). Internationally, lack of integrated care for general perinatal services has been thought to contribute to increased maternal mortality rates, such as has been seen in the Netherlands and is currently being addressed by the implementation of an integrated care model (Posthumus et al 2013). It has been suggested that the case-finding and assessment process should be more streamlined for all PMH conditions in order to improve the patient experience (Freed et al 2012). HCPs in my study suggest that a more streamlined assessment process and improvements to integration of care would help to improve the current standard of treatment that is provided for women with PNA which echoes similar previous findings by Khan (2015).

As the first study to compare the experiences of different HCPs to one another my study is able to add to the current literature base around HCP perspectives of PNA. A few previous studies have reviewed PNA care with one type of HCP. Ashford, Ayers and Olander (2017) focused specifically on HVs supporting women with postpartum anxiety and identified the following themes: identification and screening issues, importance of training, service usage and status of current service provision, all of which are similar to themes found in my study.

Jomeen et al (2013) explored HVs' experiences of supporting general psychological health, including anxiety. They reported that that HVs see themselves as well placed to identify and assess women's psychological health but there is a definite focus surrounding PND as opposed to other psychological problems. The authors suggest that training plays an important role to provide HVs with context about other PMH problems they should be aware of in addition to PND. Again, similar concepts were discussed in my study.

A further study investigated student MWs' perspectives of antenatal anxiety (McGookin, Furber and Smith 2017). Four key themes were identified which included: risk factors for development of anxiety; barriers to care; midwife skillset and suggestions for improvements. It was felt that MWs are well placed to identify antenatal anxiety and refer to specialist support if needed and called for mental health education for MWs to be improved and more integrated into the MW curriculum. HCPs in my study agreed with this, with GPs in particular highlighting that they relied upon their MW colleagues' skills during the perinatal period.

From a HCP perspective there is evidence to suggest that HCPs often feel that they lack the knowledge and skills to identify and manage PMH problems, and report they frequently seek help from specialist services (Russell et al 2013b). Limited training around PMH is a common disclosure and suggested as one of the causes of this by MWs, HVs and Obs in one study (Rothera and Oates 2011). MW students expressed concerns about the limited PMH training that they received in another study by McGookin, Furber and Smith (2017) who presented survey data collected from 25 student MWs and qualitative data from 7 semi-structured interviews A further study which presented data from a survey of MWs experiences of PMH problems suggested that MWs require further structured education around MH to improve their confidence and abilities (Noonan et al 2018a).

GPs also express similar concerns about limited confidence in their knowledge and awareness of PMH problems (Khan 2015). A recent secondary analysis of 11 studies exploring the role of GPs in PMH care by Noonan et al (2018b) suggested that GP training should take this into account and prepare GPs more for managing women with PMH problems. The risk of GPs becoming deskilled as they do not routinely see antenatal patients has been demonstrated to lead to increased rates of poor communication, coordination of care and decision making (Oates and Cantwell 2011, Khan 2015). It has also been acknowledged that PMH does not feature heavily in the

GP curriculum and could be prioritised more than currently (NCT 2017, Khan 2015, Ladd and Santhanam 2015).

Findings in my study support all of the above with HCPs expressing concern that they have not received adequate training to be confident when faced with managing PNA in a clinical scenario. My study therefore adds additional support to existing calls for improved HCP education and training around PNA and PMH problems (Russell et al 2013b) which appears to be a key area for development in order to improve HCP confidence and competency with managing PNA.

Opportunistic identification has been identified as being crucial in both my study and previous literature. This appears to be especially important for GPs who may not see patients regularly during the perinatal period and so have less time to build rapport. This supports the concept of making every encounter meaningful and maximising available opportunities to identify PMH problems, as discussed in the RCGP Report ‘Falling through the gaps’ (Khan 2015). This concept can be broadened to include other HCPs such as HVs and MWs.

In my study it was highlighted that GPs have an important role in case-finding PNA and providing support to women at their six-eight week postnatal check that all new mothers should have with their GP. This scheduled appointment can be a crucial opportunity for interaction around mental health as highlighted by The National Childbirth Trust (NCT) in their recent report ‘The Hidden Half: bringing postnatal mental illness out of hiding’ (NCT 2017). The NCT are keen to emphasise that this appointment is often a missed opportunity where PMH go undiagnosed and therefore a woman does not receive appropriate follow-up or treatment if it is indicated. This is echoed by the RCGP Report ‘Falling through the gaps’ (Khan 2015). Amongst other recommendations, the NCT have called for the UK government to put more funding into this routine postnatal check so that all women have adequate appointment time with their GP to discuss their mental health amongst other physical health issues (NCT 2017).

HCPs in my study were aware of how their attitude and behaviour could affect women with PNA. By regularly asking women about how they were feeling, HCPs felt that women would appreciate that it was a routine element of their care. This would hopefully enable them to feel more comfortable and confident disclosing any problems that they were having in a safe space. This echoes similar discussion by Reilly et al (2014) who felt that asking regular, routine questions improved rates of disclosure by women.

HCPs in my study discussed that they felt very aware of the type of language that they use with women with PMH. This awareness echoes a sentiment expressed by Khan (2015) which stresses that GPs need to be careful in the way that they respond to women who disclose PMH problems and use appropriate language when discussing PNA with patients. This report also emphasises that voluntary disclosure of a PMH problem should be seen as a red flag and taken seriously, something which the NICE CG192 (2014) is also very clear about.

It has been demonstrated previously that integrated care can have a positive effect on outcomes for women with PMH problems (Khan 2015) HCPs in my study called for improvements to the current system and it was mentioned by one MW that where services have become more integrated there has been a noticeable improvement in the delivery of care. My study therefore provides further evidence for the continued development of integrated services for PNA and PMH in general.

6.5 Strengths and limitations

My study has several notable strengths and the main aims and objectives were achieved. However, it is important to also consider the limitations of my study.

6.5.1 Strengths

My study used qualitative methods which allowed for the exploration of the views and opinions of a variety of HCPs. As different HCPs were interviewed (GPs, MWs, HVs) comparisons could be made between participants within the same and then different professional groups. Within each HCP group there was variety of experience and professional background which enabled us to gain data from individuals with a range of perspectives. Primary data was gathered and as data collection occurred in an iterative way the topic guide could be amended between interviews to reflect any emerging themes (Miles and Huberman 2014). This meant that myself and TK could explore any emerging themes with subsequent participants.

A further strength in my study was that the PMH PPIE group contributed regularly; something which has been recognised to result in higher impact upon a research study (Blackburn et al 2018). The PMH PPIE group were involved throughout the process of the study, starting from the initial conceptualisation of the research idea. They contributed towards developing the research questions and study goals and how those could be achieved. Their personal experiences and the impact their own PMH problems had resulted in within their lives gave them a unique perspective upon this research which could not be anticipated by myself. They provided me with the opportunity to understand PMH prior to data collection as they gave me another perspective on the phenomena and informed my thinking.

The PMH PPIE group reviewed interview documents such as the topic guides and participant interview information sheets and gave advice and suggestions during the data analysis process. Their input was invaluable as it allowed for discussion around issues that had not previously been considered by the research team. They also provided ideas regarding dissemination activities and ideas for further research that will build upon the findings in my study. Ultimately, their input ensured that the study was topical and timely and approached the research question in an appropriate way.

Data saturation was achieved within the GP, MW and HV datasets as no new themes were emerging when data collection concluded (Saunders et al 2018). Analysis was performed in a team containing clinicians and researchers with different backgrounds, therefore allowing for multiple perspectives on the data (Henwood and Pidgeon 1994). Any disagreements regarding themes were agreed via discussion and these discussions meant that members of the research team were introduced to different ways to approach the analysis process.

6.5.2 Limitations

Recruitment was challenging for a variety of reasons. Initially as a study team we aimed to interview up to forty HCPs: ten GPs, 10 MWs, ten HVs and ten Obs but this was not possible. Busy clinical schedules of the participants made it very challenging to arrange interviews at suitable times. Several HCPs who expressed interest in taking part in the study were then not interviewed as it was difficult to find a suitable time to interview them due to their lack of availability.

Only one Obs was recruited, and the study team decided to exclude the single interview with this Obs from the analysis. It was felt that this was not sufficient data to compare to other HCP groups and did not provide any opportunity to compare with other Obs.

There was a limited time for data collection; I was due to enter a period of maternity leave and so had to complete all of the GP interviews quite closely together. I was therefore unable to complete any further interviews, hence why my supervisor TK completed all of the MW and HV interviews.

The individuals taking part in the research chose to do so of their own volition with GPs receiving financial reimbursement for their time as per BMA rates. It is important to recognise that as they have an interest in contributing towards research their views may not be generalisable to all HCPs. My study was performed across the West Midlands and so the data may not represent views held by others in different geographical areas but could still have important implications for service provision more generally.

6.6 Implications for clinical practice

My study suggests that there are multiple practical methods of improving care for PNA. These include raising awareness of PNA amongst HCPs, ensuring that they remain alert to the possibility of PNA in scheduled appointments with perinatal women and working to improve the provision of integrated, individualised care.

6.6.1 Potential for improvements in patient care

From a clinical perspective, the profile of PNA needs to be raised in order to promote better understanding and awareness of PNA. With increased knowledge of PNA HCPs would be a stronger position to appropriately identify and support patients with PNA. HCPs should also be aware that they need to remain alert to signs and symptoms that suggest PNA is present. They should understand that women can provide answers to generate 'normal' scores when assessment tools are used if they do not wish to disclose anxiety symptoms. Opportunistic identification has been identified as crucial in appropriate diagnosis of PNA with HCPs agreeing that overall MWs and HVs are more likely to identify PNA as they have more time to build rapport with women at routine contacts throughout the perinatal period. (See Figure 1-1 Opportunities to identify PMH problems during the perinatal period on page 6).

It is important the HCPs see all contacts with women as opportunities to identify and potential PMH problems. Early identification of PNA would reduce any delay in being able to provide appropriate support.

6.6.2 Changes to healthcare professional training

Future curriculum development should focus on areas such as PNA as a priority to ensure that HCPs receive adequate training to enable them to feel confident managing patients with PNA. Although educational resources are available they are not routinely accessed by many HCPs, greater awareness of these would be beneficial to address training needs.

It would be helpful to raise HCP awareness of the tools that are available to help them identify and manage women with PMH problems. The RCGP Perinatal Mental Health Toolkit (Ladd and Santhanam 2015) is a collection of resources freely available which fills such a gap. This includes a variety of clinical guidance, tips for communication with women and describes key ‘red flag’ symptoms that all clinicians should be aware of. Data from my study suggests that even though this resource is available, clinicians are not all aware of it. If tools like this could be highlighted and their use encouraged during clinical training they may be better used once a HCP is fully qualified. It might be helpful to share resources between different HCPs such this toolkit (Ladd and Santhanam 2015).

6.6.3 Service organisation

The FYFVMH emphasises that the integration of care between different HCPs involved in delivering perinatal care should be a priority (Farmer and Dyer 2016). HCPs should work together to establish more effective working relationships and professional links. This which would help the development of a more integrated approach to care which has been having a positive effect in one locality where it has been implemented. PMH pathways need sufficient support and resources to enable them to be effective and appropriately integrated (Myors et al 2013). HCPs need to keep updated on new referral pathways and specialist services that are available so they can refer for specialist support appropriately.

My study provides evidence for the need for improved inter-professional communication when managing women with PNA, to ensure services are responsive and integrated and adds to the current literature base around challenges of communication between HCPs (Farmer and Dyer 2016). Improved communication between HCPs would be beneficial for patient care, potentially this could be achieved by the introduction of standardised proformas for documentation or a more standardised approach to written communication between HCPs. A shared data management system, with one way of recording notes across all HCP groups to more easily share patient information is a possibility, although this may not be a feasible or practical.

6.7 Implications for policy

This research demonstrates that there is a wide range of opinions from HCPs around the identification and management of PNA. As per the NICE CG192 (2014) a standardised approach to care is not appropriate as it does not reflect the diversity of issues amongst women with PNA and PMH problems. Women should have individual care plans developed using a shared decision making approach so that their thoughts are at the centre of any decisions made about their treatment.

Access to specialist services needs to become more streamlined and more efficient so that women can receive appropriate and timely support. These services could be based in the community or in secondary care. The FVFVMH (Farmer and Dyer 2016) describes how currently only 15% of localities provide effective specialist community care (including psychological therapies) for women with PMH problems and over 40% do not provide any at all. Clearly this needs to change and women across the country should be provided with equal access to high quality care.

The impact of appropriate social networks for women should be considered and emphasised. HCPs in my study recognise that the input from family and friends can be crucial in ensuring that women have appropriate support. Investment in community projects may provide women with the opportunities to build appropriate peer support networks and share experiences with other women. The RCGP PMH toolkit (Ladd and Santhanam 2015) encourages HCPs to consider appropriate ways to support individuals and community peer support networks and groups are highlighted as one way of doing this. If these groups are established HCPs should be kept up to date about them to ensure they can inform women about them.

Public health campaigns may have a role in improving awareness amongst laypeople. Improved public health campaigns with greater emphasis on PNA could be helpful as often campaigns focus on PND, not PNA; meaning that sometimes women do not seek help for PNA (Woolhouse et al 2009). Professional and public health campaigns to reduce the stigma of PMH and encourage women to discuss symptoms with a HCP would also be beneficial (Russell et al 2013b).

6.8 Recommendations for research

My study is the first study in a programme of research around PNA. I am currently involved in further research which is exploring women's views and experiences of PNA. This research aims to gain insights into women's perspectives of how their PNA started, how it was first identified and diagnosed and any interventions they were offered. It is important to understand what is suitable and acceptable with regards to both case-finding tools and possible interventions to ensure that women find interactions with HCPs around PNA feel supportive and useful. Comparative analysis across the data-sets will be conducted to provide further insight into research gaps. After this, potential future research has been outlined where I would like to investigate optimal interventions for PNA in a Doctor of Philosophy (PhD) thesis.

Opinions from HCPs around case-finding tools was mixed, however it was identified that if a validated tool was available for PNA it could be beneficial. There have been several case-findings tools developed over recent years that could fill such a gap and work towards the validation and approval of use in a clinical setting may be helpful to increase identification of PNA and allow for HCPs to monitor PNA symptoms. (Somerville et al 2014; Fallon et al 2016).

Brockington, Butterworth and Glangeaud-Freudenthal (2017) suggest that whilst PMH services should aim to improve awareness and reduce stigma surrounding PMH problems they should also try to engage in research into causation, treatment and prevention of PMH problems. Other areas to consider are necessary to understand what women view as 'negative experiences and interactions during childbirth' to try and improve the experience of childbirth (Grekin and O-Hara 2014) and the use of appropriate technological interventions for PMH problems (Ashford, Olander and Ayers 2016).

The final chapter of this MPhil will discuss my reflections around this MPhil. This will cover issues such as reflexivity and describe what I have learnt throughout this process.

7 Reflections

In this chapter I will discuss my reflections on completing this MPhil. I will give consideration to ways in which I have developed as both an academic, a general practitioner and an individual. I will discuss the concept of reflexivity which takes into account the impact that an individual researchers' background and role has on a research study from considering why they choose to investigate a research question, the methods they choose to perform the study, the analysis process and the dissemination techniques (Malterud 2001). I will reflect upon specific parts of the research process, with specific focus given to conducting the interviews and performing data analysis.

7.1 My personal circumstances

I started work towards this MPhil in late 2016. I was a Specialty Trainee year three (ST3) Academic Clinical Fellow (ACF) in General Practice, a post which was funded by the National Institute for Health Research (NIHR). I had previously been an Academic Foundation Programme (AFP) Doctor which had really developed my interest in academic General Practice and made me keen to pursue further academic appointments. I was therefore very pleased to have been offered this ACF post and was keen to maximise the opportunities it provided me with. Prior to starting this MPhil I had completed a Postgraduate Certificate in Medical Education (PGCE [MedEd]) during my AFP years and a Postgraduate Diploma in Medical Sciences (PGDip[MedSci]) within my ACF post so I had some previous experience of postgraduate academia but nothing which compared to completing an MPhil.

I am married and have an active personal life in which I pursue a variety of hobbies. I became pregnant with my now nearly two year old daughter in autumn 2016 which meant that the timeline for completing both my clinical and academic work needed to be adjusted. Along with adjusting to being a new mum, my daughter was also diagnosed as being profoundly deaf via new born screening which means that she has additional needs. She underwent surgery to have cochlear implants inserted in June 2018 aged 12 months and now she requires regular hospital and therapy appointments.

This major change to my personal circumstances meant my approach towards work shifted slightly which I initially found quite challenging to accept. Whereas before I may have thought nothing of working extra hours or working late now I suddenly found that this simply wasn’t possible as I wanted to place my daughter’s needs first. My daughter is happy and thriving which is the most important thing to me now and reassures me that she is benefitting from all of the extra input that we are able to access and provide for her. It certainly hasn’t been easy to balance clinical work, academic work and my daughters’ additional needs but I have found a way that works for me as an individual and for us as a family which I think is the most important thing.

7.2 Personal and professional development

This is the second qualitative study I have conducted, and my previous experience meant that I had some understanding of what completing a qualitative study would entail. In contrast to this, writing this MPhil has been a completely new challenge and I have developed both personally and professionally whilst completing it and this next section will outline reflections upon these.

7.2.1 What have I learnt?

I have learnt a huge amount about both myself and my approach to research whilst conducting my study. Some of the learning has been positive and reinforces already established working methods, however if I were to do my study again there are several things I would change.

7.2.1.1 The importance of organisation

I have always considered myself to be an organised individual however adding in a project as big as an MPhil to an already busy clinical working life was always going to take some adjustment and adaptation in order to complete both my GP training and the MPhil alongside one another. I have found that I work more efficiently than prior to having my daughter and I am better equipped to prioritise tasks and plan my working week to maximise my efficiency and productivity. Forward planning has become second nature and I plan my time quite strictly to try and meet deadlines.

Prior to starting this MPhil I didn’t understand how much time each element of the process would take. This lack of understanding and appreciation for time meant that my initial plan for work completion was very unrealistic. Although I think all researchers find that sometimes time is short I do think I have a more realistic perspective of how long elements of research can take. This would affect my work planning and I think in the future I would allocate time to ‘catch-up’ in my work plan to try and keep on track. With greater understanding about how long it takes to write up work I also think in the future I would try to do more writing as I went along with the study. I think writing alongside completing the research may have been more time efficient, less time consuming and less stressful particularly towards the end of writing with an imminent deadline looming. Along the same theme, I think if in the future I need to take a break within a study I would prepare a little more; writing down more of my thoughts and plans to make it easier on my return would probably be helpful.

Whilst completing this MPhil I chose to do my referencing manually, something which has been considerably more time consuming than I had anticipated. With further work, certainly if I am able to complete a PhD, I will find a referencing system and start using it right from the beginning of my study which I imagine would save quite a bit of time, particularly towards the completion of a study.

7.2.1.2 Challenges with balancing clinical and academic work

Academic life can be more flexible than clinical work, something which has both advantages and disadvantages. Sometimes one area is impacted negatively whilst the other flourishes and I am trying to accept that this ebb and flow is likely to occur regularly throughout my career. The old adage of ‘If you want something to be done ask a busy person' certainly holds some truth but I have certainly become better at recognising my limits and trying to avoid taking on any extra work that I don't have adequate time to complete. I am now increasingly aware of the need to develop and sustain balance between work and home life; something which can be very challenging at times.

The possibility to work flexibly has allowed me to attend appointments for my daughter and maintain my working hours which has been something I have found very beneficial. I have a dedicated working space at home for when I wish to work from home which is a way of trying to separate my home and working life time. Accepting that not everything has to be 'perfect' did not use to be in my nature, however I now feel that if I can honestly say that I have worked hard, been realistic with targets and done my best then I am (usually) satisfied.

7.2.1.3 Research training

Throughout this MPhil I have been able to carry out a variety of research training which has enabled me to carry out my study but has also provided me with skills that I will be able to use in the future. I have completed Qualitative and Advanced Qualitative Masters of Research (MRes) modules which really helped with my understanding of how qualitative research works and the methodological considerations that need to be taken into account when undertaking a qualitative study. This training enabled me to explore qualitative methodology from different perspectives, not just from a health services research perspective which I found useful.

7.2.1.4 Literature searching and critiquing

Having previously completed a systematic review I have some experience in literature searching, critical appraisal and data extraction which has given me a good grounding for further research and definitely helped with my study. Although I can confidently state that my academic writing skills have improved, completing the PNA study has also demonstrated just how much I have to learn and skills that I need to develop. I find critiquing and comparing literature very interesting but it is very different reading an individual paper to reading around a hundred papers and critiquing and comparing them appropriately.

The sheer volume of literature involved has been quite daunting at times and I have sometimes been worried that I have missed a ‘key paper’ which has led me to repeat my searches periodically and try and keep as up to date as possible with newly published literature. To try and make this process easier I have developed a system for recording my thoughts about papers when I read them to make recalling information a little easier. When I read a new paper I extract key quotes and interesting points and note down my thoughts about it. This means that I have a key document that I can refer back to about each published paper which is fairly succinct. Other researchers are likely to do something similar, (I am certainly not suggesting that I have developed this as a new approach) but I have found this works for me.

7.2.1.5 Academic writing skills

As this is by far the longest single piece that I have ever written I have had to be aware of the volume of text that is needed to fulfil the research question. Trying to link all the chapters together in a fluid manner and avoid unnecessary repetition has been difficult with such large volumes of text but hopefully I have achieved it. I tried to plan each chapter with a reasonable amount of detail prior to starting to write properly which has helped as it means I have a logical place for all of the information. The skills I have developed of constantly moving backwards and forwards between different chapters to check that they flow well to one another will be very useful in the future if I complete a PhD.

7.2.1.6 Data analysis

The analysis process was really thought-provoking. I had to try and set aside my own professional clinical opinions and make sure that I was interpreting the data fairly and not looking for themes that I had anticipated would occur. There were some themes that I anticipated would emerge from the data such as lack of awareness around PNA and issues accessing support for women with PNA. This was reassuring as it confirmed that my clinical practice as a GP is similar to my colleagues. In contrast to this however, there were some themes that I had not anticipated would emerge such as discussion around fragmented care and the impact of co-location on providing integrated care for women.

7.2.1.7 The process of completing the MPhil

By far, the hardest part of completing this MPhil was taking a break in the middle of it for maternity leave and returning to work around eight months later. When I went off on maternity leave I had just completed all of the GP interviews and I felt really engrossed in the study; understanding exactly where I anticipated it would go and with a clear plan for it all. I found it quite difficult on my return to work to get back into the habit of academic working and it took me a couple of months to feel like I was fully absorbed into my study again which was frustrating.

7.2.2 Implications for my continued professional development

Completing my study has really confirmed to me that I wish to continue to pursue the development of a career in academic General Practice. My aim is to continue working in primary care mental health research and establish this as my core research area of expertise. I feel that I can make a positive contribution to the excellent research that is conducted within the iPCHS.

I will continue with clinical work as a GP in the NHS for part of my week alongside research work. This combination is highly satisfying and I have demonstrated throughout my ACF post that I am able to balance the combination of the two effectively. I feel that both parts of my working life are able to have a positive impact on the other, and my research is rooted in clinical reality which ensures it will have maximum benefit for clinical practice and policy.

My major career goal is to establish myself as a clinical academic. I aspire to a senior post in a research institution where I would work as part of a research team on a variety of research projects. I would anticipate developing a programme of research around mental health in primary care, contribute to external grant applications and continue to publish work in peer-reviewed journals. I envisage that I would engage in activities such as the supervision of students and junior academics and contribute to the education of both undergraduate and postgraduate medical students. I hope to contribute to national guidelines and policy and therefore have a direct impact on how people with mental health problems are managed in primary care. Ultimately I would like my research to have a lasting, positive impact on patient care.

7.3 Reflexivity

Throughout my study I have been aware of reflexivity and have often reflected upon this. Palaganas et al (2017) describe reflexivity as a process that allows researchers to acknowledge their influence on a research study and recognise any changes that occur in themselves as a result of the study. Dowling (2006) suggests that it is both a process and a concept that researchers should be aware of when conducting qualitative research. Reflexivity is a skill that researchers usually develop as they conduct research and regular mentorship can help with this process (Mitchell et al 2018).

Researchers need to understand, be aware of and consider how they as an individual may influence the research they are undertaking (Hesse-Biber 2007) and clearly outline this influence to readers (Jootun et al 2009). Providing clarity around a researchers' individual perspectives and background can be seen as a basic requirement to ensure quality in qualitative research (Dodgson 2019). It has been suggested that when researchers provide this clarity the reader is able to determine whether they agree with the analysis provided in the text (Koch and Harrington 1998).

I am aware that as an individual I am likely to have influenced my study in a few ways. My different personal and professional roles will have influenced my decision-making and approach to my study which I have been very aware of. For example, I found that it was easier to arrange interviews when I knew the individual, something which is reflected in the literature (Chew-Graham et al 2002). Also, as I was pregnant whilst completing the interviews I was very aware of the effect that fluctuating hormones and changes in my personal circumstances could have on my mood. I imagine that this change in circumstances will have changed my perspective when analysing data.

Although historically reflexivity has been discussed with regards to an individual it has been recognised that reflexivity can occur within teams and leads to ‘improved productivity and effectiveness and higher quality’ research (Barry et al 1999, page 25). Having multiple researchers on a team engaged in reflexivity ensures rigour in academic reasoning when analysing data and also reduces individualism within academic research (Erickson and Stull 1998). As mentioned previously in my methods chapter (page 51) having multiple perspectives on the data is helpful (Henwood and Pidgeon 1994) however when considering reflexivity having multiple researchers involved in qualitative research has other benefits. Developing a reflexive dialogue within teams strengthens study design ‘not for the purpose of consensus or identical readings, but to supplement and contest each other’s statements’ (Malterud 2001, page 484). Via this process researchers within a team can challenge each other’s pre-conceptions and ensure that any arguments presented after data analysis are sufficiently developed and rigorous.

As a GP trainee interviewing peers, I also need to consider the impact of my position and relationship to the participants. Quinney, Dwyer and Chapman (2016) compared nurse to nurse qualitative interviewing and found that the dynamic between the two professionals needs to be carefully considered to ensure that it does not endanger the integrity of the research. It is also well established that a hierarchy exists within medicine which could cause problems relating to confidence and perceived seniority with HCPs interviewing one another (Crowe, Clarke and Brugha 2017). As a trainee

GP interviewing qualified GPs I was able to acknowledge that I don't have as much experience as the GPs but didn't ever feel intimidated or that my status was vulnerable. In contrast to this it is important to acknowledge that the GPs themselves may have also seen me testing their knowledge and morals which may have led to some feelings of professional vulnerability and caused them to provide different answers (Coar and Sim 2006; Chew-Graham et al 2002). An example of this is below where a GP participant in my study can be seen to express frustration that they couldn't think of the answer that they wanted to provide:

> *'there's probably something glaringly obvious but right now I can't think . . .'* (GP008)

As I was seeking to explore individuals' experiences of PNA, my study wasn't a test of HCPs knowledge, however it is interesting that it was perceived in that way by some individuals. I am not sure that this will have had a significant impact on the data as it certainly didn't feel like individuals were changing their answers to alter their perspectives but it is important to consider and be aware of.

I did find it challenging at times to conduct the interviews from an impartial stance, mainly due to my clinical background. Medical professionals are trained to conduct consultations with patients using quite standardised techniques such as the Calgary Cambridge model, developed by Silverman, Kurtz and Draper (2013). In comparison semi-structured qualitative interviews do not seek the need to acquire an absolute truth and instead aim to explore an individuals' perspective of a topic (Bryman 2006). There is usually less time pressure and the interview does not need to have as much structure as a medical interview does. In a clinical consultation doctors need to seek the relevant information in order to make a diagnosis and develop an appropriate management plan; qualitative interviews do not need to reach such a specific outcome, making them considerably more flexible.

The process of reviewing the transcripts and learning about my interviewing technique was enlightening. There were occasions where I wished that I had sought more clarification about a point a participant was making or explored a comment a little more. There were also some points where during the interview I felt like I was gathering lots of data but actually this wasn't the case, as it wasn't data that I could use to illustrate a point and had to ask further questions to get useful data. The extract below is an example of this from the interview with GP001:

> *Int: "So, do you feel you have a role in delivering perinatal care"*
>
> *Ppt: "Yes, yes definitely."*
>
> *Int: "Okay, and what sort of role would you say that is?"*
>
> *Ppt: "Um, trying to identify perinatal anxiety, perhaps in a woman who isn't going to come forward as admitting that it's a problem, so trying to spot it and for someone who does realise it's a problem to sign-post them to the best, uh, help, be it counselling or medication for the anxiety that they are presenting with."*

As you can see in this extract in the first question the participant does confirm that they have a role in perinatal care but then I need to ask a further question to seek more information about this role. On reflection, this is because I used a closed question initially which is not very helpful and in qualitative interviewing a more exploratory approach would allow for greater information to be gathered from the participant without as much need for further questions.

Keeping a reflexive journal has been suggested as a technique to foster reflexivity within qualitative research (Lincoln and Guba 1985). This is something I have done automatically and I find it very helpful. Reflexivity needs to occur throughout different stages of the research process in order for it to be effective (Rae and Green 2016). I chose to make field notes (please see Appendix Seven) immediately after each interview and kept a diary of my thoughts as I was completing my study. This process was invaluable to keep my thoughts clearly documented and allowed me to reflect on how my perspectives of the data changed or was confirmed with further interviews. As I found the process so helpful in further research I would keep a reflective diary from the beginning of study design, as then I could document my rationale around other parts of the research such as decisions about choice of methodology.

After completing these interviews I feel that I now have a much greater appreciation about the differences in approach between a clinical consultation and conducting semi-structured interviews for qualitative research.

7.4 Research process

I will now reflect on specific elements of the research process that I encountered when completing my study.

7.4.1 Ethics

The first part of completing my study was gaining the appropriate ethical approval. When I started to work on my study the ethics approval application process had already been considered by other members of the team and work towards it was in the preliminary stages. This meant that I was able to contribute towards it throughout the process and understand what happened at each stage. From previous experience (my clinical GP training and having previously completed research Masters modules in Ethics in Healthcare) I feel that I have a reasonable understanding of basic ethical principles. I was pleased to find that this understanding of ethics in clinical medicine was able to be transferred to appreciating and understanding the ethics process in research.

Prior to my study I had needed to seek ethical approval from a local University ethics panel for a smaller qualitative study and had found that this was quite a straightforward process. In this PNA study however, ethical approval was required from the Health Research Authority (HRA) something which I have no previous experience of. The application was far more detailed that I had anticipated it might be, with attention paid to even the smallest detail. The application was returned with comments for change prior to acceptance several times which meant that adjustments to the study protocol were necessary. Somewhat naively, I was surprised how lengthy the process turned out to be and it was quite frustrating waiting for our application to be reviewed and commented upon.

This process taught me a lot about planning research projects and ethical applications for them. I now appreciate that I always need to plan ahead, possibly even as far as a year ahead, when planning research projects that require ethical approval. As I learnt that the time waiting for ethical applications to be approved can be quite lengthy it is important that the time spend waiting is not wasted and used productively. It is important to consider what might happen next and plan accordingly by securing approval far enough in advance of when I would like to start working on a study. This means that projects and studies will often overlap and not finish neatly so that another can begin.

7.4.2 Scientific Foundation Board Grant

I was pleased that during my study I was awarded a RCGP Scientific Foundation Board (SFB) Grant (SFB2017-02). This provided me with funding that I was able to put towards some transcription, for travel to interviews and for conference attendance fees to disseminate my work. Having this extra piece of funding meant that I had more flexibility during the study and demonstrated to me just how helpful some additional financial support can be whilst conducting research. I would not hesitate in the future to apply for similar funding to allow the same benefits and was able to encourage other academic clinical fellows to consider applying for grants to support their research whilst contributing to a workshop around SFB grants at the RCGP annual conference in 2018.

7.4.3 Patient and public involvement and engagement

My study was the first time that I have been able to work directly with a PPIE group. Working with the PMH PPIE group was very enlightening and has allowed me to gain greater perspective of how important good quality PPIE is within a study. Prior to my study I didn't really appreciate what PPIE actually was which meant I had a very limited perspective with regards to how useful it could be. INVOLVE, the NIHR advisory group on PPIE, suggests that becoming linked to a PPIE group is one of the best ways for researchers to learn about PPIE (NIHR 2019), which is certainly something that happened with myself. I have been able to witness first-hand the meaningful impact that PPIE can have upon a study and ensure that research conducted is relevant and appropriate. I imagine that it could be too easy to get lost in the research process and forget what issues are actually important to patients and patient care.

The PMH PPIE group I have worked with were very thought provoking and their constructive input encouraged me to think about the research from the perspective of the women PNA affects in order to consider how to address the research questions that we developed together. I think it can be easy to lose sight of the original reason for conducting research but having regular PPIE group input ensures that the study is regularly grounded in clinical reality. Hopefully this makes the results more trustworthy and useful when considering how to improve patient care.

7.4.4 Topic guide development

When developing the topic guide I was able to use my clinical background to consider the areas that would be helpful to explore. It was useful to consider what I would do as a clinician if a woman presented to me with PNA and build questions around this as a starting point. As mentioned above, the PMH PPIE group provided feedback on the topic guide and made some suggestions that we had not considered which was really helpful. I found the process of developing the topic guide in an iterative manner (Miles and Huberman 2014) to reflect emerging themes very interesting and feel I have developed skills around this which I will be able to use in future work.

7.4.5 Recruitment and arranging interviews

Although we tried to recruit via multiple NHS sites (HVs and MWs via the SCHT, UHNM, SATH and RWT and GPs via the West Midlands CRN) the recruitment process for my study was quite challenging and it was necessary in some circumstances to use purposive sampling to secure sufficient participants. In some ways, use of purposive sampling was beneficial; for example, with the GPs it meant that I was able to interview GPs with different backgrounds, levels of clinical experience, gender and ethnicity. It was hoped that this spread of participant characteristics would lead to greater generalisability of the results.

In contrast to this however, some of the individuals who took part did so because of personal and professional motivation because they had an interest in research. We had initially intended to interview ten of each HCP group but this wasn’t possible in the timeframe that we had available. It was decided with the rest of the study team that we would not analyse the data gathered in the single Obs interview. This meant that making comparisons between perspectives of primary and secondary care participants was not possible, however it did mean that our paper had a strong primary care focus. This has allowed for more focussed recommendations for practice, policy and research and for dissemination purposes.

At times it was a little disheartening that we were struggling to recruit, however I think it reflects the busy nature of current clinical practice, where it is difficult to prioritise research over direct clinical work and the needs of patients. I think interviewers need to try and make as minimal an impact into clinicians working lives and compensate them appropriately and these are two learning points that I will take forwards into future research studies. This is a good example of a tension that can occur being both a clinician and a researcher.

7.4.6 Conducting interviews

As mentioned in my Methods chapter (page 44) I conducted all of the interviews with GP, and TK performed all of the interviews with HVs and MWs. Prior to commencement of the study TK and I had planned to perform an equal number of interviews and space them out a little more than we did. We had hoped for more time in between interviews to develop emerging themes and iteratively amend the topic guide. I performed almost all of the GP interviews prior to TK carrying out the MW and HV interviews, because I was pregnant and therefore had a limited timeframe for data collection prior to commencing maternity leave. Ideally, we would have had more time to conduct the interviews in, however I have learned that life sometimes means that good plans have to be adjusted and it is important to try and be flexible

I found that conducting qualitative interviews has increased my confidence in generating qualitative data and I found the whole interviewing process enjoyable. It was really interesting to have lots of time available to ask people about their experiences and opinions and be able to explore them and try to understand their viewpoint.

7.4.7 Research team

I worked in an MDT, including those with clinical, research and sociology of health focussed backgrounds as well as the PMH PPIE group which meant we all had different strengths and could provide alternative perspectives to one another. Discussions around any differences in opinion were very productive and allowed us to reflect one another's' assumptions about the data in particular. It has been demonstrated that analysing data from multiple perspectives makes it more trustworthy (Henwood and Pidgeon 1994), something I wanted to maximise within my study.

7.5 Final thoughts

Overall I have found completing this MPhil to be enjoyable and both personally and professionally very satisfying. I have learnt a huge amount about research such as the benefits of working in a research team, the processes and policies that dictate research and effective ways of working. I have also been able to personally experience some of the more challenging and frustrating elements that can be encountered during research and have had to develop techniques to combat these issues. I have learnt a great deal about myself as an individual, which will be helpful in both my personal and professional life.

I envisage research will be a major part of my career going forwards and I have applied for several routes of funding to complete either a PhD or further research fellowships and am currently awaiting the outcomes of these. Overall, I am now pleased to be able to confidently state that I wish to continue to pursue a career in academic General Practice and this MPhil has been an excellent platform from which to begin.

8 References

Alder J., Fink N., Bitzer J., Hosli I., Holgreve W. (2007). Depression and anxiety during pregnancy: A risk factor for obstetric, fetal and neonatal outcome? A critical review of the literature. The Journal of Maternal-Fetal and Neonatal Medicine, 20(3): 189-209.

Alderdice F, Lynn F. (2016) Factor structure of the Prenatal Distress Questionnaire. Midwifery, 27: 553-559.

Alderdice F., McNeill J., Lynn F. (2013) A systematic review of systematic reviews of interventions to improve maternal mental health and well-being. Midwifery, 29: 389-399.

Andersson L., Sundstrom-Poromaa I., Wuff M., Astrom M., Bixo M. (2004). Implications of Antenatal Depression and Anxiety for Obstetric Outcome. Obstetrics and Gynaecology, 104(3): 467-476.

Ashford M. T., Ayers S., Olander E.K. (2017). Supporting women with postpartum anxiety: exploring views and experiences of specialist community public health nurses in the UK. Health and Social Care in the community, 25(3): 1257-1264.

Ashford M. T., Olander E., Ayers S. (2016). Computer or web-based interventions for perinatal mental health: A systematic review. Journal of Affective Disorders, 197: 134-146.

Austin M.P. (2013) The Antenatal Risk Questionnaire (ANRQ): acceptability and use for psychosocial risk assessment in the maternity setting. Women and Birth, 26: 17-25.

Austin M.P., Priest S., Sullivan E.A. (2014). Antenatal psychosocial assessment for reducing perinatal mental health morbidity. Cochrane Database Systematic Review:4.

Austin M-P, Frilingos M., Lumley J., Hadzi-Pavlovic D., Roncolato W., Acland S., Saint K., Segal N., Parker G. (2008). Brief antenatal cognitive behavioural therapy group for the prevention of postnatal depression and anxiety: a randomised control trial. J Affect Disorders, 105:35-44

Austin M-P. (2003). Psychosocial assessment and management of depression and anxiety in pregnancy: key aspects of antenatal care for general practice. Australian family Physicians, 32: 119-126.

Austin M-P. (2004) Antenatal screening and early intervention for ‘perinatal’ distress, depression and anxiety: where to from here? Archives of Women’s Mental Health, 7:1-6.

Austin M-P., Lumley J. (2002). Antenatal screening for women at risk of post-natal depression. Acta Psych Scand., 106: 1-8.

Austin M-P., Priest S. (2005) Clinical Issues in perinatal mental health: new developments in the detection and treatment of perinatal mood and anxiety disorders, 112: 97-104.

Ban L., Gibson J.E., West J., Fiaschi L., Oates M.R., Tata L.J. (2012). Impact of socioeconomic deprivation on maternal perinatal mental illnesses presenting to UK general practice. BJGP, 62: e671-8.

Bandelow B., Michaelis S. (2015). Epidemiology of anxiety disorders in the 21st Century. Dialogues of Clinical Neurosciences; 17: 327-35.

Barbour R. S. (2000) The role of qualitative research in broadening the 'evidence base' for clinical practice. Journal of Evaluation in Clinical Practice, 6(2): 155-163.

Barry C. A., Britten N., Barber N., Bradley C., Stevenson F. (1999) Using Reflexivity to Optimise Teamwork in Qualitative Research. Qualitative Health Research, 9(1): 26-44/

Bauer A., Parsonage M., Knapp M., Iemmi V., Adelaja B. (2014). Costs of perinatal mental health problems. London School of Economics and Political Science, London, UK. Available from: http://eprints.lse.ac.uk/59885/1/__lse.ac.uk_storage_LIBRARY_Secondary_libfile_shared_repository_Content_Bauer%2C%20M_Bauer_Costs_perinatal_%20mental_2014_Bauer_Costs_perinatal_mental_2014_author.pdf Accessed on: 22.8.18.

Bayrampour H., Ali E., McNeil D.A., Benzies K., MacQueen G., Tough S. (2016). Pregnancy-related anxiety: A concept analysis. International Journal of Nursing Studies, 55: 115-130.

Beck A.T., Epstein N., Brown G., Steer R.A. (1988). An Inventory for Measuring Clinical Anxiety: Psychometric Properties. Journal of Consulting and Clinical Psychology, 56(6):893-7.

Biaggi A., Conroy S., Pawlby S., Pariante C.M. (2016). Identifying the women at risk of antenatal anxiety and depression: A systematic review. Journal of Affective Disorders, 191: e62-e77.

Black N. (1994) Why we need qualitative research. Journal of Epidemiology and Community Health, 48: 425-426.

Blackburn S., McLachlan S., Jowett S., Kinghorn P., Gill P., Higginbotham A., Rhodes C., Stevenson F., Jinks C. (2018) The extent, quality and impact of patient and public involvement in primary care research: a mixed methods study. Research Involvement and Engagement, 4(16).

Boeije H. (2002) A Purposeful Approach to the Constant Comparative Method in the Analysis of Qualitative Interviews. Quality and Quantity, 36: 391-409.

Boeije H. R., Bromberger N., Duijnstee M. S. H., Grypdonck M. H. F., Pool A. (1999) In relatie tot MS. Zorgafhankelijke mensen met Multiple Sclerose en hun partners. Utretcht: NIZW.

Bowen A., Muhajarine N. (2006). Antenatal depression. Canadian Nurse, 102:26-30

Braun, V., Clarke, V. (2006) Using thematic analysis in psychology. Qualitative Research in Psychology, 3 (2). pp. 77-101. ISSN 1478-0887 Available from: http://eprints.uwe.ac.uk/11735

Brockington I. (2004). Postpartum psychiatric disorders. The Lancet, 363: 303-310

Brockington I., Butterworth R., Glangeaud-Freudenthal N. (2017). An international position Archives of Women's Mental Health, 20: 113-120.

Brockington I., Chandra P., Bramante A., Dubow H., Fakher W., Garcia-Esteve L., Hofberg K., Moussa S., Palacios-Hernandez B., Parfitt Y., Shieh P-L. (2017) The Stafford Interview. Archives of Women's Mental Health, 20: 107-112.

Brockington I., Macdonald E., Wainscott G. (2006) Anxiety, obsessions and morbid preoccupations in pregnancy and the puerperium. Archives of Womens Mental Health, 9(5): 253-63. t

Bryman, A. (2016) Social Research Methods. Oxford University Press. Oxford. 5th Edition.

Buist A. (1998). Childhood abuse, postpartum depression and parenting difficulties: a literature review of the associations. Aust NZ J Psychiatry, 32: 370-378

Byatt N., Biebal K., Moore Simas T. A., Sarvet B., Ravech M., Allison J., Straus J. (2016.) Improving perinatal depression care: the Massachusetts Child Psychiatry Access Project for Moms. General Hospital Psychiatry, 40: 12-17.

Charmaz K. (2004) Premises, principles and practices in qualitative research: revisiting the foundations. Qualitative Health Research, 14(7), 976-993.

Charmaz K. (2006) Constructing Grounded Theory. A practical guide through qualitative analysis. Thousand Oaks, Sage.

Chew-Graham C. A., May C. R., Perry M. S. (2002) Qualitative research and the problem of judgement: lessons from interviewing fellow professionals. BMC Family Practice, 19(3): 285-289.

Chew-Graham C.A., Chamberlain E., Turner K., Folkes L., Caulfield L., Sharp D. (2008). GPs and health visitors views on the diagnosis and management of postnatal depression: a qualitative study. BJGP, 58: 169-176.

Chew-Graham C.A., Sharp D., Chamberlain E., Folkes L., Turner K .M. (2009). Disclosure of symptoms of postnatal depression, the perspectives of health professionals and women: a qualitative study. BMC Family Practice; 10(7).

Chief Nursing Officers. (2010). Midwifery 2020: Delivering expectations. Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/216029/dh_119470.pdf

Coar L., Sim J. (2006) Interviewing one’s peers: methodological issues in a study of health professionals. Scandinavian journal of Primary Health Care, 24: 251-256.

Coates A.O., Schaefer C.A., Alexander J.L. (2004). Detection of postpartum depression and anxiety in a large health plan. Journal of Behav. Health Serv. Res., 31(2): 117-33.

Cohen J., Altshuler L.L., Harlow B.L. (2006). Relapse of major depression during pregnancy in women who maintain or continue antidepressant treatment. JAMA, 295:499-507.

Cox J., Holden J. (2003). Perinatal Mental Health: A guide to the Edinburgh Postnatal Depression Scale (EPDS). UK. The Royal College of Psychiatrists, Gaskell.

Cox J., Holden J., Sagovsky R. (1987). Detection of postnatal depression. Development of the 10-item Edinburgh Postnatal Depression Scale. British Journal of Psychiatry, 150: 782-186.

Crowe S., Clarke N., Brugha R. (2017) ‘You do not cross them’: Hierarchy and emotion in doctors’ narratives of power relations in specialist training. Social Science and Medicine, 186: 70-77.

Dennis C-L., Falah-Hassani K., Shiri R. (2017). Prevalence of antenatal and postnatal anxiety: systematic review and meta-analysis. The British Journal of Psychiatry, 210: 315-323.

Department for Health (2014) Closing the Gap. Priorities for essential change in Mental Health. London: Department of Health.

Ding X.X., Wu Y.L, Xu S.J. Zhu R. P., Jia X. M., Zhang S. F., Huang K., Zhu P., Hao J.H., Tao F.B. (2014). Maternal anxiety during pregnancy and adverse birth outcomes: a systematic review and meta-analysis of prospective cohort studies. J Affective Disorders, 159C: 103-10.

Dodgson J. E. (2019) Reflexivity in Qualitative Research. Journal of Human Lactation, 35(2): 220-222.

Dowling M. (2006) Approaches to reflexivity in qualitative research. Nurse researcher, 13(3), 7-21.

Erickson K. C., Stull D. D. (1998) Doing team ethnography: Warnings and advice. (Qualitative Research Methods Series Vol 42) Thousand Oaks: Sage.

Evans K., Morrell C.J., Spiby H. (2017). Women's views on anxiety in pregnancy and the use of anxiety instruments: a qualitative study, Journal of Reproductive and Infant Psychology, 35:1, 77-90, DOI: 10.1080/02646838.2016.1245413

Fairbrother N., Janssen P., Anthony M.M., Tucker E., Young A.H. (2016). Perinatal anxiety disorder prevalence and incidence. Journal of Affective Disorders, 200:148-155.

Fairbrother N., Young A.H., Zhang A., Janssen P., Antony M.M. (2017). The prevalence and incidence of perinatal anxiety disorders among women experiencing a medically complicated pregnancy. Arch Womens Mental Health, 20(2): 311-319.

Fallon V., Halford J.C.G., Bennett K.M., Harrold J.A. (2016). The postpartum specific anxiety scale: development and preliminary validation. Arch Womens Mental Health, 19: 1079-1090.

Farmer P., Dyer J. (2016). NHS Five Year Forward View for Mental Health Report Available from: https://www.england.nhs.uk/wp-content/uploads/2016/02/Mental-Health-Taskforce-FYFV-final.pdf Accessed on: 25/10/18

Ford E., Shakespeare J., Elias F., Ayers S. (2017a). Recognition and management of perinatal depression and anxiety by general practitioners: a systematic review. Family Practice, 34(1):11-19.

Ford E., Lee S., Shakespeare J., Ayers S. (2017b). Diagnosis and Management of perinatal depression and anxiety in general practice: a meta-synthesis of qualitative studies. British Journal of General Practice, 67(661):e538-e546.

Fram, S. M. (2013) Constant Comparative Analysis Method Outside of Grounded Theory. e Qualitative Report, 18(1), 1-25.

Freed R. D., Chan P. T., Dingman Boger K., Tompson M. C. (2012). Enhancing Maternal Depression in Health Care Settings: A Review of Strategies to Improve Detection, Reduce Barriers and Reach Mothers in Need. Families, Systems and Health, 30(1): 1-18.

Gavin N.I., Gaynes B.N., Lohr K.N., Meltzer-Brody S., Gartlehner G., Swinson T. (2005). Perinatal depression: a systematic review of prevalence and incidence. Obstet. Gynaecol,106: 1071-83

Giardinelli L., Innocenti A., Benni L. Stefanini M. C., Lino G., Lunardi C., Svelto V., Afshar S., Bovani R., Castellini G., Faravelli C. (2012). Depression and anxiety in perinatal period: prevalence and risk factors in an Italian sample. Arch Womens' Mental Health; 15:21-30.

Glaser B.G (1965) The Constant Comparative Method of Qualitative Analysis. Social Problems, 436-445.

Glaser B.G., Strauss A.L (1967) The Discovery of Grounded Theory: Strategies for qualitative research. Aldine, Chicago.

Goldberg, D. P.(1972). The Detection of Psychiatric Illness by Questionnaire. Oxford University Press: London.

Goldsmith M E. (2007). Postpartum depression screening by family nurse practitioners. Journal of the American Academy of Nurse Practitioners, 19: 321-327.

Goodman J. H., Watson G. R., Stubbs B. (2016) Anxiety disorders in postpartum women: A systematic review and meta-analysis. Journal of Affective Disorders, 203: 292-331.

Goodman J.H. (2009) Women's attitudes, preferences and perceived barriers to treatment for perinatal depression. Birth, 36: 60-69.

Goodman J.H., Guarino A., Chenausky K., Klein L., Prager J., Petersen R., Forget A., Freeman M. (2014). CALM pregnancy: results of a pilot study of mindfulness-based cognitive therapy for perinatal anxiety. Arch Womens' Mental Health, 17(5): 373-87

Goodman J.H., Tyer-Viola L. (2010). Detection, Treatment and Referral of Perinatal Depression and Anxiety by Obstetrical Providers. Journal of Women's Health, 19(3): 477-490.

Green J., Murray D. (1994) The use of the Edinburgh Postnatal Depression Scale in research to explore the relationship between antenatal and postnatal dysphoria. In: Cox J, Holden J (eds) Perinatal Psychiatry. Gaskell, London, page 80.

Green J., Thorogood N. (2009) Qualitative Methods for Health Research. London. Sage. 2nd Edition.

Green S.M., Haber E., Frey B. N., McCabe R.E. (2015). Cognitive Behavioural group treatment for perinatal anxiety: a pilot study. Arch Womens Ment Health, 18:631-638.

Grekin R., O'Hara M. (2014). Prevalence and risk factors of postpartum traumatic stress disorder: A meta-analysis. Clinical Psychology Review, 34: 389-401.

Hall P. A. (2003) Aligining Ontology and Methodology in Comparitve Research. In: Mahoney J , Rueschemeyer D. (2003) Comparative Historical Analysis in the Social Sciences. London, Cambrdige University Press: 373-399.

Hallberg L. R-M. (2006) The "core category" of grounded theory: Making constant comparisons. International Journal of Qualitative Studies on Health and Well-being, 1: 141-148.

Halligan S.L., Herbert J., Goodyer I. M., Murray L. (2004). Exposure to postnatal depression predicts elevated cortisol in adolescent offspring. Biological Psychiatry, 55: 376-381.

Hammarberg K., Kirkman M., de Lacey S. (2016) Qualitative research methods: when to use them and how to judge them. Human Reproduction, 31(3): 498-501.

Hayes R.M., Wu P., Shelton R.C., Cooper W. O., Dupont W. D., Mitchel E., Hartet T.V. (2012) Maternal antidepressant use and adverse outcomes: a cohort study of 228,876 pregnancies. Am J Obstet Gynaecol, 207: e1-9.

Henwood K., Pidgeon N. (1994) Beyond the qualitative paradigm: A framework for introducing diversity within qualitative psychology. Journal of Community & Applied Social Psychology 4(4):225–238.

Heron J., O'Connor T.G., Evans J., Golding J., Glover V. (2004). The course of anxiety and depression through pregnancy and the postpartum in a community sample. Journal of affective disorders, 80: 65-73.

Hesse-Biber (2007) Hand book of feminist research: Theory and praxis. Thousand Oaks, CA, Sage Publications.

Howard L., Molyneaux E., Dennis C-L., Rochat T., Stein A., Milgrom J. (2014a). Non-psychotic mental disorders in the perinatal period. The Lancet, 384: 1775-1788.

Howard L. M., Piot P., Stein A. (2014b). No health without perinatal mental health. The Lancet, 384: 1723-1724.

Huizink A. C., Mulder E.J.H, de Medina P.G.R., Visser G.H.A., Buitelaar J.K. (2004). Is pregnancy anxiety a distinctive syndrome? Early Human Development, 79: 81-91.

Humphrey M.D., Bonello M.R., Chughtai A., Macaldowie A., Harris K., Chambers G.M. (2015). Maternal deaths in Australia 2008–2012. Maternal deaths series no. 5. Cat. no. PER 70. Canberra: AIHW

Jinks C., Carter P., Rhodes C., Taylor R., Beech R., Dziedzic K., Blackburn S., Hughes R., Ong B. N. (2016) Patient and public involvement in primary care research - an example of ensuring its sustainability. Research Involvement and Engagement, 2(1).

Johnson J., Cohen P., Kasen S., Smailes E., Brook J. (2001) Association of maladaptive parental behaviour with psychiatric disorder among parents and their offspring. Am J Psych, 58: 453-460.

Jomeen J., Glover L., Jones C., Grag D., Marshall C. (2013). Assessing Women's perinatal psychocligcal health: exploring the experiences of health visitors. Journal of Reproductive and Infant Psychology, 31(5): 479-489.

Jootun D., McGhee G., Marland G. (2009) Reflexivity: promoting rigour in qualitative research. Nursing Standard, 23(23): 42-46.

Kendall R., Chalmers J. C., Platz C. (1987). Epidemiology of Puerperal Psychoses. Br Journal Psychiatry, 150(5): 662-673

Kenny, M., Fourie, R. (2015). Contrasting Classic, Straussian, and Constructivist Grounded theory: Methodological and Philosophical Conflicts. The Qualitative Report, 20(8), 1270-1289.

Khan. L. (2015). Falling through the gaps: perinatal mental health and general practice. Centre for Mental Health. London. Available from: https://www.centreformentalhealth.org.uk/Handlers/Download.ashx?IDMF=9c9ea879-a7bf-4f0a-9ee8-e32ee697d265. Accessed on: 28/11/2017.

Kingston D. E., Biringer A., Toosi A., Heaman M.I., Lasiuk G.C., McDonald S.W., Kingston J., Sword W., Jarema K., Austin M.P. (2015) Disclosure during prenatal mental health screening. Journal of Affective Disorders, 186: 90-94.

Knight M, Nair M, Tuffnell D, Kenyon S, Shakespeare J, Brocklehurst P, Kurinczuk JJ (Eds.) on behalf of MBRRACE-UK. (2016). Saving Lives, Improving Mothers' Care - Surveillance of maternal deaths in the UK 2012-14 and lessons learned to inform maternity care from the UK and Ireland Confidential Enquiries into Maternal Deaths and Morbidity 2009-14. Oxford: National Perinatal Epidemiology Unit, University of Oxford 2016.

Koch T., Harrington A. (1998) Reconceptualising rigour: the case for reflexivity. Journal of Advanced Nursing, 28(4): 882-890.

Kroenke K., Spitzer R.L., Williams J.B., Monahan P.O., Lowe B. (2007) Anxiety disorders in primary care: prevalence, impairment, comorbidity, and detection. Ann Intern Med, 146:317–25.

Ladd C. and Santhanam L. (2015) RCGP Perinatal Mental Health Toolkit. Available from: https://www.rcgp.org.uk/clinical-and-research/resources/toolkits/perinatal-mental-health-toolkit.aspx

Lappin J. (2001). Depressed mood during pregnancy and after childbirth. BMJ, 323: 1367.

Lavender T.J., Ebert L., Jones D. (2016). An evaluation of perinatal mental health interventions: An integrative literature review. Women and Birth, 29: 399-406.

Lee A.M., Lam S.K., Sze Mun Lau S.M, Chong C.S., Chui H.W., Fong D.Y. (2007). Prevalence and risk factors for antenatal anxiety and depression. Obstetri. Gynaecol., 110:1102-1112.

Lincoln Y.S., Guba E. G. (1985) Naturalistic enquiry. Newbury Park, CA: Sage.

Lovibond P.F., Lovibond S.H. (1995). The Structure of Negative Emotional States: Comparison of the Depression Anxiety Stress Scales (DASS) with the Beck Depression and Anxiety Inventories. Behav. Res. Ther., 33(3), p335-343.

Malterud K. (2001) Qualitative research: standards, challenges and guidelines. The Lancet,358: 483-488.

Manassis K., Bradley S., Goldberg S. Hood J, Swionson R.P. (1994). Attachment to mothers with anxiety disorders and their children. J Am Acad Adolesc Psychiatry, 33: 1106-13.

Mann R., Gilbody S. (2011). Validity of two case finding questions to detect postnatal depression: A review of diagnostic test accuract. Journal of Effective Disorders, 133; 388-397.

Marc I., Toureche N., Ernst E., Hodnett E.D., Blanchest C., Dodin S., Njoya M.M. (2011). Mind-body interventions during pregnancy for preventing or treating women's anxiety. Cochrane database Systematic Reviews, 7: CD007559.

Marchesi C., Ossola P., Amerio A., Daniel B.D., Tonna M., De Panfilis C. (2016). Clinical management of perinatal anxiety disorders: a systematic review. Journal of Affective Disorders, 190:543-550.

Marnes J., Hall P. (2013). Midwifery care: A perinatal mental health case scenario. Women and Birth, 26: e112-e116.

Matthey S., Barnett B., Howie P., Kavanagh D.J. (2003). Diagnosing postpartum depression in mothers and fathers: whatever happened to anxiety? Journal of Affective Disorders, 74; 139-47.

Matthey S., Fisher J., Rowe H. (2013). Using the Edinburgh postnatal depression scale to screen for anxiety disorders: Conceptual and methodological considerations. Journal of Affective Disorders, 146: 224-230.

Mays N., Pope C. (2000) Qualitative Research in health care: Assessing quality in qualitative research. BMJ, 320: 50-52.

McGookin A., Furber C., Smith D.M. (2017). Student midwives awareness, knowledge and experiences of antenatal anxiety within clinical practice. Journal of Reproductive and Infant Psychology, 35:4, 380-393.

Meades R., Myers S. (2011). Anxiety measures validated in perinatal populations: A systematic review. Journal of Affective Disorders, 133: 1-15.

Megnin-Viggars O., Symington I., Howard L. M., Pilling S. (2015). Experience of care for mental health problems in the antenatal or postnatal period for women in the UK: a systematic review and meta-synthesis of qualitative research. Arch Womens Ment Health, 18:745-759.

Miles M.B., Huberman A.M. (2014) Qualitative Data Analysis: An Expanded Sourcebook (3rd Ed.). Sage Publications. London. (352 pages).

Milgrom J., Schembri C., Ericksen J., Ross J., Gemmill A.W. (2011). Towards parenthood: an antenatal intervention to reduce depression, anxiety and parenting difficulties. J Affect Disord., 130: 385-394

Misri S., Kendrick K. (2007). Treatment of Perinatal Mood and Anxiety Disorders: A review. Canadian Journal of Psychiatry, 52:489-498.

Mitchell J., Boettcher-Sheard N., Duque C., Lashewicz B. (2018) Who do we think we are? Disrupting notions of qualitative research. Qualitative Research, 28(4). 637-680.

Morse J. M., Richards L. (2002) Read me for a user's guide to qualitative methods. Sage. London.

Morse J.M. (2015) "Data were saturated . . ." Qualitative Health Research, 25(5): 587-588.

Murphy E., Dingwall R. (2003) Qualitative methods and health policy research. New York; Aldine de Gruyter.

Myors K. A., Schmied V., Johnson M., Cleary M. (2013) Collaboration and integrated services for perinatal mental health: an integrative review. Child and Adolescent Mental Health, 18(1): 1-10.

Najman J. M., Andersen M., Bor W., O'Callaghan M, Williams M. (2000). Postnatal Depression - Myth and Reality: Maternal Depression Before and After the Birth of a Child Social Psychiatry and Psychiatric Epidemiology, 35 (1): 19-27. DOI: 10.1007/s001270050004

National Childbirth Trust. (2017). The Hidden Half: bringing postnatal mental illness out of hiding. Available from: https://www.nct.org.uk/sites/default/files/related_documents/NCT%20The%20Hidden%20Half_0.pdf

National Institute for Health and Care Excellence. (2014). Antenatal and postnatal mental health: clinical management and service guidance. CG192. London. NICE. Available from: https://www.nice.org.uk/guidance/cg192

National Institute for Health Research (NIHR) (2019) NIHR INVOLVE: What is Public Involvement in Research? Available from: https://www.invo.org.uk/find-out-more/what-is-public-involvement-in-research-2/. Accessed on: 14/04/2019

NHS England. (2016). National Maternity Review: Better Births. Improving Outcomes of maternity services in England. A Five Year Forward View for maternity care. Available from: https://www.england.nhs.uk/mat-transformation/implementing-better-births/mat-review/.

NHS England (2018). NHS Improvement and The National Collaborating Centre for Mental Health: The Perinatal Mental Health Pathways. Available from: https://www.rcpsych.ac.uk/docs/default-source/improving-care/nccmh/nccmh-the-perinatal-mental-health-care-pathways-short-guide.pdf?sfvrsn=4f52dbb3_2

Noble H., Smith J. (2014) Qualitative data analysis: a practical example. Evidence Based Nursing, 17(1).

Noonan M., Jomeen J., Galvin R., Doody O. (2018a) Survey of midwives perinatal mental health knowledge, confidence, attitudes and learning needs. Women and Birth, 31: e358-366.

Noonan M., Doody O., Jomeen J., O'Regan A., Galvin R. (2018b) Family Physicians perceived role in perinatal mental health: an integrative review. BMC Family Practice, 19:154.

O'Hara M. W., Wisner K. L., Asher H. (2014). Perinatal mental illness: Definition, description and aetiology. Best Practice and Research Clinical Obstetrics and Gynaecology, 28: 3-12.

O'Hara M.W., Zekoski E.M., Phillipps L.H. (1990). Controlled prospective study of postpartum mood disorders: comparison of childbearing and non-childbearing women. J Abnormal Psychology, 99:3-15.

O'Mahen H. A., Richards D.A., Woodford J., Wilkinson E., McGinley J., Taylor R.S. Warren F.C. (2014). Netmums: a phase II randomised control trial of a guided internet behavioural activation treatment for postpartum depression. Psychol Med, 44(8): 1675-89.

O'Mahen H., Himle J.A., Fedock G., Henshaw E., Flynn H. (2013). A pilot randomised controlled trial of cognitive behavioural therapy for perinatal depression adapted for women with low incomes. Depress Anxiety, 30(7): 679-87

Oates M., Cantwell R. for Centre for Maternal and Child Enquiries (CMACE). (2011). Deaths from Psychiatric Causes In: Lewis G, ed. Saving Mothers' Lives: reviewing maternal deaths to make motherhood safer: 2006–08. The Eighth Report on Confidential Enquiries into Maternal Deaths in the United Kingdom. BJOG, 118(Suppl. 1):1–203.

O'Connor T.G., Heron J, Golding J, Beveridge M, Glover V. (2002). Maternal antenatal anxiety and children's behavioural/emotional problems at 4 years. Report from the Avon Longitudinal Study of Parents and Children. Br J Psychiatry., 180: 502-8.

Ormston R., Spencer L., Barnard M., Snape D. (2014) The Foundations of Qualitative Research. In: Qualitative Research Practice: A Guide for Social Science Students and Researchers. (eds) Ritchie, J., Lewis. J. , McNaughton Nicholls C., Ormston R. Sage Publications, London.

Palaganas E.C., Sanchez M. C., Molintas M. V. P., Caricativo R. D. (2017.) Reflexivity in Qualitative Research: A journey of learning. The Qualitative report, 22(2): 426-438.

Patton M.Q. (2002) Qualitative research and evaluation methods. 3rd Edition. Sage, California.

Pawluski J.L., Lonstein J.S., Fleming A.S. (2017). The Neurobiology of Postpartum Anxiety and Depression. Trends in Neurosciences, 40(2): 106-119

Posthumus A. G., Scholmerich V. L. N., Waelput A. J. M., Vos A. A., De Jong-Potjer L. C., Bakker R., Bonsel G.J., Groenewegen P., Steegers E. A. P., Denktas S. (2013). Bridging between Professionals in Perinatal Care: Towards Shared Care in The Netherlands. Matern. Child Health Journal, 17: 1981-1989.

Prady S.L., Pickett K.E., Petherick E.S., Gilbody S., Croudace T., Mason D., Sheldon T.A., Wright J. (2016a) Evaluation of ethnic disparities in detection of depression and anxiety in primary care during the maternal period: combined analysis of routine and cohort data. Br J Psychiatry, 208: 453 –61.

Prady, S. L., Pickett, K., Gilbody, S. M., Petherick, E. S., Mason, D., Sheldon, T. A., & Wright, J. (2016b). Variation and ethnic inequalities in treatment of common mental disorders before, during and after pregnancy: combined analysis of routine and research data in the Born in Bradford cohort. BMC Psychiatry, 16(99).

Prady S.L., Hanlon I., Fraser L.K., Mikocka-Walus A. (2018). A systematic review of maternal antidepressant use in pregnancy and short- and long-term offspring's outcome. Arch Womens Ment Health. 21(2): 127–140.

Quinney L., Dwyer T., Chapman Y. (2016) Who, Where and How of interviewing Peers: Implications for a Phenomenological Study, 1-10.

Rae J., Green B. (2016) Portraying Reflexivity in Health Services Research. Qualitative Health Research, 26(11): 1543-1549.

Regan L., Gregoire A. (2017). Maternal Mental Health – Women's Voices. Royal College of Obstetrics and Gynaecology. Available from: https://www.rcog.org.uk/globalassets/documents/patients/information/maternalmental-healthwomens-voices.pdf

Reilly N., Harris S., Loxton D., Chojenta C., Forder P., Austin M.P. (2014). The impact of routine assessment of past or current mental health on help-seeking in the perinatal period. Women and Birth, 27: e20-e27.

Reusser K., Pauli C. (2015) Co-constructivism in Educational Theory and Practice. In: Wright, J.D. International encyclopaedia of the social and behavioural sciences. Oxford: Elsevier, 913-917.

Ride J., Lancsar E. (2016). Women's preferences for Treatment of Perinatal Depression and Anxiety: A Discrete Choice Experiment. PLOS ONE, 11(6)

Ritchie, J. and Lewis. J. (eds.) (2003) Qualitative Research Practice: A Guide for Social Science Students and Researchers. Sage Publications, London

Rothera I., Oates M. (2011) Managing perinatal mental health: A survey of practitioners' views. British Journal of Midwifery, 19(5).

Russell E.J., Fawcett J.M., Mazmanian D. (2013a). Risk of obsessive-compulsive disorder in pregnant and postpartum women: a meta-analysis. J Clinic Psychiatry, 74: 377-85

Russell S., Lang B., Clinton J., Adams C., Lamb J. (2013b) Perinatal Mental Health: Experiences of Women and Health Professionals. Boots Family Trust, London. Available from: https://www.tommys.org/sites/default/files/Perinatal_Mental_Health_Experiences%20of%20women.pdf

Saunders B., Sim J., Kingstone T., Baker S., Waterfield J., Bartlam B., Burroughs H., Jinks C. (2018) Saturation in qualitative research: exploring its conceptualization and operationalization. Qual Quant (2018) 52:1893–1907

Shakespeare J., Blake F., Garcia J. (2003). A qualitative study of the acceptability of routine screening of postnatal women using the Edinburgh Postnatal Depression Scale. British Journal of General Practice, 53(493):614-9

Sharp D. J., Chew-Graham C. A., Tylee A., Lewis G., Howard L., Anderson I., Abel K., Turner K. M., Hollinghurst S. P., Tallon D., McCarthy A., Peters T.J. (2010). A pragmatic randomised control trial to compare antidepressants with a community-based psychological intervention for the treatment of women with postnatal depression: the RESPOND trial. Health Technology Assessment, 14(43).

Silverman J.,Kurtz S.,Draper J. (2013) Skills for communicating with patients. 3rd edn. Oxford: Radcliffe.

Sim J., Saunders B., Waterfield J. & Kingstone T. (2018): Can sample size in qualitative research be determined a priori?, International Journal of Social Research Methodology, 619-634.

Somerville S., Byrne S., Dedman K., Hagan R., Coo S., Oxnam E., Doherty D., Cunningham N., Page A.C. (2015). Detecting the severity of perinatal anxiety with the Perinatal Anxiety Screening Scale (PASS). Journal of Affective Disorders, 186: 18-25.

Somerville S., Dedman K., Hagan R., Oxnam E., Wettinger M., Byrne S., Coo S., Doherty D., Page A.C. (2014). The Perinatal Anxiety Screening Scale: developing and preliminary validation. Arch Womens Mental Health, 17: 443-454.

Spielberger, C. D., Gorsuch, R. L., Lushene, R., Vagg, P. R., & Jacobs, G. A. (1983). Manual for the State-Trait Anxiety Inventory. Palo Alto, CA: Consulting Psychologists Press.

Stein A., Pearson R.M., Goodman S.H., Rapa E., Rahman A., McCallum M., Howard L., Pariante C.M. (2014). Effects of perinatal mental health disorders on the fetus and child. Lancet, 384:1800-19.

Strauss A., Corbin J. (1998) Basics of Qualitative Research Techniques and Procedures for Developing Grounded Theory. Sage London.

Tong A, Sainsbury P, Craig J. (2007) Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. Int J Qual Health Care, 19(6): 349- 357.

Turner K. M., Chew-Graham C. A., Folkes L., Sharp D. (2010). Women's experiences of health visitor delivered listening visits as a treatment for postnatal depression: A qualitative study. Patient Education and Counselling, 78: 234-239.

Van den Bergh B.R., Marcoen A. (2004). High antenatal anxiety is related to ADHD symptoms, externalising problems and anxiety in 8-9 year olds. Child development, 75: 1085-97.

Varela P., Spyropoulou A.C., Kalogerakis Z., Moraitou M., Zervas I.M. (2015). Nurs. Midwifery Stud, 4(3): e29308.

Vesga-Lopez O., Blanco C., Keyes K., Olfson M, Grant B.F., Hasin D.S. (2008). Psychiatric disorders in pregnant and postpartum women in the United States. Arch Gen Pysch, 65: 805-815.

White D. E., Oelke N. D., Friesen S. (2012) Management of a Large Qualitative Data Set: Establishing trustworthiness of the Data. International Journal of Qualitative Methods, 11(3): 244-258.

Whooley M. A., Avins A.L., Miranda J., Browner W.S. (1997). Case-finding instruments for depression. Two questions are as good as many. J Gen Intern Med, 12(7): 439-45.

Wisner K. L., Sit D. K. Y., McShea M. C., Rizzo D. M., Zoretich R.A., Hughes C. L. Eng H. F., Luther J. F., Wisniewski S. R., Costantino M. L., Confer A. L., Moses-Kolko E. L., Famy C. S., Hanusa B. H. (2013). Onset Timing, Thoughts of Self-harm and Diagnoses in Postpartum Women with Screen-Positive Depression Findings. JAMA, 70(5): 490-498.

Womersley K., Ripullone K., Agius M. (2017). What are the risks associated with different Selective Serotonin Re-uptake Inhibitors (SSRIs) to treat depression and anxiety in pregnancy? An evaluation of current evidence. Psychiatr Danub, 29(Suppl 3):629-644.

Woody C.A., Ferrari A.J., Siskind D.J., Whiteford H.A., Harris M.G. (2017). A systematic review and meta-regression of the prevalence and incidence of perinatal depression. Journal of Affective Disorders, 219: 86-92.

Woolhouse H, Mercuri K. Judd F., Brown S.J. (2014). Antenatal mindfulness intervention to reduce depression, anxiety and stress: a pilot randomised controlled trial for the MindBabyBody program in an Australian tertiary maternity hospital. BMC Pregnancy Childbirth, 14(369

Woolhouse H., Brown S., Krastev A., Perlen S., Gunn J. (2009). Seeking help for anxiety and depression after childbirth: results of the Maternal Health Study. Arch Women’s Mental Health, 12:75-83.

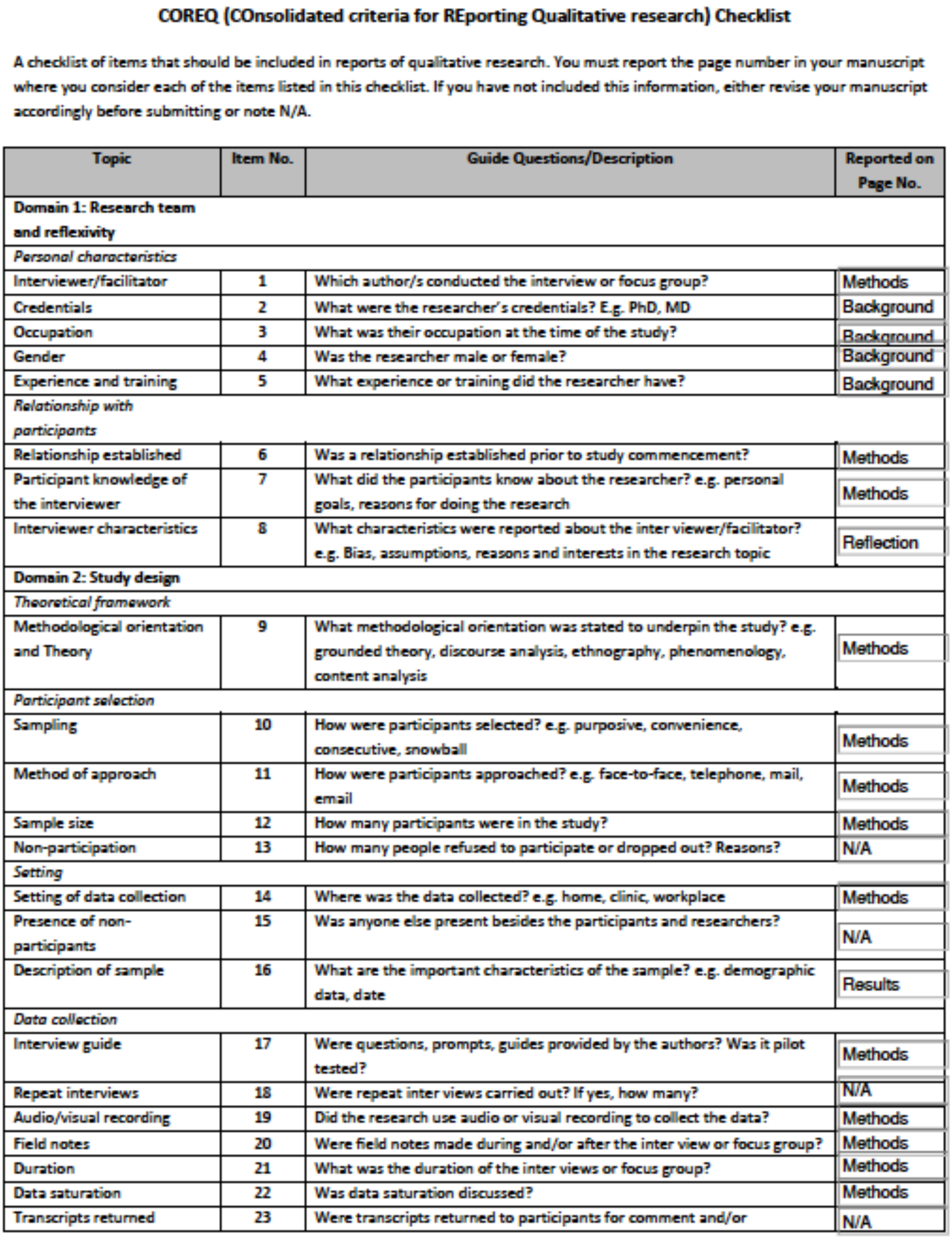
World Health Organisation (WHO). (2014). Social determinants of Mental Health. WHO and Calouste Gulbenkian Foundation, Geneva.

Zhao X., Liu Q., Cao S., Pang J., Zhang H., Feng T., Deng Y., Yao J., Li H. (2018). A meta-analysis of selective serotonin reuptake inhibitors (SSRIs) use during prenatal depression and risk of low birth weight and small for gestational age. Journal of Affective Disorder, 241: 563-570.

Zigmond A.S., Snaith R.P. (1983). The hospital Anxiety and Depression Scale. Acata Psyhciatr. Scand.; 67 (361-370)

9 Appendices

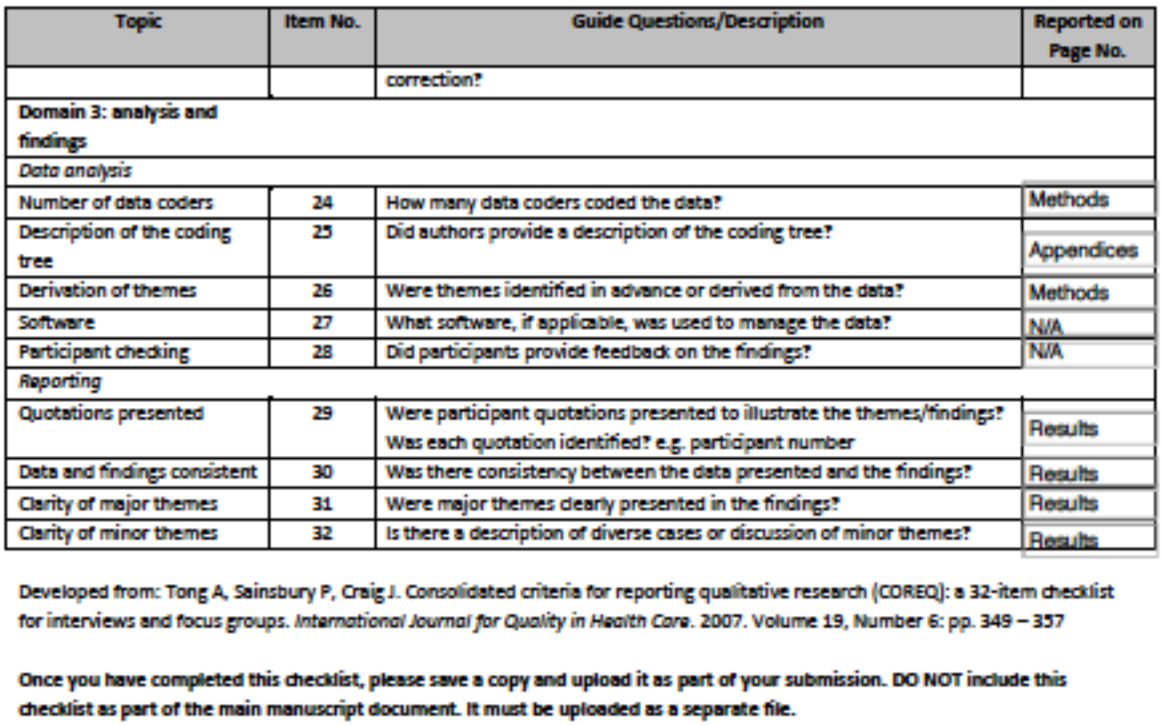
9.1 Appendix One: COREQ (COnsolidated criteria for REporting Qualitative research) Checklist



COREQ (COnsolidated criteria for REporting Qualitative research) Checklist

A checklist of items that should be included in reports of qualitative research. You must report the page number in your manuscript where you consider each of the items listed in this checklist. If you have not included this information, either revise your manuscript accordingly before submitting or note N/A.

Topic	Item No.	Guide Questions/Description	Reported on Page No.
Domain 1: Research team and reflexivity			
Personal characteristics			
Interviewer/facilitator	1	Which author/s conducted the interview or focus group?	Methods
Credentials	2	What were the researcher's credentials? E.g. PhD, MD	Background
Occupation	3	What was their occupation at the time of the study?	Background
Gender	4	Was the researcher male or female?	Background
Experience and training	5	What experience or training did the researcher have?	Background
Relationship with participants			
Relationship established	6	Was a relationship established prior to study commencement?	Methods
Participant knowledge of the interviewer	7	What did the participants know about the researcher? e.g. personal goals, reasons for doing the research	Methods
Interviewer characteristics	8	What characteristics were reported about the inter viewer/facilitator? e.g. Bias, assumptions, reasons and interests in the research topic	Reflection
Domain 2: Study design			
Theoretical framework			
Methodological orientation and Theory	9	What methodological orientation was stated to underpin the study? e.g. grounded theory, discourse analysis, ethnography, phenomenology, content analysis	Methods
Participant selection			
Sampling	10	How were participants selected? e.g. purposive, convenience, consecutive, snowball	Methods
Method of approach	11	How were participants approached? e.g. face-to-face, telephone, mail, email	Methods
Sample size	12	How many participants were in the study?	Methods
Non-participation	13	How many people refused to participate or dropped out? Reasons?	N/A
Setting			
Setting of data collection	14	Where was the data collected? e.g. home, clinic, workplace	Methods
Presence of non-participants	15	Was anyone else present besides the participants and researchers?	N/A
Description of sample	16	What are the important characteristics of the sample? e.g. demographic data, date	Results
Data collection			
Interview guide	17	Were questions, prompts, guides provided by the authors? Was it pilot tested?	Methods
Repeat interviews	18	Were repeat inter views carried out? If yes, how many?	N/A
Audio/visual recording	19	Did the research use audio or visual recording to collect the data?	Methods
Field notes	20	Were field notes made during and/or after the inter view or focus group?	Methods
Duration	21	What was the duration of the inter views or focus group?	Methods
Data saturation	22	Was data saturation discussed?	Methods
Transcripts returned	23	Were transcripts returned to participants for comment and/or	N/A

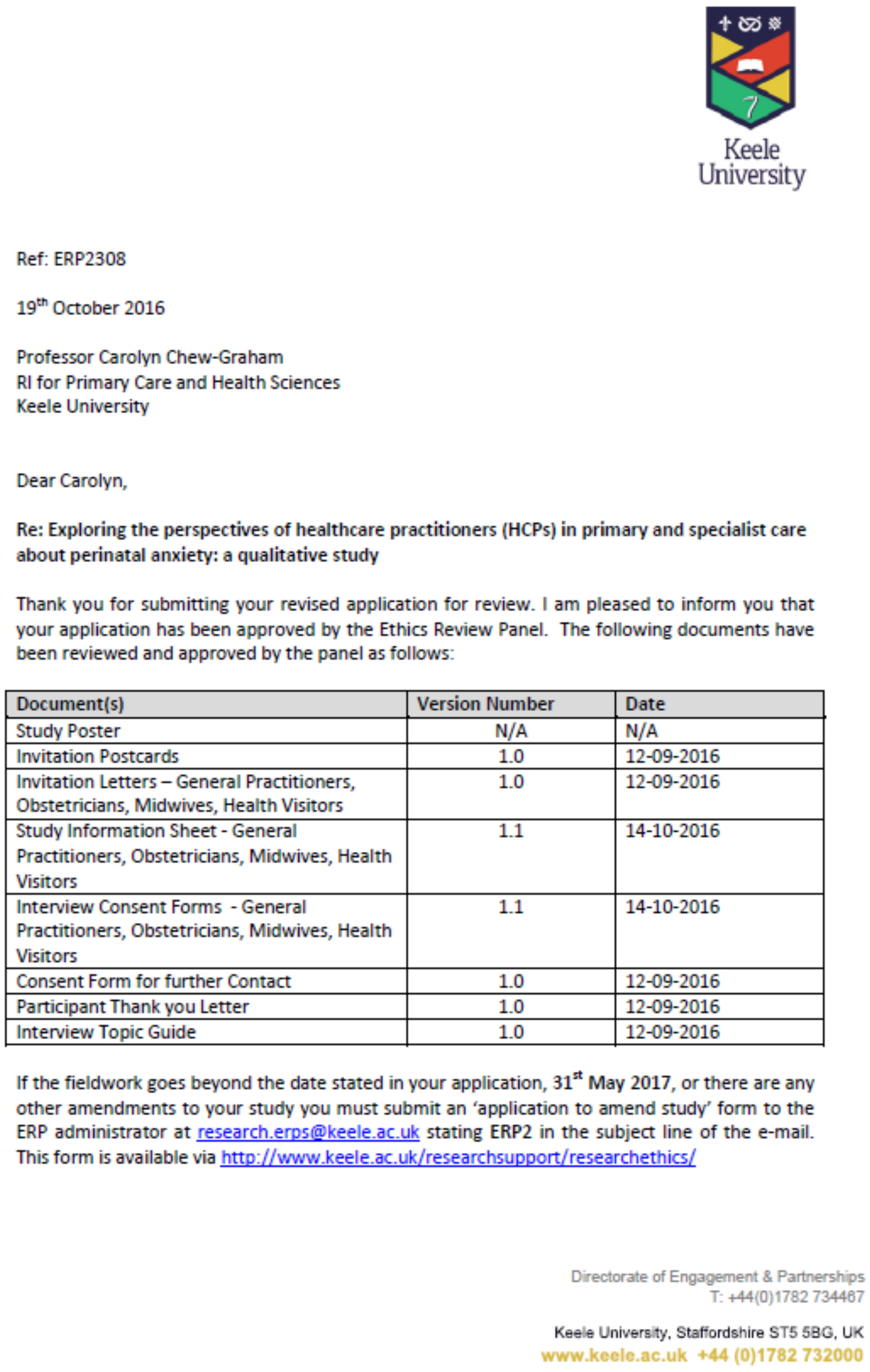


Topic	Item No.	Guide Questions/Description	Reported on Page No.
		correction?	
Domain 3: analysis and findings			
Data analysis			
Number of data coders	24	How many data coders coded the data?	Methods
Description of the coding tree	25	Did authors provide a description of the coding tree?	Appendices
Derivation of themes	26	Were themes identified in advance or derived from the data?	Methods
Software	27	What software, if applicable, was used to manage the data?	N/A
Participant checking	28	Did participants provide feedback on the findings?	N/A
Reporting			
Quotations presented	29	Were participant quotations presented to illustrate the themes/findings? Was each quotation identified? e.g. participant number	Results
Data and findings consistent	30	Was there consistency between the data presented and the findings?	Results
Clarity of major themes	31	Were major themes clearly presented in the findings?	Results
Clarity of minor themes	32	Is there a description of diverse cases or discussion of minor themes?	Results

Developed from: Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *International Journal for Quality in Health Care*. 2007. Volume 19, Number 6: pp. 349 – 357

Once you have completed this checklist, please save a copy and upload it as part of your submission. DO NOT include this checklist as part of the main manuscript document. It must be uploaded as a separate file.

9.2 Appendix Two: Ethical approval letters – Keele and HRA



Keele
University

Ref: ERP2308

19th October 2016

Professor Carolyn Chew-Graham
RI for Primary Care and Health Sciences
Keele University

Dear Carolyn,

Re: Exploring the perspectives of healthcare practitioners (HCPs) in primary and specialist care about perinatal anxiety: a qualitative study

Thank you for submitting your revised application for review. I am pleased to inform you that your application has been approved by the Ethics Review Panel. The following documents have been reviewed and approved by the panel as follows:

Document(s)	Version Number	Date
Study Poster	N/A	N/A
Invitation Postcards	1.0	12-09-2016
Invitation Letters – General Practitioners, Obstetricians, Midwives, Health Visitors	1.0	12-09-2016
Study Information Sheet - General Practitioners, Obstetricians, Midwives, Health Visitors	1.1	14-10-2016
Interview Consent Forms - General Practitioners, Obstetricians, Midwives, Health Visitors	1.1	14-10-2016
Consent Form for further Contact	1.0	12-09-2016
Participant Thank you Letter	1.0	12-09-2016
Interview Topic Guide	1.0	12-09-2016

If the fieldwork goes beyond the date stated in your application, 31st May 2017, or there are any other amendments to your study you must submit an 'application to amend study' form to the ERP administrator at research.erps@keele.ac.uk stating ERP2 in the subject line of the e-mail. This form is available via http://www.keele.ac.uk/researchsupport/researchethics/

Directorate of Engagement & Partnerships
T: +44(0)1782 734467

Keele University, Staffordshire ST5 5BG, UK
www.keele.ac.uk +44 (0)1782 732000

If you have any queries, please do not hesitate to contact me via the ERP administrator on research.erps@keele.ac.uk, stating **ERP2** in the subject line of the e-mail.

Yours sincerely

pp C H Bannerman

Dr Colin Rigby
Chair – Ethical Review Panel

CC RI Manager

NHS
Health Research Authority

Professor Carolyn Chew-Graham
Research Institute for Primary Care and Health Sciences
Keele University
Keele
ST5 5BG

Email: hra.approval@nhs.net

08 February 2017

Dear Professor Chew-Graham

Letter of HRA Approval

Study title: **Exploring the perspectives of healthcare practitioners in primary and specialist care about perinatal anxiety: a qualitative study**
IRAS project ID: **211285**
Protocol number: **RG-0108-16-IPCHS**
Sponsor **Keele University**

I am pleased to confirm that **HRA Approval** has been given for the above referenced study, on the basis described in the application form, protocol, supporting documentation and any clarifications noted in this letter.

Participation of NHS Organisations in England

The sponsor should now provide a copy of this letter to all participating NHS organisations in England.

Appendix B provides important information for sponsors and participating NHS organisations in England for arranging and confirming capacity and capability. **Please read *Appendix B* carefully**, in particular the following sections:

- *Participating NHS organisations in England* – this clarifies the types of participating organisations in the study and whether or not all organisations will be undertaking the same activities
- *Confirmation of capacity and capability* - this confirms whether or not each type of participating NHS organisation in England is expected to give formal confirmation of capacity and capability. Where formal confirmation is not expected, the section also provides details on the time limit given to participating organisations to opt out of the study, or request additional time, before their participation is assumed.
- *Allocation of responsibilities and rights are agreed and documented (4.1 of HRA assessment criteria)* - this provides detail on the form of agreement to be used in the study to confirm capacity and capability, where applicable.

Further information on funding, HR processes, and compliance with HRA criteria and standards is also provided.

It is critical that you involve both the research management function (e.g. R&D office) supporting each organisation and the local research team (where there is one) in setting up your study. Contact details and further information about working with the research management function for each organisation can be accessed from www.hra.nhs.uk/hra-approval.

Appendices

The HRA Approval letter contains the following appendices:

- A – List of documents reviewed during HRA assessment
- B – Summary of HRA assessment

After HRA Approval

The attached document *"After HRA Approval – guidance for sponsors and investigators"* gives detailed guidance on reporting expectations for studies with HRA Approval, including:

- Working with organisations hosting the research
- Registration of Research
- Notifying amendments
- Notifying the end of the study

The HRA website also provides guidance on these topics and is updated in the light of changes in reporting expectations or procedures.

Scope

HRA Approval provides an approval for research involving patients or staff in NHS organisations in England.

If your study involves NHS organisations in other countries in the UK, please contact the relevant national coordinating functions for support and advice. Further information can be found at http://www.hra.nhs.uk/resources/applying-for-reviews/nhs-hsc-rd-review/.

If there are participating non-NHS organisations, local agreement should be obtained in accordance with the procedures of the local participating non-NHS organisation.

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 email the HRA at hra.approval@nhs.net. Additionally, one of our staff would be happy to call and discuss your experience of HRA Approval.

HRA Training

We are pleased to welcome researchers and research management staff at our training days – see details at http://www.hra.nhs.uk/hra-training/

Your IRAS project ID is **211285**. Please quote this on all correspondence.

Yours sincerely

Simon Connolly
Senior Assessor

Email: hra.approval@nhs.net

Copy to: *Dr Victoria Silverwood, Keele University*
Dr Clark Crawford, Keele University
Mr Alastair Mobley, NIHR CRN: West Midlands

9.3 Appendix Three: Topic guide for semi-structured interviews

Keele University

Professor of General Practice Research   Professor of Psychiatry

Perinatal Anxiety Study
Interview topic guide

Welcome
Check that participant is aware of what the interview is about and invite questions
Record written consent to digitally record discussion prior to the start of interview (if not, explain that you will take notes)

Role of the healthcare professional during perinatal care
I want to start by exploring your experiences of providing care to women during the perinatal period so that I can understand your role

Do you feel you have a role in the perinatal care of women?
How frequently do you see women during pregnancy and after birth?
What is your role in the provision of women's perinatal care?
Prompts: *stage of pregnancy/ postnatal months, frequency, priority, nature of care*
What happens during your appointments with pregnant/postnatal women?
Prompts: *standard practice, documentation, mental health checks*
How closely do you work with other services/individuals involved in the provision of care to women during pregnancy/after birth?
Prompts: *GPs, obstetricians, midwives, health visitors, social services*

Experiences of perinatal anxiety in the provision of perinatal care
I now want to move on to explore your awareness and understanding of perinatal anxiety and how to detect this during the perinatal period

What do you understand by the term perinatal anxiety?
What is your opinion on the current provision of care provided for women with perinatal anxiety?
Prompts: is what is currently available suitable/sufficient, what could help?
Have you been involved in the management of care for women with perinatal anxiety?
Prompts: *role, frequency, how did you identify anxiety, how did you record it*

Have you ever received training about perinatal anxiety?
Prompts: *nature of training, what did you learn, reason for attending, perinatal or mental health generally, compulsory or self-initiated*
What role do other services/healthcare professionals have in the provision of this care?

***Prompts:** mental health specialists in your service, making referrals, sharing your concerns, sharing information, awareness of other services, third sector services*

How do you work with other services?

Prompts: what other services, availability of services, how services work together

Barriers and facilitators to detecting perinatal anxiety

I now want to explore what you think prevents or assists you in the detection of perinatal anxiety. This will be separated into anxiety during pregnancy and anxiety after childbirth.

Do you think there are any barriers that prevent you from detecting anxiety during pregnancy?

***Prompts:** time, knowledge, lack of appropriate anxiety measure/tool*

Is anxiety (or mental health in general) a topic that you are comfortable raising with pregnant women?

Prompts: who raises it, when do you raise it, how do you raise it, openness from

pregnant women to disclose/discuss anxiety

What kind of things would help you to detect anxiety during pregnancy?

Do you think there are any barriers that prevent you from detecting anxiety following childbirth?

Prompts: time, knowledge, lack of appropriate anxiety measure/tool

Is postnatal anxiety (or mental health in general) a topic that you are comfortable raising with women following childbirth?

Prompts: who raises it, when do you raise it, how do you raise it, openness from

pregnant women to disclose/discuss anxiety

What kind of things would help you to detect anxiety in postnatal women?

End of interview

Thank you

What happens now/next

9.4 Appendix Four: Invitation to participate letter

Research Institute for Primary Care and Health Sciences
Keele University
Staffordshire
ST5 5BG
Tel: 01782 733905
Fax: 01782 734719

Date: 10/02/2017
General Practitioner Invitation Letter

‘Exploring perinatal anxiety from the perspectives of health care practitioners’

Dear colleague,

We are inviting you to take part in an interview for a research study on perinatal anxiety. The aim of the study is to explore the views of a range of different healthcare practitioners involved in the management of care for women during pregnancy and up to 12 months post-partum. The study is led by Professors Carolyn Chew-Graham and Athula Sumathipala at the Research Institute for Primary Care and Health Sciences, Keele University. The interview will last for up to one hour at a time and place convenient to you.

We have enclosed an information sheet giving more details about the study, including what participation will involve, and the contact details for the study team. Please take your time to read this information and consider whether you would like to take part.

If you would like to take part please contact Tom Kingstone (Study Coordinator) by telephone on 01782 734829 or by email at tom.kingstone@nhs.net or by completing and returning the reply slip enclosed (prepaid envelope provided).

Thank you for taking the time to read this letter and for considering taking part in this research. If you have any questions please do not hesitate to contact Tom Kingstone on the details above.

Yours faithfully,

Carolyn Chew-Graham **Athula Sumathipala**

9.5 Appendix Five: Study Information Sheet for participants

Study Information Sheet for General Practitioners

Exploring perinatal anxiety from the perspectives of healthcare practitioners

Invitation

We would like to invite you to take part in a research study about perinatal anxiety.

The study is entitled "Exploring perinatal anxiety from the perspectives of health care practitioners". This study is being undertaken by Professors Carolyn Chew-Graham and Athula Sumathipala at the Research Institute for Primary Care and Health Sciences, Keele University.

Before you decide whether or not you wish to take part, it is important for you to understand why this research is being done and what it will involve. Please take the time to read this information sheet carefully. Please contact us if anything is unclear or if you would like more information.

Summary

This study explores Healthcare Practitioner views on barriers and facilitators to the identification and management of anxiety in women during the perinatal phase

We define 'perinatal' as during pregnancy and up to 12 months postpartum

We want to hold one-to-one interviews:

With GPs, obstetricians, midwives, and health visitors

Lasting between 45-60 minutes

At a time/place convenient to you

Audio recorded and transcribed with consent

The study has received approvals from

Keele University Ethical Review Panel

Health Research Authority

The study is funded by NIHR Clinical Research Network

Your time for participating will be reimbursed in accordance with BMA rates (an invoice is required; payment will be made via Research Institute for Primary Care & Health Sciences, Keele University).

To express your interest in taking part or ask any questions please contact:

Tom Kingstone – Research Institute for Primary Care and Health Sciences, Keele University, ST5 5BG – **Phone**: 01782 734 829 – **Email**: tom.kingstone@nhs.net

What is the purpose of the research?

The aim of the study is to explore the perceived barriers and facilitators to the identification of anxiety in perinatal women by Healthcare Practitioners (HCPs) in primary and specialist care; including GPs, midwives, health visitors and obstetricians. In this study we will be conducting semi-structured one-to-one interviews with a total of 40 healthcare practitioners to explore experiences of current practice in the provision of care to women with perinatal anxiety, to identify barriers facing HCPs in the identification of perinatal anxiety and to identify facilitators to support HCPs in the identification of perinatal anxiety. This study will add to existing knowledge about the detection of perinatal anxiety in primary and specialist care in the UK. The study will also inform future research to test the feasibility of an intervention for women with perinatal anxiety.

Why have I been invited?

As a GP with experience of providing care to women during and following pregnancy, we would be interested in hearing your views.

Do I have to take part?

No, you do not have to take part. Your participation is entirely voluntary. If you take part you will be asked to sign a consent form at the start of the interview. This is to show that you have read this information sheet and consent to take part in the study. You are free to withdraw at any time during the interview, without giving any reason and without your rights being affected. You may withdraw interview data from final analysis and dissemination up to four weeks after the date that consent was recorded. The data from the interview will then be deleted.

How do I take part and what will happen if I do?

If you decide to take part in the study please contact the Tom Kingstone by telephone on 01782 734829 or by email tom.kingstone@nhs.net. You will be invited to attend an interview conducted by a member of the research team. The interview will be held at a place and time convenient to you (e.g. your place of work) alternatively the interview can be held over the telephone, if preferred. In the interview we will discuss current practice in the provision of care to women with perinatal anxiety, and perceived barriers and facilitators to the identification of anxiety in pregnant and postnatal women in primary care. We expect the interview to last up to 1 hour.

What are the benefits/risks of taking part?

There are no expected risks or immediate benefits of taking part. However, the discussions in the interviews will help assess how women experiencing anxiety during and following pregnancy are currently identified in practice and whether there is a need or opportunity for this to be improved.

Who will have access to information about me?

Your participation will be kept completely confidential and your information and data will be anonymised (name removed) through the use of a unique study code. Audio recordings will be stored on a secure university network drive and transcripts of the interviews will be kept securely in a locked filing cabinet at the Research Institute for Primary Care and Health Sciences. Anonymised data may be used in future research.

Who is funding the research?

This research project is funded by the National Institute for Health Research, Clinical Research Network West Midlands.

Has the research study been ethically approved?

Keele University ethical approval has been granted (ERP2308: 19/10/2016). Approval has also been granted from the Health Research Authority to conduct this research (IRAS 211285: 08/02/2017).

What if there is a problem?

If you have a concern about any aspect of the study and wish to speak to the researcher(s) who will do their best to answer your questions you should contact Professor Carolyn Chew-Graham by telephone on 01782 734717 or by email at c.a.chew-graham@keele.ac.uk.

Alternatively, if you do not wish to contact the researcher(s) please write to Dr Clark Crawford Head of Research Integrity, Directorate of Engagement and Partnerships, IC2 Building, Keele University, ST5 5NH, or email: research.governance@keele.ac.uk, or telephone 01782 733371.

Contact for further information

For further information or if you have any suggestions or comments about this study or would like to take part please contact Tom Kingstone on 01782 734289 or by email at tom.kingstone@nhs.net.

9.6 Appendix Six: Participant consent form

Interview consent form for General Practitioners

Exploring perinatal anxiety from the perspectives of health care practitioners

Please **initial** each statement
on the dotted line to
confirm that you agree

1. I can confirm that I have read and understood the health visitor information sheet (version 1.2 dated 19/12/2016) and have had the opportunity to ask questions and had these suitably answered. ....
2. I understand that my participation is voluntary, that I can withdraw at any time during the interview, without giving any reason and without my legal rights being affected, and that I can withdraw my data from final analysis and dissemination up to four weeks after today. ....
3. I understand that the interview will be recorded and transcribed and that the recordings will be stored in a secure location and will bear no personal identifying information. I also understand that hard copies of transcripts will be kept for 5 years after publication of the research. ....
4. I understand that electronic data will be anonymised and stored indefinitely. ....
5. I understand that anonymised data may be used future research studies. ....
6. Audio from the interview will be recorded and stored indefinitely. ....
7. I understand that my participation will be kept confidential. ....
8. I agree to the use of anonymised direct quotes when results are reported. ....
9. I agree to take part in the interview. ....

Please sign and date below

Name of participant	Date	Signature

Name of researcher	Date	Signature

One copy to be retained by researcher. One copy to be retained by participant.

9.7 Appendix Seven: Example of field notes

These notes were made prior to my first interview with GP001:

- Expected interview length – 30-45mins
- Possible anticipated themes: (based on my clinical experiences)
    - GPs might not see much PNA
    - GPs don't have much training on PNA
    - Frustration with lack of time and resources across both primary and secondary care
    - Difficult to refer patients who are not severely unwell
    - More streamlined assessment tool might help
    - More services for women who fall between services e.g. not acutely severely unwell but needing help
- How will my role as a GP trainee potentially affect the data gained?
    - Need to avoid collusion with participants
    - Need to ensure clarity within the data – try to avoid making shared assumptions with the participants without gaining real data to support points to be made

These notes were made after my interview with GP001:

- Shorter interview than I imagined
- GPs role – this participant felt it was about sign-posting and referring
- Reliance on MWs discussed
- Not afraid to mention/discuss mental health with patients
- Time constraints a common problem
- Mother and baby [mental health team] seem to be a very good service

- Dad’s can have too
- ?female GPs see more pregnant and postnatal patients?
- What’s normal anxiety in pregnancy?
- Impact on baby seemed to be main concern
- Should I mention the RCGP toolkit specifically if the participant doesn’t?
- Didn’t have any communication from specialist services whilst patients were receiving treatment, would have liked some
- My thoughts on this interview
    - Participant provided lots of rich data, I didn’t need to prompt very much, gave lots of answers fluently and clearly
    - PNA not a familiar concept to participant – thought it was just anxiety but during pregnancy or postnatal period, didn’t realise it was its on entity.

. . . .

9.8 Appendix Eight: Example of initial analysis

The following is an example of the notes I made after the first read through of each participants transcript to develop an overview of the themes that emerged from the interviews. I have provided my initial analysis from GP001 and GP002.

Initial Analysis of GP 001

Role of the GP in care of pregnant women

- Six week check provides opportunity to carry out physical and mental health assessment of Mum
- Identification of PNA
- Referral to appropriate services for care
    - Low threshold for referral
- Some GPs may have a specialist interest in PNA, isn't aware of anybody locally who does this.
- Sees perinatal women daily – how often depends on the problem presenting, may need reviewing more regularly
- GP's are more aware of mental health problems postnatally rather than antenatally
- Even if baby's appointment has been booked always a chance to ask about Mum and check that she's getting on okay, holistic approach to family care
- Computer alerts help to link family members and alert GP to potential problems when seeing patients

Impact of perinatal mental health problems

- Can affect both mother and baby

Work with other services

- Used to have much closer links to the HVs
- Obstetrics only if severe problems
- Good links with the midwives
- Feels the midwives are very good
- Social services – come to regular meetings for more serious cases. Doesn't usually have much more contact than this.

What is PNA?

- Reading paperwork for my study has changed opinion of the time frame for PNA

- Prior to reading paperwork thought it was anxiety relating to birth and delivery just before and afterwards

Specialist mental health services

- Better at dealing with PNA, GPs don't deal with it, they identify and refer to more appropriate services
- Communication between services isn't frequent, maybe this is enough?
- Long wait list at times
- Sometimes only the more severe cases can be seen

Initial analysis of GP002

GPs only get involved if there is a 'problem' – often physical health, can be mental health too.

Some GPs have 'specialist interests' where they see more of a certain type of patient due to their personal interests rather than after attaining educational certificates in certain areas.

Gender roles again 'women prefer to see women' – both female GPs (GP001 and GP002) have said this now.

Less HVs than previously, more difficult links with them now and more difficult to communicate with them. 'they've been taken away' – quite strong language, makes me feel that they have been removed against their wishes.

Importance of family network, those with less support from family tend to seek more support from HCPs.

Anxiety has 'levels'. (*I didn't get this clarified . . .)*

Have to consider the impact of Mum's health on the baby's health.

Have to screen for depression if anxiety is present - are they part of the same entity?

Response to recognition of PNA would depend on the severity of it and has different ways to tackle different levels of it.

Referrals for PNA - M&B for severe, HVs for mild – where does the GP sit amongst this? Does the GP have a role in managing PNA???

Referral to wellbeing can take a while, as can referral to the community mental health team – resource issue?

Not sure how to code the section where the GP talks about a specific patient – quite a personal account.

Knows the guidelines around infant feeding but acknowledges that not appropriate for everybody and GPs should be flexible.

M&B service take responsibility for all care, don't ask GP to prescribe medication etc. Get correspondence from M&B but takes a while

Referred in => seen by CPN/care worker => see Consultant later on – causes a 'lag time' in correspondence

Importance of support network – doesn't matter who that is, as long as it is somebody. Lack of support network can lead to more presentations to primary care.

Giving advice as a childless person is different than if you have children – *but we give advice all of them time, so how is this different?*

Changes to HV service could mean that 'mild' cases don't get picked up, patients may not present and if the HVs aren't available to notice problems they may not be identified.

More reluctant to prescribe medication in pregnancy

More sceptical about prescribing for anxiety as takes a long time to know if it is helping or not. (Clinical experience)

Pregnancy puts women into a high-risk group category

Doesn't clinically see pregnant women very often. (*Different to GP001 who felt that they saw quite a lot of pregnant women, ?why is this).*

Would ask about mood in the postnatal period but not routinely antenatally.

Has no problems discussing mental health problems with women.

Justifies why sees more mental health than other GPs in the practice, semi-specialist interest

Rapport very important to be able to discuss mental health problems.

There are scoring systems to be used but doesn't use them – confident in clinical ability and assessment without needing tools.

Scoring systems can be helpful in areas where the clinician doesn't feel as comfortable.

Knows that there is a RCGP toolkit available but there are a lot them and doesn't have time to look through all of those

Personal reflection on transcripts GP001 and GP002

After reading these first two transcripts I have recognised that although my clinical background can in some ways be very helpful when interpreting this data, I need to be careful not to super-impose my own views into the pieces and 'look for meaning' when it isn't present. I may not agree with the codes that appear but that doesn't mean that I or the other GPs are wrong, it juts reflects the differences between different GPs and their approach to clinical work.

I also need to remain open minded to discover codes and themes that I hadn't considered myself would appear and see where they take me. Coding appears to be like a journey and sometimes you should turn around or change direction but making a note of the direction of travel will be helpful later down the road with regards to data analysis writing.

9.9 Appendix Nine: Example of further analysis

The table below is an example of how I extracted quotes from transcripts and grouped them into discussion points amongst emerging theme headings. The example is about the theme of ‘PNA as a hidden problem’.

Discussion point	Quotes to support this:
Uncertainty about PNA as a diagnosis:	*‘So, anxiety during pregnancy and kind of after, the postnatal period I suppose’ (MV002)* *‘Any anxiety around the pregnancy within pregnancy and the postnatal period’ (MW006)* *‘I mean it’s a concept that I’m really not that much aware of either professionally or from reading’ (GP007)*
Association of anxiety with depression	*‘I think that you know, that we go straight in, you know, sort of we’re looking at depression rather than anxiety I think’ (HV001)* *‘I’m trying to think when I’ve last seen a lady who just had anxiety . . . I think that’s very difficult to define but there are only a small number of women that would have pure anxiety and no mood disorder at all’ (GP005)* *‘Anxiety is obviously different to depression or sometimes the two go hand in hand’ (HV003)*
Opportunistic identification/scheduled contacts	*‘I suppose that would certainly increase the chances of picking up any problems so I think that’s the main sort of barriers [are] that we don’t tend to see them unless they present to us really’ (GP003)* *‘it maybe that that woman we see every week for breast feeding support or indeed maternal mental health support, it maybe that she comes into clinic, to our open clinic every month to get her baby weighed, and I suppose it’s that*

	opportunistic contact that helps provide the bigger picture' (HV001) *'So health visitors used to run a postnatal group but that's not running any more. So basically if we don't pick it up at these contacts, well, we don't pick it up.' (HV004)*
Normal vs. pathological anxiety	*'I was surprised about the amount of women that report they have anxiety when you ask them about it. Some of that is the normal anxiety but I would say at least half of the women that I look after have some sort of anxiety' (MW006)* *'I don't like to use the word normal but I think it's understandable anxiety' (GP004)* *'A lot of the time you maybe ask a lady if she's feeling anxious, yes she is because she's anxious about the pregnancy, she's not had a scan yet, she's heard stories from family and friends about horror stories, etc. So there's a lot of, like you say, 'normal' anxiety, which we would expect from a lot of first-time pregnant women or even pregnant women that have had a horrendous time in the previous pregnancy or delivery' (MW006)* *'It's quite a common thing and to normalise it, really, with ladies as well that it's quite common to feel anxious' (HV003)* *'the first couple of days someone says, 'Oh, I've been a bit weepy.' 'Oh, that's normal.' But for some people it might not be; it might carry on' (MW005)* *'I think all mums, all pregnant mums are anxious, aren't they, about the future and how they're going to cope and I would put that down to a normal anxiety' (HV002)*

When does anxiety become pathological?	*‘we do recognise like I said that pregnant women can be more anxious and it is trying to identify when that might be becoming more pathological rather than sort of normal yeah and it is sometimes tricky to identify that I suppose because we don’t see them that often’ (GP003)* *‘Especially if we’ve not known that person before they’ve been pregnant. We don’t know what their anxiety levels are like for them . . . It’s quite hard to measure and establish whether this person is really so anxious that it’s a concern or is this just anxiety due to being pregnant, the hormone levels make them more anxious and they’re wanting everything to be just right for their new baby?’ (HV005)* *‘I’ll ascertain from more questions as to whether I think it’s something that’s normal or whether it’s something that needs further support’ (MW006)*
Normalising PNA	*‘Well, I think their expectations are so high, so if they’re not fulfilling them, they start blaming themselves’ (HV002)* *‘Mum’s feel that there is an expectation that they will be happy because they have just had a baby but if they don’t feel happy they may not feel able to say, or if they’re anxious they may not be able to say, it may feel like they are indicating they aren’t coping’ (GP001)* *‘…but there’s still the taboo of mental health [yeah], I think that there’s, you know, there’s lots of stuff on social media, lots of stuff on the general media. But it’s still about imbedding that it’s ok to feel like that, that there is some normal [yeah] worrying you know, productive worries, normalising that for the woman [yeah]. But you know, recognising that there are unproductive worries and negative cycles [yeah], so, yeah, recognition and acceptance’ (HV001)*

	‘…I think there is, unfortunately, still a bit of a stigma around thinking, ‘If I share with my health visitor that I’m not coping and I’m experiencing low mood, then...’ It’s quite an old-fashioned stigma but I do think it’s still there. Unfortunately, they think we’ll go back to Social Services and say, ‘This mum isn’t coping. She can’t look after a baby’ (HV004)

9.10 Appendix Ten: Publication in the British Journal of General Practice (BJGP)

Research

Victoria Silverwood, Annabel Nash, Carolyn A Chew-Graham, Jacqualyn Walsh-House, Athula Sumathipala, Bernadette Bartlam and Tom Kingstone

Healthcare professionals' perspectives on identifying and managing perinatal anxiety:

a qualitative study

Abstract

Background
Perinatal mental health problems are those that occur during pregnancy or up to 12 months postpartum, and affect up to 20% of women. Perinatal anxiety (PNA) is at least as common as depression during the perinatal phase and can adversely impact on both mother and child. Despite this, research into anxiety has received less attention than depression. The National Institute for Health and Care Excellence guidance on perinatal mental health has identified PNA as a research priority.

Aim
To explore the perspectives and experiences of healthcare professionals (HCPs) in the identification and management of PNA.

Design and setting
This was a qualitative study in primary and secondary care set in the West Midlands from February 2017 to December 2017.

Method
Semi-structured interviews (*n* = 23) with a range of HCPs. Iterative approach to data generation and analysis, using principles of constant comparison. Patient and Public Involvement and Engagement (PPIE) group was involved throughout the study.

Results
Twenty-three HCPs interviewed: 10 GPs, seven midwives, five health visitors, and one obstetrician. Four themes were uncovered: PNA as an 'unfamiliar concept'; reliance on clinical intuition and not clinical tools, fragmentation of care, and opportunities to improve care.

Conclusion
Awareness and understanding of PNA among HCPs is variable, with debate over what is 'normal' anxiety in pregnancy. HCPs suggested that PNA can be challenging to identify, with mixed views on the use and value of case-finding tools. Opportunistic identification was noted to be significant to aid diagnosis. Care for women diagnosed with PNA was reported to be fragmented and interprofessional communication poor. Potential solutions to improve care were identified.

Keywords
general practice, perinatal anxiety, perinatal mental health, pregnancy, qualitative research.

INTRODUCTION

Perinatal mental health (PMH) problems are those that occur during pregnancy or up to 1 year after birth.[1] In the UK, patients are registered with GPs who they can consult throughout the perinatal period and who will invite women for a 6–8-week postnatal check. Women will also have appointments with midwives (MWs) for routine antenatal care, obstetricians (Obs) for more complex antenatal care, and see health visitors (HVs) postnatally.

During the perinatal period, the most common mental health problems are depression and anxiety disorders, which include generalised anxiety disorder (GAD), obsessive compulsive disorder, panic, social anxiety,[1] and post-traumatic stress disorder.[2] Perinatal depression is reported to affect around 13% of women[3] and some evidence suggests that rates of perinatal anxiety (PNA) may be higher at around 22%.[4] Anxiety is often comorbid with depression, for example, 66% of women with postpartum major depression also had an anxiety disorder.[5] Women who have experienced previous problems with anxiety may be more at risk of PNA.[6]

PMH problems may negatively impact on pregnancy and neonatal outcomes,[7] postnatal mental health,[8] parenting behaviours, and the child's emotional, social, and behavioural development[9] such as attachment disorders.[10] A Swedish study identified an association between antenatal anxiety disorders with increased frequency of visits to obstetric clinics, caesarean delivery, and epidural analgesia.[11] Despite such reported increases in the use of healthcare services, women with PMH disorders are less likely to receive treatment for these in comparison with mental health problems experienced outside of the perinatal period.[12] Barriers to detecting PMH problems exist at individual (for example, patient and practitioner) and systemic levels.[13] Under half of women with mental health problems may have these problems identified in hospital antenatal clinics[14] and only 10–15% who have a PMH

How this fits in

Perinatal anxiety (PNA) is a common problem that has implications for mother, baby, and wider society, and it has been demonstrated that early detection and appropriate interventions could improve clinical outcomes. There is currently a limited evidence base from which to draw appropriate identification and management options; this article reports the perspectives of healthcare professionals (HCPs) on current practice, and the barriers and facilitators to identification and management of women with PNA. The study found that PNA is an unfamiliar concept to many HCPs, the use of case-finding tools to aid diagnosis and management varies, and that HCPs feel the management of PNA can be fragmented. This study makes specific recommendations around the importance of raising awareness of PNA among HCPs, and of making every patient contact count.

problem detected receive treatment during pregnancy.[3,15,16] Pregnant women report reluctance to self-refer or disclose mental health problems, due to feelings of stigma, or indicate having a lack of time to receive treatment.[17] Healthcare professionals (HCPs) report insufficient time to case-find for post-natal depression[18] and MWs, HVs, and Obs have reported limited knowledge and awareness of PMH problems.[19] Case-finding for anxiety disorders has not received the same attention as for depression during pregnancy and the post-natal period.[20] National Institute for Health and Care Excellence (NICE) clinical guideline CG192 recommends specific case-finding questions (Box 1) to be used at the pregnancy booking appointment for every woman.[3,21,22]

Significant research on perinatal depression exists, including aetiology and prevalence and incidence data,[3,23] trials of interventions,[24] and of the perspectives of women and HCPs.[19,25,26] However, at the commencement of this study in February 2017 there was no published literature that discussed the perspectives of GPs around PNA in the UK,[27] compared perspectives of multiple HCPs around PNA, or reviewed care delivery across the entire perinatal period.[28,29] The NHS *Five Year Forward View for Mental Health Report*[30] recommends the provision of additional specialist and community perinatal mental health support across England by 2020/2021. The development and implementation of evidence-based pathways that promote holistic care and integrated services for PMH are highlighted as important. NICE guidelines recommended the need for further research to develop psychological interventions to identify and treat moderate to severe anxiety disorders in pregnancy.[2] Before interventions can be developed, it is important to understand the factors influencing current practice. This study aimed to explore the perspectives of GPs, Obs, MWs, and HVs on the barriers and facilitators to the identification and management of PNA.

Box 1. Case-finding questions for perinatal mental health problems (extracted from the NICE clinical guideline [CG192])[2]

The following questions are recommended by NICE for use at the booking visit for each pregnant woman.

- **Whooley questions[21]**
1. During the past month, have you often been bothered by feeling down, depressed, or hopeless?
2. During the past month, have you often been bothered by having little interest in or pleasure doing things?

- **Two-item Generalised Anxiety Disorder Scale (GAD-2)[22]**
1. Over the last 2 weeks, how often have you been bothered by feeling nervous, anxious, or on edge?
2. Over the last 2 weeks, how often have you been bothered by not being able to stop or control worrying?

METHOD

Study design and setting

This study utilised qualitative methods involving semi-structured interviews, predominantly face-to-face but some conducted by telephone. This allowed participants to express their individual views and facilitated in-depth comparison between the interviewees. The study took place across Staffordshire and Shropshire in primary and secondary care. A Patient and Public Involvement and Engagement (PPIE) group was involved throughout development of the study and contributed to the study protocol and data analysis process.

The 'Consolidated criteria for reporting qualitative research' checklist (COREQ) was used as a tool to ensure data trustworthiness.[31]

Sampling and recruitment

A purposive sampling strategy[32] aimed to recruit different HCPs (GPs, Obs, MWs, and HVs) involved in delivering care to women experiencing PMH problems. Inclusion criteria included HCPs who were currently employed in the West Midlands. Multiple NHS sites were engaged to support recruitment, including: Shropshire Community Health Trust, University Hospitals of North Midlands, Shrewsbury and Telford NHS Trust, and Royal Wolverhampton Trust. GPs were recruited with the support of West Midlands Clinical Research Network (CRN) and personal contacts. Information packs, including a participant information sheet and a consent to contact form, were distributed

Table 1. GP participants

	Sex	Ethnicity	GP role	Years as a GP	Type of practice (as stated by individual)
GP001	Female	White British	GP partner	15–20	Semi-rural
GP002	Female	White British	Salaried GP	<5	Suburban
GP003	Male	White British	GP partner	15–20	Semi-rural
GP004	Female	White British	Salaried GP	10–15	Semi-rural
GP005	Male	White British	GP partner	25–30	Suburban
GP006	Female	White Polish	GP partner	10–15	Semi-rural
GP007	Male	White British	Salaried GP	25–30	Suburban
GP008	Male	White British	GP partner	10–15	Rural
GP009	Male	Indian	GP partner	10–15	Semi-rural
GP010	Female	White British	Salaried GP	<5	Suburban

Table 2. Midwife participants

	Sex	Age, years	Specialist role/interest	Years as a midwife	Interview type
MW001	Female	50	Patient information	13	Face-to-face
MW002	Female	51	Research/clinical midwife	25	Face-to-face
MW003	Female	33	Clinical midwife	13	Face-to-face
MW004	Female	34	Antenatal and postnatal care	8	Face-to-face
MW005	Female	59	Community/public health midwife	17	Telephone
MW006	Female	59	Community midwife	9	Telephone
MW007	Female	53	Mental health	27	Face-to-face

Table 3. Health visitor participants

	Sex	Age, years	Years as a health visitor	Type of area worked in	Type of interview
HV001	Female	27	4	Children's centre attached to primary school	Telephone
HV002	Female	62	30	Children's centre attached to primary school	Telephone
HV003	Female	38	6	Community health centre	Telephone
HV004	Female	58	29	Community health centre	Telephone
HV005	Female	52	17	Community health centre	Telephone

to potential participants. The research team arranged interviews with HCPs who returned 'consent to contact' forms or contacted the team directly. GPs received financial reimbursement of their time according to BMA rates.

Data collection

An interview topic guide, developed from the literature review and thorough discussion with the PPIE group, was used to generate data. This was modified as data collection and analysis proceeded, to include emerging themes to be checked in subsequent interviews in an iterative process.[33] Mean interview length was 41 minutes 46 seconds and total accumulated interview time was 15 hours 19 minutes.

The interviews were conducted by two authors, both of whom have training in qualitative methods. All GP interviews were face-to-face; MW and HV interviews were a mixture of face-to-face and telephone interviews. Prior to agreeing to take part, participants were given an information sheet outlining the study objectives. Interviews were digitally recorded with consent, and transcribed and anonymised prior to analysis using a unique participant identifier.

Data collection concluded when data saturation was achieved[34] in GP, HV, and MW datasets, when no new themes emerged from the data that prompted new theoretical or clinical insights. One obstetrician agreed to be interviewed, which was insufficient to generate saturation within the subgroup, and so these data were not included in the overall analysis.

Data analysis

Coding was guided by principles of constant comparison.[35,36] All transcripts were read by at least two authors. All authors were involved in coding data from interviews. Initial codes were refined within the team until key themes were identified. Emerging themes were discussed with the PPIE group throughout the data analysis process. Any variations in coding were discussed and agreed upon within research team meetings.

RESULTS

Recruitment was challenging with only one obstetrician interviewed. A total of 23 HCPs working in the West Midlands were interviewed. Participant demographics are shown in Tables 1–3.

The data were organised within four main themes: PNA as an unfamiliar concept; reliance on intuition in the identification of PNA as opposed to case-finding tools; fragmentation of care; and opportunities to improve care.

Illustrative data are presented to support analysis with unique participant identifiers to indicate HCP-type. These themes are outlined in Figure 1.

Perinatal anxiety as an unfamiliar concept

Some HCPs were not aware of PNA as a specific diagnosis and were uncertain that PNA existed as a distinct clinical entity:

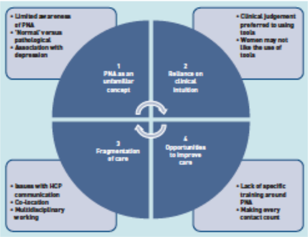


Figure 1. Data analysis themes.
HCP = healthcare professional. PNA = perinatal anxiety

> *'I mean it's a concept that I'm really not that much aware of either professionally or from reading.'* (GP007, male [M], 25–30 years in role)

Anxiety was seen commonly as 'normal' or 'understandable', with HCPs suggesting that some anxiety during the perinatal period was to be expected:

> *'I was surprised about the amount of women that report they have anxiety when you ask them about it. Some of that is the normal anxiety, but I would say at least half of the women that I look after have some sort of anxiety.'* (MW004, 9 years in role)

It was suggested by several HCPs that anxiety becomes *'pathological'* when symptoms began to affect a woman's everyday functioning. HCPs suggested that it can be challenging to differentiate between 'normal' and 'pathological' PNA:

> *'We do recognise that pregnant women can be more anxious, and it's trying to identify when that might be becoming more pathological rather than, sort of normal.'* (GP003, M, 15–20 years in role)

Some respondents felt that normalising PNA could reassure women that they are not alone, but others were concerned that normalising symptoms could lead to women feeling unable to seek help and support. In addition, HCPs suggested that society's expectations to have a positive perinatal experience are unrealistic and creates pressures for women.

These pressures, combined with stigma around mental health, mean women may be reluctant to disclose symptoms of anxiety:

> *'I think there is, unfortunately, still a bit of a stigma around thinking, "If I share with my health visitor that I'm not coping and I'm experiencing low mood, then ..." It's quite an old-fashioned stigma but I do think it's still there.'* (HV004, 29 years in role)

The association of anxiety symptoms associated with depression was discussed, with a range of opinions expressed.

Some HCPs acknowledged that they now view anxiety as a distinct diagnosis; others felt that the focus should be on depression and therefore they did not screen for anxiety symptoms:

> *'Postnatal depression is a term that we would more commonly use but obviously that doesn't necessarily encapsulate anxiety, and I think often anxiety seems to come hand in hand with a degree of depression. So maybe there needs to be a wider use of anxiety as a definition.'* (GP008, M, 10–15 years in role)

Clinician intuition versus the use of case-finding tools

HCPs discussed the clinical tools and validated questionnaires they were aware of for the identification and assessment of PMH problems, suggesting that these were focused on depression, not on PNA. There was disagreement about how helpful clinical tools were.

GPs indicated that they did not commonly use tools to assess anxiety, but some remarked they would anticipate that their MW or HV colleagues might use the Edinburgh Postnatal Depression Scale (EPDS)[37] to identify both depression and anxiety. Several participants felt that their own clinical expertise and professional judgement were preferable to using tools:

> *'I personally don't* [use diagnostic tools] *with postnatal women, I don't like mental health score cards and things where you have to get a number and then you are, then you're diagnosed as whatever. I think with experience and skill, you can pretty much pick it up yourself.'* (GP007, M, 25–30 years in role)

Several MWs and HVs also described including scores from assessment tools to support referrals to specialist mental health services:

'I think it gives a bit of credibility. We used to find that we'd struggle to get people referred into the services ... because we didn't use those and we'd be saying, oh this woman's a bit depressed ...' (MW007, 27 years in role)

Some HCPs suggested that women expressed opinions about the tools, and reported a range of experiences in using them:

'Some women look at me and say, "I'm not using those, that's just really weird." Yet other families think well, actually that's a great introduction ...' (HV001, 6 years in role)

One perceived limitation of using scoring tools to assess PNA was that a woman might consciously provide responses to generate a 'normal' score to avoid being identified as having a PMH problem:

'There are lots of tools we could be using but I think even with the tool, they can give the answers that they want to give really.' (HV002, 30 years in role)

Fragmentation of care

GPs reported that they rarely see pregnant women in the course of their daily work, as woman are seen by their MWs for the majority of their routine antenatal care:

'If it's a completely uneventful normal pregnancy then the contact may be minimal, depending on the needs in terms of the patient as well as the medical needs identified by midwife in the prenatal period.' (GP009, M, 10–15 years in role)

Some GPs reported that they felt routine antenatal care was not part of their role, that they had lost clinical skills, and that pregnant women should be managed wholly by the MW:

'I mean the reason we're de-skilled is because we don't do it anymore. But we don't get paid to do it and we don't have the time to do it. If we were to take on more of a role with antenatal care, then what would the midwives do?' (GP010, female [F], <5 years in role)

Most participants reported management of PNA to be fragmented, with poor communication between different HCPs:

'I think if we had a better way of communicating with our allied health professionals; with our MWs; with our GPs. If we had better communication which gave us a clearer picture of [a patient's] *history, then that would help.'* (HV005, 12 years in role)

HCPs discussed how the quantity and quality of information received from each other was highly variable:

'If the person who sends them to see me hasn't made it clear to the patient or to me why they have expressed such a concern, that's a shame. Just a loss of a link in the chain really.' (GP001, F, 15–20 years in role)

Many HCPs expressed frustration at the limited availability of specialist services to refer women with PNA to, especially the long waiting times for psychological support, leaving some HCPs reporting feelings of helplessness:

'With the midwife you're their advocate. You're supposed to be able to help and make it better for them and know where they can go to get some help. But it's just not there.' (MW005, 12 years in role)

Lack of integration of care was identified as a barrier to effective management of women with PNA, with some HCPs feeling that working in separate premises was a geographical barrier to an effective working relationship:

'When we used to be based in GP surgeries, we used to see more of the midwives because they'd be there doing the clinics.' (HV002, 30 years in role)

However, even when HCPs were located in the same building they acknowledged that interprofessional communication between HCPs could still be limited, despite working alongside each other:

'They [midwives] *just tend to come in and have their own clinic. I think that's running in parallel rather than you're working with them.'* (GP010, F, <5 years in role)

One HV reported they felt that being centrally located with other HV colleagues was beneficial as they could provide support to each other and respond to concerns raised by patients and other HCPs more quickly:

'So at least any concerns do get actioned quite quickly, whereas I suppose if you're based in a GP practice and you're maybe one or two health visitors, perhaps, or a couple that

---

work part time, you haven't always got the coverage.' (HV003, 6 years in role)

Some HCPs expressed concerns that they may be duplicating or overlapping work with their colleagues and commented that at some points it was not clear who should be delivering care:

'It depends, really, who's the best professional to deliver that intervention at the time, because, primarily, they come under the midwife's remit but obviously there's benefit to us being there.' (HV003, 6 years in role)

HCPs suggested that referral pathways and available referral services for specialist mental health support were often unclear. Several stated that it was only with experience that they began to understand the constantly changing clinical landscape and know where they could refer to appropriately, suggesting that if pathways were simplified it would be more straightforward to find appropriate support for patients:

'I think there's more services out there than we realised, I think that's a lot of my initial years took a lot of time to actually work out what was out there.' (MW007, 27 years in role)

Opportunities to improve care

Very few HCPs described having specific training around PNA, which they felt would be helpful. When asked about previous training, the majority of HCPs felt that education could have been more targeted towards PMH and described most of their personal learning around PMH occurring within ongoing continued professional development or through clinical or personal experiences:

'Not on anxiety specifically but I suppose you know anxiety, depression they often feel like they come hand in hand, maybe I'm wrong about that ... but I feel probably a lot of my experience has come either once I've become a qualified GP or once I've been training as an actual GP, seeing patients and learning from those interactions and reflecting on how that's gone. And then also my personal experiences with, you know, having children.' (GP008, M, 10–15 years in role)

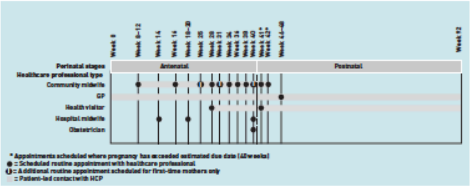
Even where educational resources are available they may not be accessed. For example, although some GPs were aware of, and had used, the Royal College of General Practitioners' (RCGP) PMH toolkit,[38] several were unaware of it:

'The problem is there are so many different toolkits. I tend to just access them if and when I see a patient that I'm unsure about something or if I need to do some CPD [continued professional development].*'* (GP010, F, <5 years in role)

Although care overall appears to be fragmented, improved integration of services could be beneficial for patients. It was acknowledged that, in one locality, the PMH service is improving specifically because HCPs are working more closely together:

'The service that we work with, the perinatal [mental health] *service is just getting ... after all these years we're actually finally working together, and it's really exciting*

Figure 2. Opportunities to identify perinatal mental health problems during perinatal period.



at the moment that these things are changing.' (MW007, 27 years in role)

It was considered essential to make the most of scheduled contacts to opportunistically identify PNA. As noted earlier, GPs reported that they did not regularly see women in the perinatal period; however, they felt that it would be possible for them to identify PNA in consultations for other problems if they were alert to it. Additional opportunities to identify PNA were also identified by HVs during the postnatal period via walk-in clinics:

'It may be that that woman we see every week for breastfeeding support or indeed maternal mental health support, it maybe that she comes into clinic, to our open clinic every month to get her baby weighed, and I suppose it's that opportunistic contact that helps provide the bigger picture.' (HV001, 6 years in role)

Figure 2 summarises this data and maps the various contact opportunities the various HCPs have with women across the perinatal phase.

DISCUSSION

Summary

This is the first study to report the perspectives of a range of HCPs about the identification and management of PNA. HCPs were unsure whether PNA is a distinct clinical entity and found it difficult to differentiate from what they considered as 'normal' anxiety in pregnancy. The expectation of 'normal' levels of anxiety was reported, as HCPs acknowledged that they anticipated women would feel certain levels of anxiety. However, they recognised that so-called 'pathological anxiety' needed to be identified and managed rather than ignored or dismissed.

There were mixed views on the use and value of case-finding tools, with some HCPs expressing a preference to rely on their own clinical intuition, and reporting that they felt some women disliked tools being used.

Care for women identified with PNA was reported to be fragmented and interprofessional communication was seen as challenging. It was acknowledged that even when HCPs were co-located they may not work together in an interprofessional way, and relationships and work were described as often 'running in parallel'.

Some HVs indicated that being centrally located in a hub with other HVs, rather than with other members of the primary care team, helps them to respond more efficiently to women's concerns, but also suggested that this might compromise the opportunities for interprofessional working. HCPs suggested there was inadequate access to specialist services for women with PNA.

Strengths and limitations

This paper reports a qualitative study that explores the views and opinions of a variety of different HCPs. As different HCPs were interviewed (GPs, MWs, HVs) comparisons could be made between interviewees in the same profession and also between different HCP groups. Data collection concluded when data saturation was achieved[24] and analysis was conducted in a team comprising clinicians and researchers with different backgrounds (clinical and sociology of health), and with members of the PPIE team. This allowed for multiple perspectives on the data and increases the trustworthiness of analysis.[29]

A further strength in this study was the extensive contribution of the PPIE group. In addition to helping develop the study design, participant-facing documentation for ethical approvals, and interview topic guide, they also contributed their views on the analysis and advised on dissemination plans.

Recruitment was challenging, particularly among obstetricians. Although good levels of interest to participate in the study were expressed, it proved difficult to schedule interviews with obstetricians as participants, with *'pressure of clinical commitments'* and *'service restructuring'* given as barriers to participation.

This study was performed across the West Midlands and so the results may not be generalisable to other areas of the UK but could still have important implications for service provision more generally.

Comparison with existing literature

Previous studies have explored perspectives about PNA of single professions[26,27] and there is literature that discusses HVs' and MWs' perspectives in the assessment and diagnosis of postnatal depression,[34] but not in PNA. This study adds to the literature specifically around management of PNA in primary care, addressing the gap noted by Ford *et al*.[37] This study also adds to the current evidence base that there is significant 'normalising' of symptoms in the perinatal period by HCPs.

This study is the first to explore perspectives of the range of HCPs delivering perinatal care. Ashford *et al*[38] reported that some HVs are unaware of the

current NICE[7] recommendations that HCPs should administer the GAD-2 to a woman at the booking visit (for MWs) or first contact and at subsequent contacts throughout pregnancy and the postnatal period. In this study, HCPs expressed a variety of opinions with regards to tools used, with a range of clinical knowledge about which tools were recommended. HCPs expressed doubts that the recommended tools are clinically appropriate, echoing recent discussion about the suitability of both the EPDS and GAD-2 as case-finding tools in PNA.[40]

HCPs suggested that the pressure women face when becoming a mother could be a potential cause for PNA. This echoes Highet *et al*, who explored women's views of PNA and PND, and reported that women's PMH symptoms were associated with dissatisfaction about their perinatal experience.[41]

The fragmentation of care across the perinatal period echoes the discussion in a 2015 meta-synthesis, where fragmented health care has been reported to be commonplace, with regular occurrence of communication issues and organisational system failures, resulting in negative consequences for patients.[42] Lack of clarity regarding role boundaries and limited understanding of other HCPs' roles was a theme that demonstrates correlation with a previous study investigating GP and HV perspectives or postnatal depression.[25]

Opportunistic identification was identified as being crucial — especially for GPs who may not see patients regularly during the perinatal period and so have less time to build rapport. This supports the concept of making every encounter meaningful and making every opportunity to identify PMH problems count, as discussed in the RCGP report *Falling through the gaps*.[43] This concept can be broadened to include other HCPs such as HVs and MWs.

Implications for research and practice

From a clinical perspective, the profile of PNA needs to be raised in order to promote better understanding and awareness of PNA, and support appropriate identification and management. HCPs should also be aware that they need to remain alert to signs and symptoms that suggest PNA is present and acknowledge that women can provide answers to generate 'normal' scores when assessment tools are used if they do not wish to disclose anxiety symptoms. Improved written communication between HCPs could be beneficial and HCPs should be aware of negative implications to patients of not establishing effective working relationships and communication channels with other HCPs. It might be helpful to share resources between different HCPs, such as the RCGP PMH toolkit,[39] which contains information relevant to all HCPs working with women in the perinatal period.

Education around PNA appears to be limited and although educational resources are available they are not routinely accessed by many HCPs. Greater awareness of these tools would be beneficial to address training needs. A more integrated approach to patient care could be helpful and has been having a positive effect in one locality where it has been implemented. Opportunistic identification has been identified as crucial in appropriate diagnosis of PNA, with HCPs agreeing that overall MWs and HVs are more likely to identify PNA, as they have more time to build rapport with women at routine contacts throughout the perinatal period (Figure 2).

The Five Year Forward View for Mental Health Report emphasises that the integration of care between different HCPs involved in delivering perinatal care should be a priority.[35] PMH pathways need sufficient support and resources to enable them to be effective and appropriately integrated.[44,45] HCPs need to keep updated on new referral pathways and specialist services that are available so they can refer for specialist support appropriately. This study provides evidence for the need for improved interprofessional communication when managing women with PNA, to ensure services are responsive and integrated.

This study suggests that there are multiple practical methods of improving care for PNA, such as raising awareness of PNA among HCPs and the general public, making every patient contact count and working to improve the provision of integrated, individualised care.

Funding
Victoria Silverwood was an NIHR-funded Academic Clinical Fellow in General Practice at Keele University when this study was conducted. This research was also supported by the Scientific Foundation Board of the Royal College of General Practitioners (Grant No. SFB2017-02).

Ethical approval
Ethical approval for the study was obtained from the Keele University Ethical Review Panel (Ref: ERP2308), and the Health Research Authority granted approval to conduct the research in NHS settings (IRAS REF: 211285).

Provenance
Freely submitted; externally peer reviewed.

Competing interests
The authors have declared no competing interests.

Acknowledgements
The authors thank the following people/groups for contributing towards this study; the maternal mental health PPIE group at the Keele Research Institute, Primary Care and Health Sciences for their ongoing advice and guidance, the Clinical Research Network, West Midlands, for recruitment support, and all healthcare professionals who participated in the study and colleagues at the NHS recruitment sites.

Discuss this article
Contribute and read comments about this article: **bjgp.org/letters**

REFERENCES