Understanding Perinatal Mental Health Care: Reviewing Psychosocial Interventions for Severe Mental Illnesses and Exploring the Dyadic Transitional Experience of Coparents.

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#### Abstract

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**Background:** Perinatal mental health is a focus of the NHS long-term plan. This thesis aimed to: 1) explore the psychosocial interventions used to support individuals with a severe mental illness within the perinatal period, and 2) understand the dyadic experience of transitioning into parenthood whilst receiving support from the perinatal mental health team.

Methods: A systematic review explored quantitative literature on psychosocial interventions for birthing people experiencing a severe mental illness (major depressive disorder, bipolar disorder, personality disorder, eating disorder, psychosis) within the perinatal period. A narrative synthesis and harvest plots were used to compare and contrast the findings, focusing on whether there were changes in symptomatology or functioning. A qualitative study was conducted to understand the dyadic experience of transitioning into parenthood whilst the birthing person is a patient of the perinatal mental health team. Thematic Discourse Analysis was used to understand this transition, the challenges, and what changes occur within the relationship.

Results: Fourteen papers were included in the systematic review. Cognitive behavioural therapy, dialectical behaviour therapy, two types of video feedback therapies, McMaster Family Therapy and integrative approaches were found to be used in the perinatal population. There was a scarcity of interventions for treating bipolar, personality disorders, and eating disorders, and no interventions solely for psychosis. In the Empirical Study, three discursive themes and four function and effect themes were formed. The transition was experienced as 'emotionally charged', 'transformative', and 'challenging'. Couples discussed this in multiple ways that allowed them to express strong emotions, promote togetherness, protect the self and other, and as a means of disconnection in the moment.

Conclusion: Perinatal mental health is a complex and multi-faceted experience. There is a greater need for further research into interventions focusing on the unique needs of those experiencing severe mental illness in the perinatal period. Furthermore, additional research to capture the experiences of couples who are from more diverse backgrounds is essential.

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**Chapter One: Introduction to Thesis Portfolio** 

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This introductory chapter will first define the aim of the thesis and common terms used throughout. Second, it will provide a summary of background information and key literature in the area.

Use of Language

The author acknowledges that the terms 'mother' and 'father' do not account for the diverse identities of parents. Roles and gender identities are fluid and complex. Families may include single-parent families, LGBTQ+ parents, adoptive parents, foster parents, extended families, and stepfamilies, as just a few examples. Unfortunately, the literature on parenthood has historically focused on nuclear families and cisgender normative language. The use of language, therefore, at times does not fully represent the terms preferred by the author, such as 'birthing person', but instead represents some of the cisgender normative terminology used at the time within the literature. There are times when this is continued to be used here to improve clarity of the concepts or literature being discussed, or because of the specificity of the aims of the research.

Aim of Thesis

This thesis will first present a systematic literature review to explore the gap in our understanding of what interventions are offered to mothers with severe mental illness (SMI) during the perinatal period to treat symptomatology and family functioning. Second, an empirical study will use dyadic interviews to explore the experiences of couples receiving support from the perinatal mental health team (PMHT), to understand how they experience the transition into parenthood and what challenges they face.

## **Key Terms**

The following definitions are provided to assist with the readability and clarity of the thesis:

## Severe Mental Illness (SMI)

There are inconsistencies in the definition of SMI. Here, SMI will refer to bipolar disorder, eating disorders, major depressive disorder (MDD), personality disorders, and psychosis. SMI can be characterised by persistent and severe symptomatology with a functional impairment or disability in areas of life such as relationships, employment, and daily living (Johnson, 1997; Zumstein & Riese, 2020). SMIs are less likely to be transient than more common mental health difficulties, such as anxiety disorders (Johnson, 1997). The National Health Service (NHS) attempts to monitor the health of people with a SMI and reduce health inequalities through primary care registers. Research has shown that people with SMI are more likely to experience comorbid physical health problems (Public Health England, 2018). Physical health monitoring is particularly important for people with bipolar disorder and psychosis (including schizophrenia), but is also recommended for people with a diagnosis of personality disorder, eating disorders, and severe depression.

## Perinatal Mental Health Difficulties (PMHD)

Perinatal mental health refers to the support of mental health difficulties in the period from conception to 12 months post-partum. However, the NHS long-term plan emphasises the need for support for people in the perinatal period until 24 months post-partum (NHS England, 2019). Here, we include any PMHD that may be treated within a Perinatal Community Mental Health Team (PMHT). Examples include MDD, perinatal psychosis, anxiety disorders (e.g. obsessive compulsive disorder, tokophobia), bipolar disorder, personality disorders, eating disorders, and post-traumatic stress disorder.

## Perinatal Community Mental Health Teams (PMHT)

These teams aim to offer specialist support to people experiencing moderate to severe mental health difficulties in the perinatal period (typically from conception to one year postpartum but occasionally extended to two years postpartum). The NHS offers these across the UK. PMHTs are run by a multidisciplinary team (MDT), offering psychiatric and medication monitoring, psychological treatment, and nursing support. Some teams also offer Peer Support Worker support.

## **Background Information**

Understanding the implications of perinatal mental health problems is highly important for Clinical Psychologists. Clinical Psychologists are in a privileged position of being capable of treating and researching difficulties experienced during the perinatal period, such as attachment, relationship difficulties and mental health problems in general. The use of these skills in clinical research and practice is advantageous, with the aim of clinical psychologists guiding services to offer safe, efficient, and effective interventions to treat those with PMHD.

#### Perinatal Mental Healthcare in the UK

In the UK, the NHS offers perinatal mental health support from primary care (e.g. Talking Therapies) for those with mild to moderate symptoms, specialist secondary care perinatal community mental health teams (PMHT) for those with moderate to severe symptoms, and in the most severe cases, in inpatient hospitals and Mother and Baby Units (MBUs).

## NHS Long-Term Plan

As outlined in the NHS Long Term Plan (NHS England, 2019), the targets for perinatal mental health over the past five years have been to increase access to services and psychological therapies for birthing people and parents experiencing moderate to severe

mental health difficulties. A further aim has been to improve the inclusion of non-birthing people or partners through assessment and signposting to appropriate services for support where a need is indicated. It is hoped that this will help partners experiencing mental health difficulties to access evidence-based treatment, as well as for couples and families to receive support as a family unit, as opposed to the traditional perinatal offer of individual support focused on mother and baby (NHS England, 2019). This is important because of the detrimental impact of both maternal and paternal perinatal mental health difficulties on the individual, and the subsequent detrimental influence on the infant's health and attachment, and the parental relationship (Antoniou et al., 2021; Filippetti et al., 2022; Lever Taylor, Billings, et al., 2019). Yet despite the development of the NHS Long Term Plan and other Best Practice guidelines (Darwin et al., 2021; NHS England, 2019), there remains variation in the provision being offered by perinatal mental health services across the country, with some partners continuing to feel neglected from perinatal services despite services promoting a family focus (Hodgson et al., 2021; Lever Taylor, Billings, et al., 2019).

However, increasing support to the whole family unit is complex. For example, there are barriers to being able to access generic and mental health support, such as limited partner/paternity leave, a busy schedule, and societal expectations for the non-birthing person/father to return to work and earn money for the family (Lever Taylor, Billings, et al., 2019). Some birthing people describe disengaging with services until the point of crisis because they are attempting to put their child before their own health and wellbeing, and shield the child from knowing about the SMI (Perera et al., 2014). Other birthing people have shared the fear of being stigmatised as a 'bad parent' or feeling ashamed of their mental health difficulty (Law et al., 2021), and a reluctance to engage with wider teams such as social services, due to a fear of being judged or that their baby may be removed from the family (Lever Taylor, Mosse, et al., 2019). Non-birthing people, in this case fathers,

supporting a partner with PMHD have shared similar ambivalence to reaching for support, due to fearing judgment or stigma, a lack of understanding from others, or their partners not wanting support (Ruffell et al., 2019).

## Theories on Transitioning into Parenthood

The Becoming a Mother Theory offers a framework for understanding the stages of transition that birthing people go through during the perinatal period: 1) Biological changes during pregnancy and preparation, 2) Meeting their baby, learning and physical recovery, 3) Creating a new normal, and 4) Finalising their identity (Mercer, 2004). Within this theory, there is limited discussion about the impact specific PMHDs have on a birthing person, other than some mention that birthing people with depression can have less confidence in their parenting (Mercer, 2004). Given the compounding impact of biological changes during the development of a PMHD, and the societal pressures of being expected to be a 'good mother', which often can have a harmful effect on their mental health (Law et al., 2021), it is expected that the transition for partners or non-birthing parents will be different.

Explorations into the transition into parenthood for non-birthing people (in this case, fathers) who have a partner with a PMHD have found that fathers transitioned into parenthood by fulfilling a commitment to being involved in parental responsibilities and being role models (Leahy-Warren et al., 2022). A review on this topic suggests that fatherhood in the context of having a partner with a PMHD can involve a change in the role of being a partner and a new parent, negative emotions, a variety of ways of coping and the need for support (Ruffell et al., 2019). Within this review, there were contrasts in experiences, with some papers demonstrating positives such as togetherness, growth, bonding with the baby and a strengthened relationship with their partner (Ruffell et al., 2019). Other papers highlighted experiences of fathers feeling burdened, unfulfilled, uncertain, depressed, helpless, shocked and confused, lost, and disconnected from their baby (Ruffell et al., 2019).

Exploration of coping highlighted attempts to suppress emotional distress using substances or distancing from their feelings, social coping through connection with others outside of the family, and the use of practical problem-solving (Ruffell et al., 2019).

Having discussed theories of parenthood individually, we will now consider the family as a whole, as the transition into parenthood does not happen in isolation and rather is a complex interaction between the birthing person, partner, and the infant(s). This is accounted for in the Family Systems Theory, which posits that an individual's mental health experience can be a product of a family's dysfunctional dynamic (Goodman, 2004; Haefner, 2014). Research exploring this complex dynamic has found that when one person's coping reduced, the other person's coping increased (Garthus-Niegel et al., 2021). Moreover, research has suggested that fathers can act as a buffer for this transition, reducing mental health symptomatology in the birthing person (Antoniou et al., 2021). When considering the mechanism of this support, birthing people with a PMHD shared that they had practical help, such as looking after the child, psychological support, and understanding when they were supported by their partner or the wider family system (Perera et al., 2014).

Chapter 2 will now discuss the interventions being offered to those with an SMI in the perinatal period, before moving on to Chapter 3, which will provide an exploration of the dyadic experiences of transitioning into parenthood alongside a PMHD.

## **Chapter Two: Systematic Review**

# A Systematic Literature Review of Psychosocial Interventions for Severe Mental Illnesses in the Perinatal Period

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#### **Abstract**

**Purpose:** Severe mental illnesses (SMI) are prevalent in people within the perinatal period. Although the NHS Long Term Plan proposes increased perinatal support for people with SMI, there is limited research on the specific interventions utilised for this population and the impact of these on maternal SMI symptoms and family functioning.

Methods: A narrative synthesis was used to examine the quantitative literature on psychosocial interventions for birthing people with SMI during the perinatal period.

Information was extracted to compare, contrast, and critically appraise the included papers.

Harvest plots highlighted whether psychosocial interventions improved symptomatology or family functioning.

Results: Fourteen papers were included in the review. Interventions varied in their approach, including cognitive behavioural therapy, dialectical behaviour therapy, McMaster Family Therapy, integrative approaches, video feedback intervention for positive parenting adapted for perinatal mental health, video-feedback interactional guidance, and mindfulness-based cognitive therapy. A variety of psychosocial interventions discussed in eight papers demonstrated a significant reduction in perinatal SMI symptoms. Similarly, a significant improvement in family functioning was also seen in six studies following psychosocial intervention. However, studies varied in quality and design, so have limited generalisability. Conclusions: Some studies demonstrate a positive impact of psychosocial interventions on family functioning and SMI symptomatology in the perinatal period. However, there is sparsity in what is being offered currently in clinical practice, and particularly within the NHS, especially for individuals experiencing psychosis. This review highlights a need for further research exploring this topic.

**Key words:** Perinatal; Severe and enduring mental illness; psychosocial interventions; family functioning.

## **Key points:**

- There is a scarcity of interventions for conditions such as bipolar disorder, personality
  disorders, and eating disorders in the perinatal period, with no literature solely for perinatal
  psychosis.
- Interventions such as CBT, DBT, Video Feedback Intervention for Positive Parenting

  Adapted for Perinatal Mental Health, video-feedback interactional treatment, McMaster

  Family Therapy and integrative approaches are currently used to improve mothers'

  symptomatology and family functioning within the perinatal period.
- Not all interventions focus on the unique needs that occur within the perinatal period, such as
  the maternal mental health in conjunction with family functioning.
- Perinatal services are having to draw from a limited research base, with studies varying in quality and design.

#### Introduction

Severe Mental Illnesses (SMI) can be characterised by persistent and severe symptomatology with functional impairment or disability in areas of life such as relationships, employment, and daily living (Johnson, 1997; Zumstein & Riese, 2020). SMI are less likely to be transient, as can be the case with anxiety disorders (Johnson, 1997). SMI, such as major depressive disorder (MDD), bipolar disorder, psychosis, eating disorders, and personality disorders, are common in the general population, but can also present as a longstanding mental health difficulty before conception, during pregnancy, or in the postnatal period (Jones et al., 2014), which spans from birth up to one year post-birth.

The prevalence of SMI in the general population ranges. With 0.1-0.2% of mothers¹ developing postnatal psychosis (Perry et al., 2021), 2.6 % for first episode perinatal bipolar disorder or 54.9% for a bipolar episode in those with a prior diagnosis of bipolar disorder (Masters et al., 2019), and 11.9% for perinatal MDD (Woody et al., 2017). Research into the prevalence of personality disorders in the perinatal period has typically focused on borderline personality disorder, with rates of 14% for borderline personality disorder in perinatal clinical samples (Prasad et al., 2022). The prevalence of eating disorders in the perinatal period is harder to determine as, for some mothers, their eating disorder may cease during pregnancy, whereas for others it may deteriorate, but occurs in approximately 10% of the general population (Fogarty et al., 2018). Although considered an underestimation, research suggests that 1 to 2 in every 1000 births result in admission to inpatient services (Jones et al., 2014). Evidence on perinatal mental health underscores the necessity of support during this period, as individuals with SMI are at an elevated risk for suicidality and self-harm postpartum (Howard & Khalifeh, 2020). People in low to middle-income countries were also more likely

<sup>&</sup>lt;sup>1</sup> The author acknowledges that the terms 'mother' and 'father' may not reflect the identities and experiences of all birthing and non-birthing parents. This language is used here solely to align with the language used in the cited literature and reviewed articles.

to have postnatal mental health difficulties (Howard & Khalifeh, 2020; Woody et al., 2017), highlighting the importance of understanding how best to support individuals with an SMI.

Psychosocial interventions refer to an intervention of any type based on psychological theory and evidence to treat a component of someone's mental health or well-being (e.g. an SMI). This can include individual, couple, or group interventions. Family functioning is an umbrella term for how a family works as a system. This can be split into features of the family (e.g. whether families have healthy development such as appropriate levels of family intimacy, adaptability, and communication; and how families cope with any strains on the system) or the tasks of the family (e.g. what role each person takes; if the needs of others are met; if there is developmental growth; and how conflict or emergencies are dealt with) (Dai & Wang, 2015).

The NHS long-term plan sets out to provide mental health support up until 24 months post-birth (NHS England, 2019). Mother and baby units (MBU) and specialised perinatal community mental health teams are available in England to attempt to meet the needs of families with SMI (Taha et al., 2021). The NHS long-term plan identified the need for increased resources and access to evidence-based treatment for mothers with SMI, including personality disorders (NHS England, 2019). However, research is still limited and appears to have focused mostly on common mental health difficulties such as anxiety and depression, with guidelines being clear for people in primary care settings (O'Mahen & Healy, 2021).

The current National Institute for Clinical Excellence (NICE) guidelines (NICE, 2020a) provide recommendations for treating these conditions during the perinatal period. It is argued that individuals in the perinatal period should receive the same recommended psychosocial treatments as those not in this period, but with appropriate adaptations accounting for differences in this period (NICE, 2020a). Cognitive Behavioural Therapy (CBT) is recommended for MDD (NICE, 2022), psychosis (NICE, 2014), bipolar disorder

(NICE, 2023) and eating disorders (NICE, 2020b). People with MDD are also recommended interpersonal psychotherapy (IPT), counselling, and short-term psychodynamic psychotherapy (NICE, 2022). People with bipolar disorder should be offered the same treatments as MDD, behavioural couples therapy, or a psychological intervention with an evidence-based manual (NICE, 2023). Family interventions can also be offered for psychosis (NICE, 2014). Eating disorders can also be treated with Maudsley Anorexia Nervosa Treatment for Adults (MANTRA) or specialist supportive clinical management (NICE, 2020b). Finally, those with personality disorders, such as borderline personality disorder, should be offered Dialectical Behaviour Therapy (DBT) (NICE, 2009).

Although beneficial in offering some guidance on what may benefit someone in the perinatal period, previous literature has argued that tailor-made interventions should be provided from conception onward to ensure a supportive transition into parenthood (Lavender et al., 2016). NICE (2020a) guidelines also reference the mother-baby relationship and the impact that SMI can have on this. However, it does not give specific information on what intervention should be offered to address this need, other than that parents with an eating disorder should be provided with psychoeducation on feeding their infant. The Royal College of Psychiatrists (Taha et al., 2021) argues that interventions should be evidence-based and focus on the mother's and infant's needs, suggesting the importance of more nuanced treatment. However, a review of guidelines in the perinatal period has highlighted variability in what is recommended, with some consensus on the use of manualised therapies, CBT, and IPT, whereas others highlight the importance of formulation-led treatment (O'Brien et al., 2023). The review also highlighted recommendations for assessing and treating any problems in the mother-infant relationship, and support being available for the partner (O'Brien et al., 2023). Thus, using treatments for non-perinatal with 'adaptations' seems

ambiguous and may result in people receiving treatment of different quality or by practitioners without perinatal expertise.

Howard and Khalifeh (2020) reviewed the evidence on the prevalence and treatment of perinatal mental health difficulties, highlighting the impact of social determinants on SMI in the perinatal period and the importance of providing appropriate treatment to parents. Their review emphasises some key challenges around the diagnosis and treatment of SMI in the perinatal period, such as whether the disorders are unique to the perinatal period or the same as outside of the period, and that there is a lack of consistent outcome measures used in research. Previous systematic reviews have provided some evidence for various psychosocial interventions to treat perinatal mental health difficulties. For example, Lavender et al. (2016) concluded that CBT, Mindfulness, Mindfulness-based Cognitive Therapy (MBCT), and Behavioural Activation (BA) were beneficial in improving maternal symptoms of depression and anxiety. However, their review found that interventions were predominantly focused on the postnatal period and that early interventions could improve perinatal mental healthcare (Lavender et al., 2016).

There is limited research on understanding both the impact on mothers' symptomatology and family functioning in people with SMI in the perinatal period.

## Aim of Review

This systematic review aimed to identify 1) What types of psychosocial interventions have been explored for use in the perinatal period for mothers (birthing parents) with SMI? 2) How effective are psychosocial interventions in improving symptomatology and/or family functioning? 3) What, if any, recommendations can be made to perinatal services for treating people with SMI?

#### Method

## **Search Strategy**

A scoping search by the first author on Cochrane and PROSPERO did not identify other published or planned reviews specifically exploring psychosocial interventions for people with SMI in the perinatal period. The review was pre-registered on PROSPERO (CRD42024517135). The initial search was completed by the first author on 26/04/2024 using MEDLINE Ultimate, APA Psychinfo, Scopus, and APA PsychArticles.

#### Search terms were:

- 1. Interventions OR treatment OR therapy OR CBT OR program OR management
- 2. Perinatal OR pregnan\* OR prenatal OR postpartum OR antenatal
- 3. Bipolar OR "manic depression" OR psychosis OR schizophrenia OR "personality disorder" OR "eating disorder" OR anorexia OR bulimia OR "major depressive disorder"

MeSH terms were not used due to the extensive search terms already used.

#### **Inclusion and Exclusion Criteria**

Papers were required to state a diagnosis or disorder that was severe and enduring, including bipolar disorder, eating disorders, psychosis, MDD, and personality disorders. Given an over-representation of research into depression and variability in the level of severity, increased criteria were used to ensure that it was severe and enduring in nature. Therefore, MDD interventions must mention a population that demonstrates complexity (e.g. comorbidity, social deprivation) or risk (e.g. risk of self-harm, suicide) or being treated in a Secondary Care Mental Health Team (e.g. Adult Community Mental Health Team, Perinatal Mental Health Team) or inpatient setting (e.g. MBU). Psychosocial interventions were defined and operationalised as any intervention that addresses an aspect of someone's mental health or parenting through a process relating to psychological theory. These could include any number of people or families, such as individual, couple, family, multi-family and group

interventions. For example, talking therapy, somatic therapy, counselling, and parenting courses. Interventions were not considered psychosocial if they focused purely on medical interventions (e.g. medication, electroconvulsive therapy).

Only published, peer-reviewed studies, available in English, that described psychosocial interventions with a relevant and measurable outcome regarding symptomatology or family functioning were included. Systematic literature reviews were not included, but studies in the reference list that met the inclusion criteria were added.

Originally, quantitative, qualitative papers and small-N studies were included. However, due to the vast number of papers and high heterogeneity in reporting, additional criteria were added at the screening stage. Qualitative and small-N studies were therefore excluded to reduce heterogeneity. Literature from the year 2000 onwards was included to ensure the results were modern and applicable to relevant guidelines for perinatal mental health. Further information on the inclusion and exclusion criteria can be found in Table 1, which uses the SPIDER framework.

Table 1
SPIDER Framework

Study Characteristic	Inclusion Criteria	Exclusion Criteria	Rationale for Criteria
Sample	Mothers/birthing people with severe mental illness and in the perinatal period (from conception until 12 months after birth of a live baby/loss of a baby). Severe mental illness in this context included eating disorders, psychosis/schizophrenia, bipolar disorder, personality disorder, and major depressive disorder.	Mothers/birthing people under the age of 18. People with mild symptoms e.g. depressive episode.	To focus the results of the review. To ensure that interventions were for adults with severe and enduring mental illness. To ensure a different focus from other reviews.
Phenomenon of Interest	Any research that has explored the use of psychosocial interventions (of any type, e.g. CBT, family interventions, couples counselling, parenting courses) for people or family members of those with severe perinatal mental health difficulties. The research must describe a measurable outcome (e.g. reduction in symptoms, increase in relationship quality).	Research that did not discuss a psychosocial intervention. Research exclusively describing medical treatments e.g. medication, ECT. Research describing interventions solely focused outside of the perinatal period (conception to 12 months). Research with no measurable outcome.	To focus the results of the review on the research question.

Design	Quantitative research with a measurable outcome (e.g. reduction of mental illness symptoms, distress or relational improvements such as improved bonding and better relationships) following psychosocial interventions for mothers in the perinatal period who have a severe and enduring mental illness.	Research that provided no measured change in outcome. Qualitative research.	To answer the research question. To reduce the heterogeneity of results. To provide a measurable outcome measure that can be compared to other research results.
Evaluation	Reduction of SMI symptoms or improvement in family functioning, e.g. relational improvements between parents or parent-baby dyad, adaptive behavioural changes such as improved eating behaviours. Outcome measures must include a quantitative symptomatic measure and/or quantitative assessment of functioning. Primary and secondary outcomes relevant to the aim of the research paper will be included.	Additional outcome measures not specifically related to the SMI symptoms or family functioning. Additional outcome measures not related to the primary or secondary aim of the research paper.	To better focus the results of the review on the research question.
Research Type	Peer-reviewed, intervention studies (e.g. from pilot studies, pre- and post-studies, all the way up to RCTs) that gave a measurable outcome will be included.	Qualitative studies. Studies that did not meet the criteria of the quality assessment stage of the process. Books, non-peer-reviewed articles. Small N samples (samples of 4 or fewer people)	To ensure high-quality research is included in the review. To focus the results of the review.
Timeframes	Studies published in the last 24 years (2000-2024).	Review papers. Studies conducted before 2000.	To ensure included studies and interventions are contemporary. To ensure

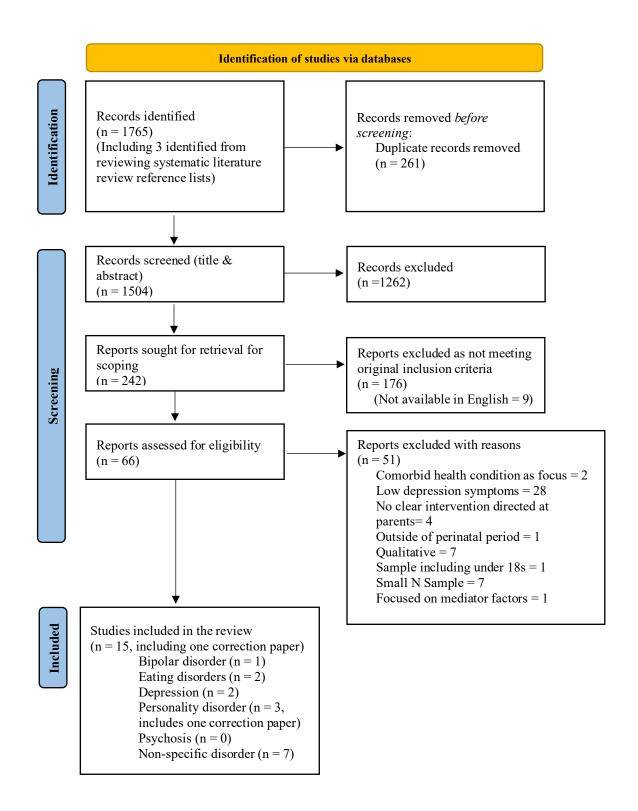
			relevance to current perinatal guidelines.
Publication	Published research only.	Unpublished studies.	To focus the results of the literature review.
Language	English language.	Non-English language.	Attempts were made to access translated copies of non-English papers. International papers were included if it was accessible in English/translated into English.

## Screening

All papers were exported to Zotero and duplicates removed. Titles and abstracts were compared to the inclusion and exclusion criteria. Relevant papers were then screened in full. Fifteen papers were included in the final review. However, one of these was a corrections paper, leaving fourteen research articles. The PRISMA diagram can be seen in Figure 1, detailing how many records were removed at each stage. The lead author and a postgraduate research colleague (JK-M) checked 10% of the screening of titles and abstracts, with 98.67% agreement. Disagreement was resolved by reading the paper and discussing alongside the SPIDER criteria, with a consensus being reached. 20% of the full-text screened papers were also checked with 93% agreement. Disagreements were resolved by discussing the full text paper with JK-M and supervisors and subsequently removing the paper for not meeting the inclusion criteria fully.

Figure 1

PRISMA Diagram (Page et al., 2021)



## **Quality Assessment**

The lead author completed the quality assessment of the final papers reviewed and corroborated 26% (n = 4) of the final papers' two validity scores with two postgraduate research colleagues (JK-M & JR) using the NICE Quality Assessment Framework (NICE, 2012). The quality assessment presented 27 questions with the opportunity to critique the internal and external validity of quantitative or qualitative papers with any study design. Each question was coded as '++' ("designed or conducted in a way to minimise the risk of bias"), '+' ("may not have addressed all potential sources of bias"), '-' ("significant sources of bias may persist"), 'not reported', or 'not applicable' (NICE, 2012). Final ratings were then given for the study's internal validity and external validity using the criteria shown in Table 2. There was 75% agreement in the final ratings of the four papers. A consensus on any disagreements was reached through discussion.

**Table 2**NICE Quality Assessment Framework (NICE, 2012) Descriptors for Internal and External Validity Ratings.

Rating	Descriptor
++	All or most of the checklist criteria have been fulfilled, where they
	have not been fulfilled the conclusions are very unlikely to alter.
+	Some of the checklist criteria have been fulfilled, where they have not
	been fulfilled, or not adequately described, the conclusions are
	unlikely to alter.
-	Few or no checklist criteria have been fulfilled, and the conclusions
	are likely or very likely to alter.

#### **Data Extraction**

Data were extracted providing demographic information on the recipients of the intervention, the type of intervention and outcomes of birthing person/mothers' symptoms, and outcomes on family functioning, such as the relationships between parent and infant. The primary outcome measure relating to the birthing person/mothers' symptoms or family functioning was extracted. If papers did not specify a primary outcome measure, then the outcome measure most closely related to the target diagnosis of the population was extracted.

## **Data Synthesis**

The data were synthesised by exploring commonalities and differences across the final papers included in the review. The findings are presented using a narrative approach following the guidance of Popay et al. (2006). Furthermore, harvest plots are used to visually demonstrate the types of interventions being offered and the quality of the included papers.

#### Results

In total, 1765 records were found (see Figure 1). Following the screening process, this resulted in a final fifteen papers where data were extracted (see Table 4). One of these papers was by the same author and was a correction to their initial results, totalling fourteen different research papers.

## **Quality of Papers**

Only three studies were randomised controlled trials (RCTs; Barnicot et al., 2022; Stein et al., 2006; Van Ravesteyn et al., 2018). One was a controlled pre-post study (Krzeczkowski et al., 2021). One study was longitudinal (Wright et al., 2020). All of the other studies were pre-post uncontrolled studies (Battle et al., 2023; Höflich et al., 2022; Kim et al., 2021; Miklowitz et al., 2015; Moureau et al., 2023; Sadeh-Sharvit et al., 2016; Sved Williams et al., 2021, 2022; Tran et al., 2024; Wright et al., 2018).

The majority of papers (n = 10) were given a 'medium' (+) internal validity rating (Barnicot et al., 2022; Battle et al., 2023; Höflich et al., 2022; Kim et al., 2021; Krzeczkowski et al., 2021; Moureau et al., 2023; Sved Williams et al., 2021, 2022; Van Ravesteyn et al., 2018; Wright et al., 2018, 2020), with three rated as 'high' (++) internal validity (Miklowitz et al., 2015; Sadeh-Sharvit et al., 2016; Stein et al., 2006), and one rated 'low' (-) internal validity (Tran et al., 2024).

Similarly, ten papers were given a 'medium' (+) external validity rating (Barnicot et al., 2022; Battle et al., 2023; Höflich et al., 2022; Kim et al., 2021; Krzeczkowski et al., 2021; Moureau et al., 2023; Sved Williams et al., 2021, 2022; Tran et al., 2024; Wright et al., 2018, 2020). Three papers were rated as 'high' (++) external validity (Miklowitz et al., 2015; Sadeh-Sharvit et al., 2016; Stein et al., 2006), and one paper was rated as 'low' (-) external validity (Van Ravesteyn et al., 2018).

**Table 3** *Internal and External Validity Ratings for Included Studies.* 

Study	Internal validity rating	External validity rating
Barnicot et al. (2022)	+	+
Battle et al. (2023)	+	+
Höflich et al. (2022)	+	+
Kim et al. (2021)	+	+
Krzeczkowski et al. (2021)	+	+
Miklowitz et al. (2015)	++	++
Moureau et al. (2023)	+	+
Sadeh-Sharvit et al. (2016)	++	++
Stein et al. (2006)	++	++
Sved Williams et al. (2021, 2022)	+	+
Tran et al. (2024)	-	+
Van Ravesteyn et al. (2018)	+	-
Wright et al. (2018)	+	+
Wright et al. (2020)	+	+

*Note.* Validity ratings are as follows: '++' "designed or conducted in a way to minimise the risk of bias"; '+' "may not have addressed all potential sources of bias"; '-' "significant sources of bias may persist".

## **Overview of Sample Characteristics**

All papers used cisgender normative language, with only Barnicott et al. (2022) acknowledging their choice of language. The language of these papers will henceforth be used. The fourteen papers sampled 2372 parents, predominantly mothers. Three papers included fathers in their demographic information (Battle et al., 2023; Moureau et al., 2023;

Sadeh-Sharvit et al., 2016). Two papers were focused on eating disorders, two on MDD, two on personality disorders and one on bipolar disorder. Seven papers were non-specific on the diagnostic focus.

All but one paper (Barnicot et al., 2022) provided the range or mean age of the parent participants. Mothers' average age ranged from 29.4 years to 35.2 years. Fathers' average age ranged from 34.6 years to 36.3 years. Information on the average age of the child was provided in six papers (Höflich et al., 2022; Krzeczkowski et al., 2021; Sadeh-Sharvit et al., 2016; Sved Williams et al., 2021; Tran et al., 2024; Wright et al., 2020). The average age of the child ranged from 3.60 months to 19.6 months.

The primary diagnosis of the mother was noted in most of the papers. However, some discussed previous diagnoses prior to admission and comorbid diagnoses. From what is reported, in total 541 mothers had major depression (with or without psychosis), 235 had an anxiety disorder, 136 had borderline personality disorder/emotionally unstable personality disorder, 125 had bipolar disorder, 76 had a diagnosis of PTSD or trauma, 53 had a Cluster B diagnosis (borderline, antisocial, narcissistic or histrionic personality disorder), 23 had a Cluster C diagnosis (avoidant, dependent or obsessive-compulsive personality disorder), 20 had psychosis or schizophrenia, 12 had an eating disorder, 2 had a Cluster A diagnosis (paranoid, schizoid, and schizotypal personality disorder), and 1 had a diagnosis of "other mental and behavioural disorder related to puerperium".

Eleven interventions were aimed at the postpartum stage of the perinatal period (Barnicot et al., 2022; Battle et al., 2023; Höflich et al., 2022; Krzeczkowski et al., 2021; Moureau et al., 2023; Sadeh-Sharvit et al., 2016; Stein et al., 2006; Sved Williams et al., 2021, 2022; Tran et al., 2024; Wright et al., 2018, 2020). Two studies had samples of mixed stages: Miklowitz et al. (2015) included participants who were preconception, pregnant, and postpartum, and Kim et al. (2021) sampled pregnant and postpartum participants. Van

Ravesteyn et al. (2018) provided the intervention to pregnant mothers and followed up in the postpartum period. 11 mothers were preconception, 220 were pregnant, and 2282 were postpartum.

#### **Overview of Interventions**

Seven studies discussed integrative psychosocial approaches involving a variety of psychological modalities (Höflich et al., 2022; Kim et al., 2021; Moureau et al., 2023; Stein et al., 2006; Van Ravesteyn et al., 2018; Wright et al., 2018, 2020), most typically in inpatient or hospital settings (Höflich et al., 2022; Kim et al., 2021; Moureau et al., 2023; Wright et al., 2018, 2020). Studies conducted on MBUs discussed a combination of CBT, ACT and mindfulness training, with video interaction guidance, psychodynamic approaches and psychoeducation (Wright et al., 2018, 2020) or group CBT alongside individual psychotherapy, and mother-baby interaction groups run by nurses (Höflich et al., 2022). Day Hospitals flexibly used IPT, DBT, infant mental health and trauma-sensitive approaches depending on the needs of the person (Kim et al., 2021) or a combination of the following models: attachment, systemic, psychodynamic and behavioural theories, alongside the use of video feedback (Moureau et al., 2023). In the community, Sadeh-Sharvit et al. (2016) incorporated psychoeducation, behavioural change and family therapy. Stein et al. (2006) described the use of video-feedback interactional treatment alongside guided self-help for eating disorders in their intervention arm. Additionally, Van Ravesteyn et al. (2018) combined psychoeducation, CBT, body-orientated therapy to improve mentalisation and bonding, expressive and relaxation therapy.

Furthermore, one study used CBT (Krzeczkowski et al., 2021), with others using third-wave CBT interventions such as DBT (Sved Williams et al., 2021, 2022) and Mindfulness-based CBT (Miklowitz et al., 2015). One used Video Feedback Intervention to Promote Positive Parenting Adapted for Perinatal Mental Health (VIPP-PMH) (Barnicot et

al., 2022), one study used the McMaster Family Model of Functioning (Battle et al., 2023), and one was a residential psychoeducation intervention (Tran et al., 2024).

 Table 4

 Extracted Information from Articles (N.B. bold denotes a primary outcome measure and extracted results)

Study code & author	Country	Study design	Participant characteristics	Intervention	Outcome measures	Extracted key results	Intervention target (symptomatology, family functioning or both)
				Bipolar disorder			
(A) Miklowitz et al. (2015)	USA	Pre-post uncontrolled study	39 mothers with a diagnosis of bipolar spectrum disorder (n = 27) or MDD (n = 12) (Antenatal, perinatal, and those planning pregnancy). The average age of mothers with bipolar spectrum disorder was 33.7 years, and 35.2 years for those with MDD	Mindfulness-Based Cognitive Therapy (2 hrs a week for 8 weeks). Delivered by MBCT clinicians. Community setting.	Maternal Symptoms: Beck Depression Inventory-II (Beck, Steer & Brown, 1996), Young Mania Rating Scale (Young et al., 1978), State-Trait Anxiety Inventory-Current Status Scale (Spielberger et al., 1983), Longitudinal Interval Follow-up Evaluation (Keller et al., 1987).  Mindfulness Tendencies: Five Facet Mindfulness Questionnaire (Baer et al., 2008).	Symptoms of depression significantly reduced over time on the Beck Depression Inventory-II (Beck et al., 1996). Greater reductions were seen in participants with MDD than bipolar disorder.  There were no significant changes on the Young Mania Scale (Young et al., 1978).	Maternal symptoms
				Eating disorders			
(B) Sadeh-Sharvit et al. (2016)	Israel	Pre-post uncontrolled feasibility study	24 parents were included.  Mothers with eating disorders (Anorexia = 3, bulimia nervosa = 2, eating disorder not otherwise specified = 7). 12 families (partners were also included in some reporting) with 16 children (between the ages of 4 and 48 months). The average age of participants was not reported.	Parent-based prevention (12 group sessions for 6-8 mothers, lasting 90 minutes; 12 family sessions for each family). Uses an integrative approach of psychoeducation, behavioural change, and family therapy.  Delivered by psychotherapists who were experts in eating disorders and parental counselling.	Maternal Symptoms: The Eating Disorders Inventory-II (Garner, 1991), The Brief Symptom Inventory (Derogatis & Melisaratos, 1983), The Parenting Stress Index-Short Form (Abidin, 1995).  Feeding Practices: The Child Feeding Questionnaire (Birch et al., 2001), The Child Behavior Checklist (Achenbach, 1992), Unpredictable Temperament subscale of The Infant Characteristics Questionnaire-6 Month Form (Bates et al., 1979).	Maternal eating disorder symptoms significantly improved on The Eating Disorders Inventory-II (Garner, 1991).  Mothers appeared to improve in areas relating to maternal feeding of their infant, such as pressure on the child to eat, concern for the child's eating and weight, restriction of child eating, and responsibility for the child's eating. Therefore, child-feeding practices appeared to improve.	Maternal symptoms and family functioning
(C) Stein et al. (2006)	UK	Randomised controlled trial	80 mothers with eating disorders (BN, bulimic subtype of eating disorder NOS) infants between 4 and 6 months old. The median age of mothers in the intervention group was 31 years, and 29 years for those in the control.	Community setting.  Treatment condition of video-feedback interactional treatment (n = 40) vs. control group of supportive counselling (n = 40). The treatment condition involved mother-infant interaction during mealtime.  Feedback was provided on infant signals, mother-infant responses, and to address triggers of		There was no significant difference between the video-feedback group and control on The Eating Disorder Examination (Fairburn & Cooper, 1993).  Mothers in the treatment condition experienced less conflict at mealtimes than the control group.	Primary aim: family functioning  Secondary aim: Maternal symptoms

				mealtime conflict. Participants also had guided self-help for eating disorders.  Therapists were trained in the intervention and child and family mental health care.  Community setting.			
				Major Depressive Disordo	er		
(D) Battle et al. (2023)	USA	Pre-post uncontrolled feasibility study	16 couples (mother-father dyads) (N = 32). Mothers had moderate-severe symptoms of postpartum depression and were 1-7 months postpartum. The average age of mothers was 32.3 years, and 34.6 years for fathers. Mothers were on average 3.8 months postpartum.	A pilot study of 10-12 sessions of Family Treatment for Postpartum Depression attended by the mother and father. The intervention used the McMaster Family Model of Functioning.  Delivered by therapists trained in the intervention.  Community setting.	Maternal Symptoms: The Edinburgh Postnatal Depression Scale (Cox et al., 1987), Modified Hamilton Rating Scale for Depression (Miller et al., 1985), Structured Clinical Interview for DSM-IV (First & Gibbon, 2004), Beck Depression Inventory (Beck et al., 1961).  Family Functioning: Family Assessment Device (Epstein et al., 1978; Miller et al., 1994), Dyadic Adjustment Scale (Spanier, 1976), Family problem ratings. Parenting Stress Index (Abidin, 1995).  Feedback on intervention: Client Satisfaction Questionnaire-8 item,	Mothers had a significant improvement in depression symptoms.  Scores on the Parenting Stress Index (Abidin, 1995) also reduced significantly in mother ratings, but not in father ratings.	Parental symptoms (mothers and fathers) and family functioning.
(E) Krzeczkowski et al. (2021)	Canada	Pre-post control study	40 infants and their mothers (with a primary diagnosis of MDD), matched with 40 healthy infants and their mothers (non-MDD). They were patients of a mental health clinic, with a severe presentation, and the inclusion criteria allowed for comorbidities. The average age of mothers was 32.3 years in the intervention group and 32.7 years in the control. The average age of infants at time point one was 5.6 months in the intervention group and 5.9 months in the control.	Mothers with MDD received nine weeks of group CBT.  Delivered by two psychotherapists trained in the intervention.  Community setting.	Maternal Symptoms: The Edinburgh Postnatal Depression Scale (Cox et al., 1987), Postpartum Bonding Questionnaire (Brockington et al., 2001), Neuroticism subscale of the NEO-revised five-factor personality inventory (Costa & McCrae, 1992).  Infant Symptomatology: resting state frontal electroencephalography alpha asymmetry, heart rate variability, Infant Behaviour Questionnaire-Revised Short-Form (Gartstein & Rothbart, 2002).	Mothers attending CBT had a significant reduction in depressive symptoms on The Edinburgh Postnatal Depression Scale (Cox et al., 1987). in comparison to control.	Maternal symptoms
				Personality disorders			
(F) Barnicot et al. (2022)	UK	Randomised controlled trial feasibility study	Mothers with personality disorder and complex PTSD with children aged 6-36 months. <b>20 mothers</b> were allocated to Video Feedback	Six 90-minute sessions using VIPP-PMH with a Sensitive Discipline component. Parents were recorded playing and	Maternal Symptoms: The Trauma History Questionnaire and the International Trauma Questionnaire (Cloitre & Bisson, 2013; Cloitre et al., 2018; Dokkedahl et al., 2015); The	Maternal mental health did not significantly change on the CORE-10 (Evans et al., 2002) in control or intervention.	Maternal symptoms and family functioning.

			Intervention for Positive Parenting Adapted for Perinatal Mental Health (VIPP-PMH), and 14 mothers to usual care alone. The average age was not provided.	doing everyday activities with their children. Clinicians then provided feedback on the infant's attachment, exploratory behaviour and promoted sensitive parental responses.  Delivered by clinicians with training in the intervention.  Community setting.	Edinburgh Postnatal Depression Scale (Cox et al., 1987); CORE-10 (Evans et al., 2002).  Family Functioning: The observer-rated Emotional Availability Scales (Biringen, 2008; Biringen et al., 2014); Parental Sense of Competence Scale (Johnston & Mash, 1989); Parental Stress Scale (Berry & Jones, 1995); Brief Infant-Toddler Social and Emotional Assessment (Briggs-Gowan & Carter, 2002); parent-rated Attachment and Emotional Functioning and self-regulation subscales of the Infant-Toddler Symptom Checklist (DeGangi, 1991)	More mothers who received video feedback intervention were rated as maternally sensitive at month 5 and month 8, in comparison to mothers in the control condition. They were also more likely to remain classified as sensitive in comparison to the control group.	
(G) Sved Williams et al. (2021); including a correction article (Sved Williams et al. (2022)	Australia	Pre-post uncontrolled study	98 mothers had started the intervention with 69 completing. Mothers with a diagnosis of borderline personality disorder completed the intervention. The mothers' average age was 30 years. Infants ranged from 1 to 32.8 months old.	Mother-Infant-DBT weekly 2.5-hour sessions for 25 weeks.  Delivered by mental health clinicians but no further clarifying information was provided.  Community & inpatient setting.	Maternal Symptoms: The Edinburgh Postnatal Depression Scale (Cox et al., 1987); Beck Anxiety Inventory (Beck et al. 1988); Borderline Symptom List 23 (Bohus et al. 2009); McLean Screening Instrument for Borderline Personality Disorder (Zanarini et al. 2003); DBT-Ways of Coping Checklist (Neacsiu et al. 2010).  Family Functioning: Parenting Sense of Competence Scale (Johnston and Mash 1989) Parental Reflective Functioning Questionnaire (Luyton et al. 2017), Parenting Stress Index-Short Form (Abidin, 1995), Nursing Child Assessment Satellite Training, Teaching Scale 2nd Ed. (Oxford and Findlay 2013).  Child Symptoms: Ages & Stages Questionnaire Social Emotional Index (Squires et al. 2015).	A significant improvement was seen on the Borderline Symptoms List 23 (Bohus et al. 2009).  Mothers also had a significant increase in their sense of parental competence after the intervention.	Maternal symptoms and family functioning.
				Non-Specific			
(H) Höflich et al. (2022)	Austria	Pre-post uncontrolled retrospective study	140 mothers and their babies. Mothers had a diagnosis of bipolar disorder, anxiety disorder, personality disorder, substance use disorder, adjustment disorder, obsessive-compulsive disorder, hypochondriasis, severe depression or psychosis. The average age of mothers was 31.26 years. The average age of infants was 3.60 months.	Psychosocial interventions offered in an MBU include group CBT offered twice weekly; individual psychotherapy; mother and baby interaction groups; occupational therapy and physical therapy.  Interventions are delivered by a	Maternal Symptoms: The Edinburgh Postnatal Depression Scale (Cox et al., 1987); The Global Assessment of Functioning (Endicott et al., 1976); The Clinical Global Impression Rating Scale (Guy, 1976).  Family Functioning: The Postpartum Bonding Questionnaire (Brockington et al., 2001, 2006; Garcia-Esteve et al., 2016; Reck et al., 2006)	A significant improvement was seen in maternal symptoms measured by the Edinburgh Postnatal Depression Scale (Cox et al., 1987).  Significant improvements were also seen in scores on the Postpartum Bonding Questionnaire (Brockington et al., 2001).	Maternal symptoms and family functioning.

				14: 4: * * *			
				multidisciplinary team (MDT).			
				Inpatient setting.			
(I) Kim et al. (2021)	USA	Pre-post uncontrolled retrospective study	Records of 328 perinatal mothers were analysed (86.3% were postnatal, 13.7% were pregnant). Pregnant or postpartum mothers (0-12 months postpartum) who had completed at least 4 days of treatment at the Day Hospital. Diagnoses were: MDD without psychosis n = 198; MDD with psychosis n = 4; Bipolar spectrum n = 102; Trauma-related diagnosis n = 75; GAD n = 132; OCD n = 18; Anxiety NOS n = 8; Psychotic disorder n = 1. The average age of mothers was 30.28 years.	Day hospital that patients can attend for up to 4 weeks. They typically attend for 5 hours per day, 4 days a week. The ethos of the hospital and psychological interventions uses Interpersonal Therapy, DBT, Infant Mental Health, and Trauma Sensitive approaches.  Typically, patients have group-based psychotherapy, psychoeducation, parentchild relationship support (based on Circle of Security Parenting), trauma-informed yoga and movement activities, and a family-style lunch. Patients also engage in individual therapy, couple/family therapy, and meetings with their psychiatrist.  Delivery of interventions is by an MDT.  Day-unit/outpatient setting.	Maternal Symptoms: The Edinburgh Postnatal Depression Scale (Cox et al., 1987); The Generalised Anxiety Disorder Scale (Spitzer et al., 2006).  Family Functioning: The Barkin Index of Maternal Functioning (Barkin et al., 2010, 2014).	Maternal symptoms on the Edinburgh Postnatal Depression Scale (Cox et al., 1987) improved significantly between pre and post-intervention.  Maternal ratings of maternal functioning also improved significantly between pre- and post-intervention, suggesting an improved perception of their maternal functioning.	Maternal symptoms and family functioning.
(J) Moureau et al. (2023)	Brussels	Pre-post uncontrolled retrospective study	Retrospective study of 92 families attending the Parent-Baby Day Hospitalisation (PBDH) between May 2015 and March 2020. 78 out of 92 parents had a mental health diagnosis including borderline personality disorder, psychosis, eating disorder, bipolar disorder, and depression. The average age of mothers was 32.7 years and 36.3 years for fathers. The average age of infants was 14.8 months.	Attendance 1-2 times a week. Group support and individual sessions are offered using multiple modalities e.g. attachment, systemic, psychodynamic, and behavioural. Mentalisation and video feedback are also used. The aim of this was to support parents in reflecting on their relationship with their child. Parents can receive parental guidance and support.  Intervention is delivered by an MDT.	Parent measures: The Edinburgh Postnatal Depression Scale (Cox et al., 1987).  Family Functioning: The Alarm Distress Baby Scale (Guedeney & Fermanian, 2001); the Diagnostic Classification of Mental Health and Developmental Disorders in Early and Middle Childhood (Relational Context) (Zero to Three, 2016).  Child Symptoms: The Bayley Scale-III (Bayley, 2006); the Diagnostic Classification of Mental Health and Developmental Disorders in Early and Middle Childhood (Zero to Three, 2016).	Parental measures were not analysed pre- and post-treatment.  The parent-child relationship improved during hospitalisation. The rated quality of the relationship was linked to the outcome of the hospitalisation, meaning that when hospitalisation was successful (e.g. when there was a discharge plan developed between the MDT and parents), it was more likely that the parent-child relationship had improved.	Family functioning.

				Day-unit/outpatient setting.			
(K) Tran et al. (2024)	Australia	Pre-post uncontrolled retrospective study	Retrospective analysis of 1220 admissions of mothers admitted with their infants. Mothers who were experiencing problems with unsettled behaviours such as disturbances of sleep/wake, feeding difficulties, anxiety, depression, clinical exhaustion, and adjustment difficulties were eligible for admission. Mothers were on average 35.2 years old. Infants were on average 8 months old.	5-day residential psychoeducational program for infants and their primary caregivers. This is run in a private hospital with 20 beds. Includes a psychoeducational group, daily 1:1 sessions with nurses, and a predischarge group.  Delivered by an MDT.  Inpatient setting.	Maternal Symptoms: The Edinburgh Postnatal Depression Scale three item Anxiety subscale (Cox et al., 1987); Modified Fatigue Assessment Scale Giallo et al., (2014); MacLean Screening Instrument for Borderline Personality Disorder (Zanarini et al., 2003).  Family Functioning: Partner Interaction after Birth Scale (Wynter et al., 2017); Karitane Parenting Confidence Scale (Črnčec et al., 2008).	Reductions in anxiety symptoms were seen from pre-discharge to post-discharge.	Maternal symptoms.
(L) Van Ravesteyn et al. (2018)	The Netherlands	Randomised controlled trial	RCT of 158 pregnant mothers (gestational age between 12 and 33 weeks) with a psychiatric disorder or personality disorder. This included Axis I disorders such as depression, anxiety, and psychosis and Cluster A, B, and C personality disorders. The average age of mothers allocated to the intervention was 29.4 years, and 30.8 years for treatment as usual.	Open group-based Multicomponent Treatment (GMT), 6 hours per day. Includes evaluation of treatment goals, psychoeducation, CBT, body-orientated therapy to increase mentalisation and bonding, expressive and relaxation therapy vs. Treatment as usual (individual counselling).  Intervention delivery was by perinatal psychiatric nurses, a clinical psychologist, Infant Mental Health Specialist and Creative Arts Therapist.  Community setting	Maternal Symptoms: The Edinburgh Postnatal Depression Scale (Cox et al., 1987); Hamilton Depression Rating Scale (Hamilton, 1980).	There was no significant difference between GMT and treatment as usual on The Edinburgh Postnatal Depression Scale (Cox et al., 1987).	Maternal symptoms
(M) Wright et al. (2018)	New Zealand	Pre-post uncontrolled study	45 mother-infant dyads were admitted to an MBU. Mothers had primary diagnoses of schizophrenia/nonaffective psychosis, bipolar disorder, depression, anxiety disorder, and borderline personality disorder. Comorbidities were common with 68.9% having more than one Axis I diagnosis, and 38.9% having more than one Axis II diagnosis. Mothers were on average 32.4 years old. Infants were on average 15.78 weeks old.	Psychosocial interventions of the MBU include CBT, acceptance and commitment therapy, mindfulness training, video interaction guidance, and psychodynamic approaches based on narrative and maternal representations. Psychoeducation is provided to partners and families.	Maternal Symptoms: The Marcé Clinical Checklist (Appleby & Friedman, 1996), Health of the Nations Outcome Scale (HoNOS; Wing et al., 1998), Global Assessment of Functioning (Aas, 2010).  Family Functioning: The Parent-Infant Relationship Global Assessment Scale (Zero to Three, 2005).  Infant Symptoms: The Ages and Stages Questionnaire 3 (Squires et al., 2009); The Ages and Stages Questionnaire 3: Social Emotional (Squires et al., 2002); Infant physical health.	There was a significant improvement in the scores of the Global Assessment of Functioning (Aas 2010) from admission to discharge, suggesting that the mother's symptoms improved.  Family functioning was not measured at admission and discharge, so it cannot be determined if the intervention had an impact.	Maternal symptoms

The interventions were delivered by an MDT that did not have specific training in perinatal or infant mental health. The psychiatrist was trained in maternal and infant mental health. Inpatient setting.

(N) Wright et al. (2020) New Longitudinal study Zealand

**42 mother-**infant dyads admitted to an MBU. Diagnoses included schizophrenia, bipolar disorder, depression, anxiety disorders, and personality disorders. Mothers were on average 32.3 years old. Infants were on average 33.3 weeks old.

al. (2018) above.

As described in Wright et Maternal Symptoms: Global Assessment of Functioning (APA, 2000).

> Family Functioning: The Child and Adult Relational Experimental Index (Crittenden, 1988); The Postpartum Bonding Questionnaire (Brockington et al., 2001).

Infant Symptoms: The Modified Alarm Distress Baby Scale (Matthey et al., 2005); The Ages and Stages Questionnaire 3 (Squires et al., 2009).

Clinically significant improvement was seen in 13 of family functioning 42 participants at three months post-discharge.

The mean scores on the Child and Adult Relational Experimental Index (Crittenden, 1988) had also improved from discharge to 3 months post-discharge.

Maternal symptoms and

### **Delivery of Intervention**

Seven studies were based on community treatment (Barnicot et al., 2022; Battle et al., 2023; Krzeczkowski et al., 2021; Miklowitz et al., 2015; Sadeh-Sharvit et al., 2016; Stein et al., 2006; Van Ravesteyn et al., 2018), two used day units (Kim et al., 2021; Moureau et al., 2023), four studies were based on inpatient treatments (Höflich et al., 2022; Tran et al., 2024; Wright et al., 2018, 2020), and one provided treatment in inpatient and community settings (Sved Williams et al., 2021, 2022).

There were specific perinatal interventions for all disorders categorised as SMI, except for perinatal psychosis. However, psychosis was included as a diagnostic label in papers that were non-specific about their diagnostic criteria (Höflich et al., 2022; Kim et al., 2021; Moureau et al., 2023; Van Ravesteyn et al., 2018; Wright et al., 2018, 2020).

Interventions were frequently offered as group therapy (see Table 5), with six papers describing an intervention offered in this way (Kim et al., 2021; Krzeczkowski et al., 2021; Miklowitz et al., 2015; Sved Williams et al., 2021, 2022; Tran et al., 2024; Van Ravesteyn et al., 2018). For this review, group interventions have been defined as such if they involve other families. Typically, group sessions lasted 2 hours (Krzeczkowski et al., 2021; Miklowitz et al., 2015) to 2.5 hours (Sved Williams et al., 2021, 2022). However, in two cases the group therapy elements were for 5 (Kim et al., 2021) to 6 hours per day (Van Ravesteyn et al., 2018). Information on the duration of the group intervention was unavailable for Tran et al. (2024). There was variation in the length of treatment, ranging from 4 sessions (Van Ravesteyn et al., 2018) to 25 sessions (Sved Williams et al., 2021, 2022).

Table 5

Characteristics of Group Interventions.

Study	Intervention type	Location	<b>Duration of session</b>	Length of treatment
(A) Miklowitz et al. (2015)	MBCT	University of Colorado & University of	2 hours.	8 weekly sessions.
(A) WIKIOWILZ et al. (2013)		California.	Z Hours.	o weekly sessions.
(E) Krzeczkowski et al. (2021)	CBT	McMaster University.	2 hours.	9 weekly sessions.
(G) Sved Williams et al. (2021, 2022)	DBT	Community centres or a hired room in	2.5 hours.	25 weekly sessions.
	Tuturation	an MBU.		
(I) Kim et al. (2021)	Integrative	Day Hospital.	One group per day, but patients meet for 5 hours per	Up to 4 weeks, 4 days per week.
	Integrative		day.	
(K) Tran et al. (2024)	integrative	Hospital.	Not reported.	5 nights.
(L) Van Ravesteyn et al. (2018)	Integrative	Not reported.	6 hours.	Median number of sessions $= 4$ .

Individual interventions were also varied in their delivery (see Table 6), with three papers meeting the inclusion criteria of the review (Barnicot et al., 2022; Battle et al., 2023; Stein et al., 2006). Interventions have been defined as such if they incorporate one or more members of the same family unit (e.g. mother, mother-infant, mother-father-infant) but do not involve other families. Individual interventions were mainly completed in the homes of participants and lasted between 60 and 90 minutes. The number of sessions varied from 6 to 13 weekly sessions.

 Table 6

 Characteristics of Individual Interventions.

Study	Intervention Type	Location	<b>Duration of Session</b>	Length of Treatment
(C) Stein et al. (2006)	Video-feedback interactional treatment	Home.	1 hour.	13 weekly sessions.
(D) Battle et al. (2023)	McMaster Family Therapy	Not reported.	1 hour.	10-12 weekly sessions over 16 weeks.
(F) Barnicot et al. (2022)	VIPP-PMH	Home or clinic at request.	90 minutes.	6 weekly sessions.

Finally, three papers described a combination of individual and group sessions (Höflich et al., 2022; Moureau et al., 2023; Sadeh-Sharvit et al., 2016). Höflich et al. (2022) described the use of group CBT, which is offered twice a week in an MBU. The duration of sessions is not discussed. The average length of admission was 37.75 days. On the other hand, Moureau et al. (2023) described the offer of group and individual support in the Parent-Baby Day Hospitalisation Unit. The duration of sessions was again not discussed, but parents were asked to attend 1-2 times per week. The average length of admission was 29 weeks. The treatment discussed by Sadeh-Sharvit et al. (2016) involved 12 weekly group sessions with other mothers, with each session lasting 90 minutes. Following this, 12 family therapy sessions were offered for 60 minutes each. These alternated between sessions for the family unit (e.g. mum, dad, child), and the couple (e.g. mum and dad).

Wright et al. (2018, 2020) described a multifaceted treatment on a 3-bed MBU. Psychological interventions were suggested, but no further information on these interventions was reported. It should be noted that the MBU also offers medication and nursing support, and one patient had electroconvulsive therapy (ECT).

#### **Outcome Measures**

A variety of outcome measures were used in the included studies. The most common measure of parental symptomatology was the Edinburgh Postnatal Depression Scale (Cox et al., 1987), which was used in nine of the studies (Barnicot et al., 2022; Battle et al., 2023; Höflich et al., 2022; Kim et al., 2021; Krzeczkowski et al., 2021; Moureau et al., 2023; Sved Williams et al., 2021; Tran et al., 2024; Van Ravesteyn et al., 2018). Measures for family functioning were broader in their focus. The most common measures used were the Postpartum Bonding Questionnaire (Brockington et al., 2001) used in three studies (Höflich et al., 2022; Krzeczkowski et al., 2021; Wright et al., 2020), and the Parenting Stress Index (Abidin, 1995) used in three studies (Battle et al., 2023; Sadeh-Sharvit et al., 2016; Sved

Williams et al., 2021, 2022). The full range of outcome measures used within the studies can be seen in Table 4. These outcome measures were not always solely related to the main aim of the study and instead offered additional information.

### **Impact of Intervention**

Five out of fourteen papers showed improvements in both the symptomatology of parents and family functioning (Höflich et al., 2022; Kim et al., 2021; Sadeh-Sharvit et al., 2016; Sved Williams et al., 2021, 2022; Wright et al., 2020). The impact of the intervention on parental symptomatology (see Figure 2) and family functioning (see Figure 3) was as follows:

### Mother's Symptoms

All but one study (Moureau et al., 2023) explored the impact of the intervention on symptomatology. That is, having symptomatology as one of the targets of intervention. Papers were either rated as favouring the intervention if they improved symptoms with statistical significance or not if the symptoms did not improve with statistical significance. Table 7 provides further information on the level of significance published in each of the papers. Eight showed statistical significance (Battle et al., 2023; Höflich et al., 2022; Kim et al., 2021; Krzeczkowski et al., 2021; Miklowitz et al., 2015; Sadeh-Sharvit et al., 2016; Sved Williams et al., 2021; Wright et al., 2018).

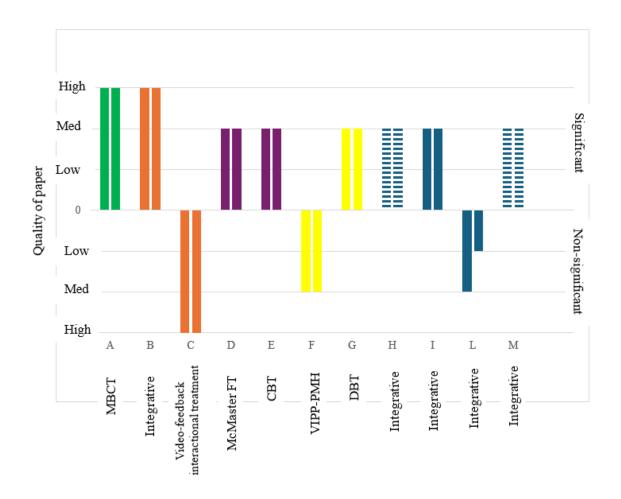
 Table 7

 Impact of Intervention on Parental Symptoms (significance level and effect size).

Study	Sample diagnosis	Extracted measure	Significance (p<.05)	Effect size
(A) Miklowitz et al. (2015)	Bipolar disorder	Beck Depression Inventory-II (Beck et al., 1996)	Yes	Medium
(B) Sadeh-Sharvit et al. (2016)	Eating disorders	The Eating Disorders Inventory-II (Garner, 1991).	Yes	Large
(C) Stein et al. (2006)	Eating disorders	The Eating Disorder Examination (Fairburn & Cooper, 1993).	No	Not reported
(D) Battle et al. (2023)	Major depressive disorder	The Edinburgh Postnatal Depression Scale (Cox et al., 1987).	Yes	Large
(E) Krzeczkowski et al. (2021)	Major depressive disorder	The Edinburgh Postnatal Depression Scale (Cox et al., 1987).	Yes	Not reported
(F) Barnicot et al. (2022)	Personality disorders	CORE-10 (Evans et al., 2002).	No	Small
(G) Sved Williams et al. (2021, 2022)	Personality disorders	Borderline Symptoms List 23 (Bohus et al., 2009).	Yes	Moderate
(H) Höflich et al. (2022)	Non-specific	The Edinburgh Postnatal Depression Scale (Cox et al., 1987).	Yes	Not reported.
(I) Kim et al. (2021)	Non-specific	The Edinburgh Postnatal Depression Scale (Cox et al., 1987).	Yes	Not reported.
(K) Tran et al. (2024)	Non-Specific	The Edinburgh Postnatal Depression Scale three-item anxiety subscale (Cox et al., 1987).	Not reported	Medium
(L) Van Ravesteyn et al. (2018)	Non-specific	The Edinburgh Postnatal Depression Scale (Cox et al., 1987).	No	Small
(M) Wright et al. (2018)	Non-specific	Global Assessment of Functioning (APA, 2000).	Yes	Large
(N) Wright et al. (2020)	Non-specific	Global Assessment of Functioning (APA, 2000).	Not reported	Not reported

Of the papers investigating parental symptomatology, three studies did not reach statistical significance for improvements in symptoms (Barnicot et al., 2022; Stein et al., 2006; Van Ravesteyn et al., 2018). However, two of these were video interventions (VIPP-PMH and video-feedback interactional treatment), with the feasibility or family functioning factors being a primary target, and symptomatology being a secondary target (Barnicot et al., 2022; Stein et al., 2006). Video interventions are usually used as a means of focusing on the parent-infant relationship as opposed to mental health symptom reduction, explaining why this was not the sole target of these interventions. Wright et al. (2020) reported clinically significant change in thirteen of forty-two participants, but did not provide *p*-values.

Figure 2. Harvest Plot Showing Intervention Effect on Parental Symptoms (significant level of p < .05), and Paper Quality (N.B. first bar shows internal validity rating, second bar shows external validity rating).



Key:

Bipolar intervention		Eating disorder		Depression intervention		
		intervention				
Personality disorder		Non-specific		Inpatient treatment		
intervention		intervention				
Outpatient treatment	Solid	Letters correspond to paper key (see Table 4)				
	colour					

## Family Functioning

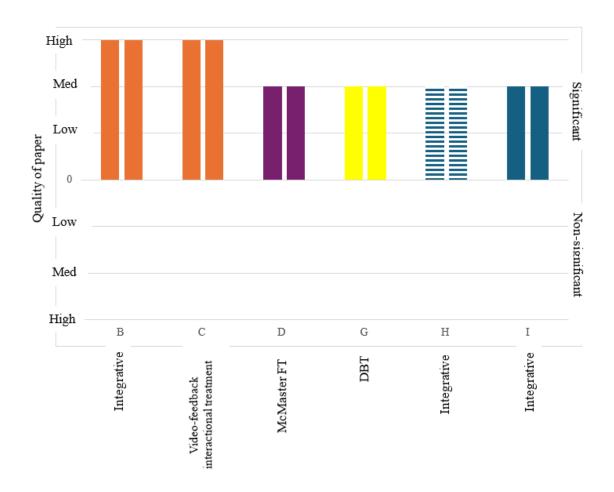
Nine studies explored family functioning (Barnicot et al., 2022; Battle et al., 2023; Höflich et al., 2022; Kim et al., 2021; Moureau et al., 2023; Sadeh-Sharvit et al., 2016; Stein et al., 2006; Sved Williams et al., 2021, 2022; Wright et al., 2020). That is, family functioning outcomes were defined as a target for intervention. Family functioning outcomes referred to were competence in parenting (Sved Williams et al., 2021, 2022), emotional availability of the parent (Barnicot et al., 2022), level of stress between parent and infant (Battle et al., 2023), the infant-parent relationship (Höflich et al., 2022; Wright et al., 2020), and behaviours between the parent and infant around eating (Sadeh-Sharvit et al., 2016; Stein et al., 2006). Table 8 provides further information on the level of significance published in each of the papers. Most studies demonstrated a significant improvement in family functioning (Battle et al., 2023; Höflich et al., 2022; Kim et al., 2021; Sadeh-Sharvit et al., 2016; Stein et al., 2006; Sved Williams et al., 2021, 2022). However, some studies did not provide data on the statistical significance of the change, despite describing a positive change (Barnicot et al., 2022; Moureau et al., 2023; Wright et al., 2020).

 Table 8

 Impact of Intervention on Family Functioning (significance level and effect size).

Study	Sample diagnosis	Extracted measure	Significance (p<.05)	Effect size
(B) Sadeh-Sharvit et al. (2016)	Eating disorders	The Child Feeding Questionnaire (Birch et al., 2001; 6 scales		
		included, maternal results):		
		Concern for child's eating	Yes	Large
		Concern for child's weight	Yes	Medium
		Perceived responsibility for child's eating	Yes	Large
		Monitoring of eating	Yes	Large
		Restriction of eating	Yes	Large
		Pressure to eat	Yes	Large
(C) Stein et al. (2006)	Eating disorders	Conflict/harmony during the principal meal of the day.	Yes	Not reported
(D) Battle et al. (2023)	Major depressive disorder	Parenting Stress Index (Abidin, 1995).	Yes	Medium
(F) Barnicot et al. (2022)	Personality disorder	The Observer-Rated Emotional Availability Scales (Biringen, 2008;		
		Biringen et al., 2014):	Reported as an improvement	Large
		Maternal non-intrusiveness Maternal sensitivity	but <i>p</i> value not given.	Large
(G) Sved Williams et al. (2021,		Parenting Sense of Competence Scale (Johnston and Mash 1989).	Yes	Medium
2022)	Personality disorders	r arching sense of competence scale (somiston and wash 1767).	165	Wediam
(H) Höflich et al. (2022)	Non-specific	The Postpartum Bonding Questionnaire (Brockington et al., 2001).	Yes	Not reported
(11) Homen et al. (2022)	rion specific	The Tostpurtum Bonding Questionnaire (Brookington et al., 2001).	105	riot reported
(I) Kim et al. (2021)	Non-specific	The Barkin Index of Maternal Functioning (Barkin et al., 2010,	Yes	Not reported
	-	2014).		•
(J) Moureau et al. (2023)	Non-specific	The Diagnostic Classification of Mental Health and Developmental	Improvement in rating of	-
		Disorders in Early and Middle Childhood (Relational Context; Zero	relationship but no <i>p-value</i>	
		to Three, 2016).		
(N) Wright et al. (2020)	Non-specific	The Child and Adult Relational Experimental Index (Crittenden,	Reports change in	Not reported
		1988).	relationship in 56% of	
			dyads, but deterioration in	
			35%. P value not reported	

**Figure 3.**Harvest Plot Showing the Effect of the Intervention (significant level of p<.05) on Family Functioning, and Paper Quality (N.B. first bar shows internal validity rating, second bar shows external validity rating).



Key:

Bipolar intervention		Eating disorder		Depression intervention	
		intervention			
Personality disorder		Non-specific		Inpatient treatment	
intervention		intervention			
Outpatient treatment	Solid	Letters correspond to paper key (see Table 4)			
	colour				

#### **Discussion**

To our knowledge, this is the first systematic literature review examining the psychosocial interventions offered to mothers with a SMI in the perinatal period. We were able to provide a narrative synthesis of the limited evidence that is currently available to go some way in answering research questions 1 and 2, but were restricted in our ability to answer research question 3.

This review has demonstrated that research into specific perinatal interventions for conditions such as bipolar disorder, personality disorder, and eating disorders is sparse, with no literature on the use of interventions solely for perinatal psychosis meeting the inclusion criteria of this review. When considered collectively, there was evidence of various modalities being used within the perinatal period. Similarly, only three papers were RCTs, which is the gold standard for research (Barnicot et al., 2022; Stein et al., 2006; Van Ravesteyn et al., 2018). Although some pre- and post-studies showed an effect on symptomatology and/or family functioning (Battle et al., 2023; Höflich et al., 2022; Kim et al., 2021; Krzeczkowski et al., 2021; Miklowitz et al., 2015; Sadeh-Sharvit et al., 2016; Sved Williams et al., 2021, 2022; Wright et al., 2018), we cannot attribute this effect to the intervention without randomisation. The review has also shed light on the complexity of treating mothers with an SMI, and that this often can involve more than treating the SMI and instead needing to consider the relationship between the mother and infant, as well as the wider family system. Overall, few recommendations can be made to perinatal services treating mothers with SMI because of these findings.

### **Delivery of Interventions**

Whilst there are recommendations of treatments offered by NICE for perinatal services to adapt treatment as usual for the various SMI diagnoses (NICE, 2020a), these treatments do not appear to have been widely tested in the perinatal period. Many of the

interventions outlined in this review are not NICE-recommended for treating an SMI within the perinatal period. Instead, offering mindfulness-based Cognitive Therapy for bipolar disorder (Miklowitz et al., 2015) and the McMaster Family Model of Functioning for MDD (Battle et al., 2023). Similarly, video-feedback interactional treatment for people with eating disorders (Stein et al., 2006) and VIPP-PMH personality disorders (Barnicot et al., 2022), with the benefit on family functioning (parent-infant) as opposed to symptomatology. Thus, there may be potential for video interventions to be used alongside other therapies in this cohort, but this would need to be more than guided self-help as this in addition to the videofeedback interactional treatment did not impact mother's symptomatology (Stein et al., 2006). In other examples, interventions are being offered integratively (Höflich et al., 2022; Kim et al., 2021; Moureau et al., 2023; Sadeh-Sharvit et al., 2016; Tran et al., 2024; Van Ravesteyn et al., 2018; Wright et al., 2018, 2020), making it hard to draw conclusions on the efficacy of treatment. Thus, the NICE-recommended treatments for SMI in the perinatal period need further exploration, as we cannot, at present, conclude or assume they work as effectively as the same interventions outside this period. If the findings of the treatments discussed in this review are replicated, then they may also be beneficial to consider in future guidance.

Likewise, although guidelines also suggest using IPT (O'Brien et al., 2023), our review found only one example of this being used integratively (Kim et al., 2021). This links to the critique within the literature of whether treatment in the perinatal period does need to be uniquely individualised for those in the perinatal period, or if it can be the same treatment offered to those with the same diagnosis outside of the perinatal period (Howard & Khalifeh, 2020). However, there is a complexity within the resulting interventions having a variety of aims, with some being solely focused on the SMI (Miklowitz et al., 2015) and then others focusing on both SMI and family functioning concurrently (Barnicot et al., 2022; Battle et al., 2023; Stein et al., 2006). Similarly, although our review focused on what interventions are

being offered to a mother with an SMI, our findings showed some limited evidence that partners are also being offered support within the intervention, with three papers demonstrating this alongside the mother (Battle et al., 2023; Moureau et al., 2023; Sadeh-Sharvit et al., 2016), which is contrary to the guidelines discussed by O'Brien et al. (2023).

The interventions were delivered by a variety of staff, with some papers mentioning that not all of the MDT members on the wards of an inpatient unit had specific training in perinatal mental health (Wright et al., 2018, 2020). Some were facilitated by therapists of varying types (Battle et al., 2023; Krzeczkowski et al., 2021; Miklowitz et al., 2015; Sadeh-Sharvit et al., 2016; Stein et al., 2006), an MDT (Höflich et al., 2022; Kim et al., 2021; Moureau et al., 2023; Tran et al., 2024; Van Ravesteyn et al., 2018). Others were mental health clinicians (Sved Williams et al., 2021, 2022). Barnicot et al. (2022) and Miklowitz et al. (2015) used clinicians with training in the intervention. Thus, highlighting potential differences in the expertise of those facilitating the treatment and therefore adherence to the model, and potentially differing in their ability to meet the complex needs within the perinatal period fully. Lavender et al. (2016) recommended the use of midwives to offer their expertise during psychosocial interventions, yet only one of the papers in our results included this staff group (Moureau et al., 2023).

An area for tentative consideration, given the design of most of the studies, is the means of delivery, dosage of treatment, and the severity of the SMI. Although our findings are limited, they showed that CBT could have an improvement on MDD in as little as nine 2-hour sessions of group therapy (Krzeczkowski et al., 2021) compared to 10-12 sessions of McMaster Family Therapy (Battle et al., 2023). In total, only two further examples of individual treatment were found, treating a personality disorder (Barnicot et al., 2022) using six sessions and eating disorders (Stein et al., 2006) using thirteen sessions. Comparatively, group sessions of DBT for personality disorder lasted 25 sessions (Sved Williams et al., 2021,

2022) and integrative group therapy for eating disorders lasted 12 sessions, followed by a further 12 family sessions (Sadeh-Sharvit et al., 2016). This highlights further questions on the most appropriate type of delivery and dosage of treatment, requiring future exploration.

#### **Outcomes of Interventions**

Of the papers included in this review, some interventions did not improve parental symptomatology but did improve family functioning. Video-feedback interactional treatment as an intervention for mothers with eating disorders did not help improve symptomatology, but could improve family functioning by having less conflict at mealtimes (Stein et al., 2006). When used with mothers with a personality disorder or complex PTSD, VIPP-PMH did not improve their symptoms, but did improve their maternal sensitivity (Barnicot et al., 2022). This is perhaps to be expected as VIPP-PMH and video-feedback interactional treatment are interventions primarily aimed to improve parent-infant relationships. Thus, VIPP-PMH and video-feedback interactional treatment may be interventions that would work well alongside other interventions that are designed to target symptomatology.

Where examined, most interventions were helpful for family functioning. An important differentiation between treatment as usual versus treatment in the perinatal period is the consideration of the infant. With only five interventions suggesting an improvement in both parental symptomatology and family functioning (Höflich et al., 2022; Kim et al., 2021; Sadeh-Sharvit et al., 2016; Sved Williams et al., 2021, 2022; Wright et al., 2020), further exploration must be conducted to understand how this additional treatment need can be combined or considered in perinatal psychosocial treatment, as this is a crucial element of perinatal care (Taha et al., 2021). The implications of untreated SMI in the perinatal period include increased maternal mortality (Lavender et al., 2016), reduced breastfeeding, changes to relationships within the family setting (e.g. infant and/or partner) (Fogarty et al., 2018), and increased risk of long-term adverse developmental outcomes for children (Howard &

Khalifeh, 2020). There is also a longer-term economic benefit to treating SMI (Howard & Khalifeh, 2020). Thus, highlighting the importance of addressing the needs of parents with an SMI and supporting the family functioning for the benefit of the infant.

### **Timing of Intervention**

Interventions were also predominantly for those in the postnatal period. This maps onto previous reviews, which have attempted to explain the challenges of offering specific support to people with SMI, particularly around conception, as often mothers fall pregnant unexpectedly, and that the focus has been on postnatal treatment (Howard & Khalifeh, 2020). However, previous research has highlighted the importance of early intervention in the antenatal period to help support parents through to the postnatal period (Lavender et al., 2016). Here, only three studies covered the antenatal stage (Kim et al., 2021; Miklowitz et al., 2015; Van Ravesteyn et al., 2018), which highlights the scarcity of early interventions meeting the criteria of this review. Understandably, family functioning may be focused more on the mentalisation of the baby, but could still benefit families.

# **Limitations of Reviewed Papers**

An important consideration when examining these results is the natural complexity of SMI in the perinatal period. Thus, any study exploring this topic is likely to be complicated by the additional treatment variables that are often present. For example, it was not uncommon for participants to be engaging in other interventions, such as therapy outside of the intervention, or medication. In one example, a participant received ECT (Wright et al., 2018), which again highlights the extent of the difficulties faced by people with an SMI in the perinatal period. In another longitudinal study, mothers were referred to a specialist perinatal mental health service. Other participants had also received mental health treatment before the intervention (e.g. Tran et al., 2024) or in addition to the assessed intervention (Sved Williams et al., 2021, 2022). Comorbidity was also common, including substance misuse and other

mental health disorders. These are all factors that are to be expected within the presentation of people with an SMI, and it would be unethical to restrict access to other support or medication. However, it does lead to further questions on the specific mechanism of change within the interventions discussed in this review.

One method of understanding the mechanisms of change would be to increase the literature using RCT designs. In this review, only three studies were RCTs (Barnicot et al., 2022; Stein et al., 2006; Van Ravesteyn et al., 2018), limiting the generalisability of the findings. For the other studies with different research designs, it is hard to say with any certainty that the intervention has been the source of change.

In addition to differences in design, there was also variability in the assessed quality of the studies. Only three of the papers were assessed as having both high internal and external validity ratings (Miklowitz et al., 2015; Sadeh-Sharvit et al., 2016; Stein et al., 2006). The remaining papers were assessed as having both medium internal and external validity, except in the case Van Ravesteyn et al. (2018) which was assessed as 'low' external validity and Tran et al. (2024) which was rated as 'low' internal validity. Thus, bias within the majority of papers was commonplace.

A further consideration is that the included papers used the term 'mother' to reflect their birthing person. There should be some consideration that not all birthing people identify themselves using this term, for example, if they are non-binary. Thus, there is a need for research using diverse groups of people and an acknowledgement by authors on their language choices.

Finally, only two interventions took place in the UK healthcare system. Other locations included were international (USA, Canada, Israel, Australia, Brussels, the Netherlands and New Zealand), which differ from the UK and NHS in the way their healthcare systems are managed and provided. This may also go some way in explaining the

lack of papers found, and in particular, RCTs, as Western areas such as the USA, UK and Australia have been the dominant research areas with initiatives to improve perinatal mental healthcare (Howard & Khalifeh, 2020). Thus, making it harder to provide clinical recommendations to NHS perinatal services.

### **Limitations of the Current Review**

Firstly, there are some limits to the generalisability of the results, given that there is a large amount of heterogeneity in what is reported as outcomes. As with other reviews, the research here has presented a variety of outcome measures, but with limited crossover, with the Edinburgh Postnatal Depression Scale (Cox et al., 1987) being the most common (Howard & Khalifeh, 2020). Additionally, some research was excluded because it did not include outcome measures. This impacts how far the results can easily be compared and how far the results of this review can be generalised. Thus, future research would benefit from addressing the heterogeneous use of outcome measures, or no outcome measure at all, attempting to form some agreement on appropriate outcome measures, and using this for meta-analysis.

Additionally, the search terms may have narrowed the results by using disorder-specific terms as opposed to generic terms such as "mental health conditions". Additionally, examples of interventions such as "CBT", used as search terms, may have also narrowed the search and impacted the results. It is therefore plausible that some relevant papers may have been missed. The exclusion of grey literature may have also resulted in some important research findings being excluded.

Finally, we concentrated on mothers/birthing parents with an SMI to ensure the focus of the review. However, some papers included partners/fathers, who provided outcomes. For example, family functioning did not improve for partners of patients with MDD using the McMaster Family Model of Functioning (Battle et al., 2023) or partners of patients with an

eating disorder using an integrative approach (Sadeh-Sharvit et al., 2016). The targeting of predominantly mothers is consistent with previous reviews, which highlights the limited interventions targeting fathers/other caregivers or the wider family (Howard & Khalifeh, 2020). Although this may be expected, as many services are usually commissioned for maternal mental health or mother-infant dyads, it fails to ignore the important family systemic elements that can perpetuate, maintain, or improve mental health difficulties in this period and the recommendation of the NHS Long Term Plan which proposes the use of mental health treatment for fathers too (NHS England, 2019). Future reviews may focus on this area to build a picture of what interventions could be effective and thus offered specifically to families seeking support from perinatal teams.

# **Clinical Implications and Future Recommendations**

As stated, it is difficult to provide recommendations for clinical practice based on the findings of this review. More research is needed to further support the interventions being used in SMI during the perinatal period. Our findings emphasised the limited research and variability in the quality of those that were included, with very few RCTs. This review highlights that further research is required to explore the interventions being used for SMI in the perinatal period to determine what is helpful for both the symptomatology of mothers and the family functioning (e.g. parent-infant relationship). This is something that the NICE guidelines lack in detail. There also needs to be explicit descriptions of the adaptations being made within the perinatal period, to ensure that services are offering an equitable treatment to people with an SMI. We recommend that there should be some consensus on disorder-specific interventions or interventions that work well with SMI, specifically for people in the perinatal period. At present, we cannot assume or confidently say that the same interventions used for SMI outside of the perinatal period are as effective in the perinatal period. In addition, NHS perinatal teams should highlight and evaluate the work they are currently

doing to contribute to the understanding of what and how interventions are being used, and how beneficial they are.

Implications for perinatal services are increased consideration of the family functioning when offering mental health interventions. Here we have seen that interventions may focus on family functioning or parental symptoms, or in some cases, both concurrently. However, both elements are important when working with families with SMI. In addition, some populations have previously been excluded from services or research, which may require an element of outreach from clinicians and researchers. This is something that the NHS Long Term Plan has also highlighted as important (NHS England, 2019). Services should also consider the modality of the treatment being offered, alongside the dose of the treatment, and be clear on what specific adaptations are being made for those within the perinatal period.

Furthermore, the included studies have shown that interventions can be offered in the community and at home. It is of interest that none of the interventions included in the review were offered online, which is happening within the NHS for people outside of the perinatal period, and has also been described in previous reviews on perinatal care (Lavender et al., 2016). People with SMI have been shown to have lower engagement with services, such as antenatal care (Prasad et al., 2022; Woody et al., 2017), and so it may be beneficial to consider increased accessibility and whether online support could be one way to improve access. Particularly given the social determinants of mental health and the cost that may occur for a family having to travel to appointments.

In conclusion, working with people with an SMI in the perinatal period is complex.

Perinatal SMI has a systemic impact on the parent and infant relationship, and wider. At present, there is an insufficient evidence base to guide clinical practice. Services are trying to meet a need by drawing on a sparse evidence base. Interventions should consider this

complexity, but clearer perinatal psychosocial treatment protocols need to be formed. These need to be based on good quality evidence-based research that, where possible, considers both symptomatology and the family more widely. Ideally, further RCTs are required to begin this formation of protocols. In addition, more emphasis needs to be placed on what specifically are the adaptations being made for those in the perinatal period within psychosocial therapies, aiming to treat the many and multiple impacts of a perinatal SMI.

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# **Appendix**

# **Appendix A – Clinical Psychology Review Author guidelines**

# About the journal

#### Aims and scope

Clinical Psychology Review publishes substantive reviews of topics germane to clinical psychology. Papers cover diverse issues including: psychopathology, psychotherapy, behavior therapy, cognition and cognitive therapies, behavioral medicine, community mental health, assessment, and child development. Papers should be cutting edge and advance the science and/or practice of clinical psychology.

Reviews on other topics, such as psychophysiology, learning therapy, experimental psychopathology, and social psychology often appear if they have a clear relationship to research or practice in **clinical psychology**. Integrative literature reviews and summary reports of innovative ongoing clinical research programs are also sometimes published. Reports on individual research studies and theoretical treatises or clinical guides without an empirical base are not appropriate.

#### Benefits to authors

We also provide many author benefits, such as free PDFs, a liberal copyright policy, special discounts on Elsevier publications and much more. Please click here for more information on our author services.

Please see our Guide for Authors for information on article submission. If you require any further information or help, please visit our Support Center

#### Peer review

This journal follows a single anonymized review process. Your submission will initially be assessed by our editors to determine suitability for publication in this journal. If your submission is deemed suitable, it will typically be sent to a minimum of two reviewers for an independent expert assessment of the scientific quality. The decision as to whether your article is accepted or rejected will be taken by our editors.

Read more about peer review.

Our editors are not involved in making decisions about papers which:

- they have written themselves. have been written by family members or colleagues.
- relate to products or services in which they have an interest.
   Any such submissions will be subject to the journal's usual procedures and peer review
- will be handled independently of the editor involved and their research group. Read more about editor duties.

Authors may submit a formal appeal request to the editorial decision, provided the it meets the requirements and follows the procedure outlined in Elsevier's Appeal Policy. Only one appeal per submission will be considered and the appeal decision will be final.

# Special issues and article collections

The peer review process for special issues and article collections follows the same process as outlined above for regular submissions, except, a guest editor will send the submissions out to the reviewers and may recommend a decision to the journal editor. The journal editor

oversees the peer review process of all special issues and article collections to ensure the high standards of publishing ethics and responsiveness are respected and is responsible for the final decision regarding acceptance or rejection of articles.

# Open access

We refer you to our open access information page to learn about open access options for this journal.

# **Ethics and policies**

# **Ethics in publishing**

Authors must follow ethical guidelines stated in Elsevier's Publishing Ethics Policy. Submission declaration

When authors submit an article to an Elsevier journal it is implied that:

- the work described has not been published previously except in the form of a preprint, an abstract, a published lecture, academic thesis or registered report. See our policy on multiple, redundant or concurrent publication.
  - the article is not under consideration for publication elsewhere.
- the article's publication is approved by all authors and tacitly or explicitly by the responsible authorities where the work was carried out.
- if accepted, the article will not be published elsewhere in the same form, in English or in any other language, including electronically, without the written consent of the copyright-holder. To verify compliance with our journal publishing policies, we may check your manuscript with our screening tools.

# Authorship

All authors should have made substantial contributions to all of the following:

The conception and design of the study, or acquisition of data, or analysis and interpretation of data.

Drafting the article or revising it critically for important intellectual content.

Final approval of the version to be submitted.

Authors should appoint a corresponding author to communicate with the journal during the editorial process. All authors should agree to be accountable for all aspects of the work to ensure that the questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

# Changes to authorship

The editors of this journal generally will not consider changes to authorship once a manuscript has been submitted. It is important that authors carefully consider the authorship list and order of authors and provide a definitive author list at original submission.

The policy of this journal around authorship changes:

 All authors must be listed in the manuscript and their details entered into the submission system.

Any addition, deletion or rearrangement of author names in the authorship list should only be made prior to acceptance, and only if approved by the journal editor.

• Requests to change authorship should be made by the corresponding author, who must provide the reason for the request to the journal editor with written confirmation from all authors, including any authors being added or removed, that they agree with the addition, removal or rearrangement.

- All requests to change authorship must be submitted using this form. Requests which do not comply with the instructions outlined in the form will not be considered.
- Only in exceptional circumstances will the journal editor consider the addition, deletion or rearrangement of authors post acceptance.
  - Publication of the manuscript may be paused while a change in authorship request is being considered.

Any authorship change requests approved by the journal editor will result in a corrigendum if the manuscript has already been published.

• Any unauthorised authorship changes may result in the rejection of the article, or retraction, if the article has already been published.

#### **Declaration of interests**

All authors must disclose any financial and personal relationships with other people or organizations that could inappropriately influence or bias their work. Examples of potential competing interests include:

- Employment
- Consultancies
  - Stock ownership
- Honoraria
  - Paid expert testimony
- Patent applications or registrations
- Grants or any other funding
  - The Declaration of Interests tool should always be completed.
- Authors with no competing interests to declare should select the option, "I have nothing to declare".

The resulting Word document containing your declaration should be uploaded at the "attach/upload files" step in the submission process. It is important that the Word document is saved in the .doc/.docx file format. Author signatures are not required.

We advise you to read our policy on conflict of interest statements, funding source declarations, author agreements/declarations and permission notes.

# **Funding sources**

Authors must disclose any funding sources who provided financial support for the conduct of the research and/or preparation of the article. The role of sponsors, if any, should be declared in relation to the study design, collection, analysis and interpretation of data, writing of the report and decision to submit the article for publication. If funding sources had no such involvement this should be stated in your submission.

List funding sources in this standard way to facilitate compliance to funder's requirements: Funding: This work was supported by the National Institutes of Health [grant numbers xxxx, yyyy]; the Bill & Melinda Gates Foundation, Seattle, WA [grant number zzzz]; and the United States Institutes of Peace [grant number aaaa].

It is not necessary to include detailed descriptions on the program or type of grants, scholarships and awards. When funding is from a block grant or other resources available to a university, college, or other research institution, submit the name of the institute or organization that provided the funding.

If no funding has been provided for the research, it is recommended to include the following sentence:

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

# Declaration of generative AI in scientific writing

Authors must declare the use of generative AI in scientific writing upon submission of the paper. The following guidance refers only to the writing process, and not to the use of AI tools to analyse and draw insights from data as part of the research process:

- Generative AI and AI-assisted technologies should only be used in the writing process to improve the readability and language of the manuscript.
- The technology must be applied with human oversight and control and authors should carefully review and edit the result, as AI can generate authoritative-sounding output that can be incorrect, incomplete or biased. Authors are ultimately responsible and accountable for the contents of the work.
- Authors must not list or cite AI and AI-assisted technologies as an author or co-author on the manuscript since authorship implies responsibilities and tasks that can only be attributed to and performed by humans.

The use of generative AI and AI-assisted technologies in scientific writing must be declared by adding a statement at the end of the manuscript when the paper is first submitted. The statement will appear in the published work and should be placed in a new section before the references list. An example:

• Title of new section: Declaration of generative AI and AI-assisted technologies in the writing process.

Statement: During the preparation of this work the author(s) used [NAME TOOL / SERVICE] in order to [REASON]. After using this tool/service, the author(s) reviewed and edited the content as needed and take(s) full responsibility for the content of the published article.

The declaration does not apply to the use of basic tools, such as tools used to check grammar, spelling and references. If you have nothing to disclose, you do not need to add a statement. Please read Elsevier's author policy on the use of generative AI and AI-assisted technologies, which can be found in our <u>GenAI Policies for journals</u>.

Please note: to protect authors' rights and the confidentiality of their research, this journal does not currently allow the use of generative AI or AI-assisted technologies such as ChatGPT or similar services by reviewers or editors in the peer review and manuscript evaluation process, as is stated in our <u>GenAI Policies for journals</u>. We are actively evaluating compliant AI tools and may revise this policy in the future.

# **Preprints**

#### **Preprint sharing**

Authors may share preprints in line with Elsevier's article sharing policy. Sharing preprints, such as on a preprint server, will not count as prior publication.

We advise you to read our policy on multiple, redundant or concurrent publication. Use of inclusive language

Inclusive language acknowledges diversity, conveys respect to all people, is sensitive to differences, and promotes equal opportunities. Authors should ensure their work uses

inclusive language throughout and contains nothing which might imply one individual is superior to another on the grounds of:

- age
- gender

race

- ethnicity culture
- sexual orientation
- disability or health condition

  We recommend avoiding the use of descriptors about personal attributes unless they are
- relevant and valid. Write for gender neutrality with the use of plural nouns ("clinicians, patients/clients") as default. Wherever possible, avoid using "he, she," or "he/she."

No assumptions should be made about the beliefs of readers and writing should be free from bias, stereotypes, slang, reference to dominant culture and/or cultural assumptions. These guidelines are meant as a point of reference to help you identify appropriate language but are by no means exhaustive or definitive.

# Reporting sex- and gender-based analyses

There is no single, universally agreed-upon set of guidelines for defining sex and gender. We offer the following guidance:

- Sex and gender-based analyses (SGBA) should be integrated into research design when research involves or pertains to humans, animals or eukaryotic cells. This should be done in accordance with any requirements set by funders or sponsors and best practices within a field.
- Sex and/or gender dimensions of the research should be addressed within the article or declared as a limitation to the generalizability of the research.
- Definitions of sex and/or gender applied should be explicitly stated to enhance the precision, rigor and reproducibility of the research and to avoid ambiguity or conflation of terms and the constructs to which they refer.

We advise you to read the Sex and Gender Equity in Research (SAGER) guidelines and the SAGER checklist (PDF) on the EASE website, which offer systematic approaches to the use of sex and gender information in study design, data analysis, outcome reporting and research interpretation.

For further information we suggest reading the rationale behind and recommended use of the SAGER guidelines.

#### Definitions of sex and/or gender

We ask authors to define how sex and gender have been used in their research and publication. Some guidance:

• Sex generally refers to a set of biological attributes that are associated with physical and physiological features such as chromosomal genotype, hormonal levels, internal and external anatomy. A binary sex categorization (male/female) is usually designated at birth ("sex assigned at birth") and is in most cases based solely on the visible external anatomy of a newborn. In reality, sex categorizations include people who are intersex/have differences of sex development (DSD).

• Gender generally refers to socially constructed roles, behaviors and identities of women, men and gender-diverse people that occur in a historical and cultural context and may vary across societies and over time. Gender influences how people view themselves and each other, how they behave and interact and how power is distributed in society.

#### Jurisdictional claims

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- Maps: Readers should be able to locate any study areas shown within maps using common mapping platforms. Maps should only show the area actually studied and authors should not include a location map which displays a larger area than the bounding box of the study area. Authors should add a note clearly stating that "map lines delineate study areas and do not necessarily depict accepted national boundaries". During the review process, Elsevier's editors may request authors to change maps if these guidelines are not followed.
- Institutional affiliations: Authors should use either the full, standard title of their institution or the standard abbreviation of the institutional name so that the institutional name can be independently verified for research integrity purposes.

# Writing and formatting

#### File format

We ask you to provide editable source files for your entire submission (including figures, tables and text graphics). Some guidelines:

- Save files in an editable format, using the extension .doc/.docx for Word files and .tex for LaTeX files. A PDF is not an acceptable source file.
  - Lay out text in a single-column format.
  - Remove any strikethrough and underlined text from your manuscript, unless it has scientific significance related to your article.
  - Use spell-check and grammar-check functions to avoid errors.

We advise you to read our Step-by-step guide to publishing with Elsevier.

#### Title page

You are required to include the following details in the title page information:

- Article title. Article titles should be concise and informative. Please avoid abbreviations and formulae, where possible, unless they are established and widely understood, e.g., DNA).
- Author names. Provide the given name(s) and family name(s) of each author. The order of authors should match the order in the submission system. Carefully check that all names are accurately spelled. If needed, you can add your name between parentheses in your own script after the English transliteration.
- Affiliations. Add affiliation addresses, referring to where the work was carried out, below the author names. Indicate affiliations using a lower-case superscript letter immediately after the author's name and in front of the corresponding address. Ensure that you provide the full postal address of each affiliation, including the country name and, if available, the email address of each author.

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#### Abstract

You are required to provide a concise and factual abstract which does not exceed 250 words. The abstract should briefly state the purpose of your research, principal results and major conclusions. Some guidelines:

- Abstracts must be able to stand alone as abstracts are often presented separately from the article.
  - Avoid references. If any are essential to include, ensure that you cite the author(s) and
- year(s).

Avoid non-standard or uncommon abbreviations. If any are essential to include, ensure they are defined within your abstract at first mention.

#### **Keywords**

You are required to provide 1 to 7 keywords for indexing purposes. Keywords should be written in English. Please try to avoid keywords consisting of multiple words (using "and" or "of").

We recommend that you only use abbreviations in keywords if they are firmly established in the field.

# **Highlights**

You are required to provide article highlights at submission.

Highlights are a short collection of bullet points that should capture the novel results of your research as well as any new methods used during your study. Highlights will help increase the discoverability of your article via search engines. Some guidelines:

- Submit highlights as a separate editable file in the online submission system with the word "highlights" included in the file name.
- Highlights should consist of 3 to 5 bullet points, each a maximum of 85 characters, including spaces.

We encourage you to view example article highlights and read about the benefits of their inclusion.

#### **Graphical abstract**

You are encouraged to provide a graphical abstract at submission.

The graphical abstract should summarize the contents of your article in a concise, pictorial form which is designed to capture the attention of a wide readership. A graphical abstract will help draw more attention to your online article and support readers in digesting your research. Some guidelines:

- Submit your graphical abstract as a separate file in the online submission system.
- Ensure the image is a minimum of  $531 \times 1328$  pixels (h x w) or proportionally more and is readable at a size of  $5 \times 13$  cm using a regular screen resolution of 96 dpi.
- Our preferred file types for graphical abstracts are TIFF, EPS, PDF or MS Office files. We encourage you to view example graphical abstracts and read about the benefits of including them.

#### **Tables**

Tables must be submitted as editable text, not as images. Some guidelines:

- Place tables next to the relevant text or on a separate page(s) at the end of your article.
- Cite all tables in the manuscript text.
  - Number tables consecutively according to their appearance in the text.
- Please provide captions along with the tables.
   Place any table notes below the table body.
- Avoid vertical rules and shading within table cells.
- We recommend that you use tables sparingly, ensuring that any data presented in tables is not duplicating results described elsewhere in the article.
- Figures, images and artwork

Figures, images, artwork, diagrams and other graphical media must be supplied as separate files along with the manuscript. We recommend that you read our detailed artwork and media instructions. Some excerpts:

When submitting artwork:

- Cite all images in the manuscript text.
- Number images according to the sequence they appear within your article.
   Submit each image as a separate file using a logical naming convention for your files (for
- example, Figure 1, Figure 2 etc).
  - Please provide captions for all figures, images, and artwork.
- Text graphics may be embedded in the text at the appropriate position. If you are
- working with LaTeX, text graphics may also be embedded in the file.

#### **Artwork formats**

When your artwork is finalized, "save as" or convert your electronic artwork to the formats listed below taking into account the given resolution requirements for line drawings, halftones, and line/halftone combinations:

Vector drawings: Save as EPS or PDF files embedding the font or saving the text as "graphics."

Color or grayscale photographs (halftones): Save as TIFF, JPG or PNG files using a minimum of 300 dpi (for single column: min.

1063 pixels, full page width: 2244 pixels).

- Bitmapped line drawings: Save as TIFF, JPG or PNG files using a minimum of 1000 dpi (for single column: min. 3543 pixels, full page width: 7480 pixels).
- Combinations bitmapped line/halftones (color or grayscale): Save as TIFF, JPG or PNG files using a minimum of 500 dpi (for single column: min. 1772 pixels, full page width: 3740 pixels).

Please do not submit:

• files that are too low in resolution (for example, files optimized for screen use such as GIF, BMP, PICT or WPG files).

disproportionally large images compared to font size, as text may become unreadable.

# Figure captions

All images must have a caption. A caption should consist of a brief title (not displayed on the figure itself) and a description of the image. We advise you to keep the amount of text in any image to a minimum, though any symbols and abbreviations used should be explained. Provide captions in a separate file.

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If you submit usable color figures with your accepted article, we will ensure that they appear in color online.

Please ensure that color images are accessible to all, including those with impaired color vision. Learn more about color and web accessibility.

For articles appearing in print, you will be sent information on costs to reproduce color in the printed version, after your accepted article has been sent to production. At this stage, please indicate if your preference is to have color only in the online version of your article or also in the printed version.

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# Supplementary material

We encourage the use of supplementary materials such as applications, images and sound clips to enhance research. Some guidelines:

- Supplementary material should be accurate and relevant to the research.
- Cite all supplementary files in the manuscript text.

  Submit supplementary materials at the same time as your article. Be aware that all
- supplementary materials provided will appear online in the exact same file type as received. These files will not be formatted or typeset by the production team.

- Include a concise, descriptive caption for each supplementary file describing its content.
- Provide updated files if at any stage of the publication process you wish to make changes to submitted supplementary materials.
- Do not make annotations or corrections to a previous version of a supplementary file. Switch off the option to track changes in Microsoft Office files. If tracked changes are
- left on, they will appear in your published version.

#### Video

This journal accepts video material and animation sequences to support and enhance your scientific research. We encourage you to include links to video or animation files within articles. Some guidelines:

- When including video or animation file links within your article, refer to the video or animation content by adding a note in your text where the file should be placed.
- Clearly label files ensuring the given file name is directly related to the file content.
- Provide files in one of our recommended file formats. Files should be within our preferred maximum file size of 150 MB per file, 1 GB in total.
- Provide "stills" for each of your files. These will be used as standard icons to personalize the link to your video data. You can choose any frame from your video or animation or make a separate image.
- Provide text (for both the electronic and the print version) to be placed in the portions of your article that refer to the video content.

This is essential text, as video and animation files cannot be embedded in the print version of the journal.

We publish all video and animation files supplied in the electronic version of your article. For more detailed instructions, we recommend that you read our guidelines on submitting video content to be included in the body of an article.

# Research data

We are committed to supporting the storage of, access to and discovery of research data, and our research data policy sets out the principles guiding how we work with the research community to support a more efficient and transparent research process.

Research data refers to the results of observations or experimentation that validate research findings, which may also include software, code, models, algorithms, protocols, methods and other useful materials related to the project.

Please read our guidelines on sharing research data for more information on depositing, sharing and using research data and other relevant research materials.

For this journal, the following instructions from our research data guidelines apply.

# Option B: Research data deposit, citation and linking You are encouraged to:

- Deposit your research data in a relevant data repository.
- Cite and link to this dataset in your article.

  If this is not possible, make a statement explaining why research data cannot be shared.
- · Data statement

To foster transparency, you are encouraged to state the availability of any data at submission. Ensuring data is available may be a requirement of your funding body or institution. If your data is unavailable to access or unsuitable to post, you can state the reason why (e.g., your

research data includes sensitive or confidential information such as patient data) during the submission process. This statement will appear with your published article on ScienceDirect. Read more about the importance and benefits of providing a data statement.

# Data linking

Linking to the data underlying your work increases your exposure and may lead to new collaborations. It also provides readers with a better understanding of the described research. If your research data has been made available in a data repository there are a number of ways your article can be linked directly to the dataset:

- Provide a link to your dataset when prompted during the online submission process.
- For some data repositories, a repository banner will automatically appear next to your published article on ScienceDirect.
- You can also link relevant data or entities within the text of your article through the use of identifiers. Use the following format:

Database: 12345 (e.g. TAIR: AT1G01020; CCDC: 734053; PDB: 1XFN).

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#### **Article structure**

#### **Article sections**

Divide your manuscript into clearly defined sections covering all essential elements using headings.

#### Glossary

Please provide definitions of field-specific terms used in your article, in a separate list.

#### **Footnotes**

We advise you to use footnotes sparingly. If you include footnotes in your article, ensure that they are numbered consecutively.

You may use system features that automatically build footnotes into text. Alternatively, you can indicate the position of footnotes within the text and present them in a separate section at the end of your article.

# **Acknowledgements**

Include any individuals who provided you with help during your research, such as help with language, writing or proof reading, in the acknowledgements section. Acknowledgements should be placed in a separate section which appears directly before the reference list. Do not include acknowledgements on your title page, as a footnote to your title, or anywhere else in your article other than in the separate acknowledgements section.

Author contributions: CRediT

Corresponding authors are encouraged to acknowledge co-author contributions using CRediT (Contributor Roles Taxonomy) roles:

- Conceptualization
- Data curation
  - Formal analysis
- Funding acquisition
  - Investigation
- Methodology
- Project administration
  - Resources
- Software
- Supervision
  - Validation
- Visualization
  - Writing original draft
- Writing review and editing
- Not all CRediT roles will apply to every manuscript and some authors may contribute through multiple roles.
- We advise you to read more about CRediT and view an example of a CRediT author statement.
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- Authors must disclose any funding sources who provided financial support for the conduct of the research and/or preparation of the article. The role of sponsors, if any,
- should be declared in relation to the study design, collection, analysis and interpretation of data, writing of the report and decision to submit the article for publication. If funding sources had no such involvement this should be stated in your submission.

List funding sources in this standard way to facilitate compliance to funder's requirements: Funding: This work was supported by the National Institutes of Health [grant numbers xxxx, yyyy]; the Bill & Melinda Gates Foundation, Seattle, WA [grant number zzzz]; and the United States Institutes of Peace [grant number aaaa].

It is not necessary to include detailed descriptions on the program or type of grants, scholarships and awards. When funding is from a block grant or other resources available to a university, college, or other research institution, submit the name of the institute or organization that provided the funding.

If no funding has been provided for the research, it is recommended to include the following sentence:

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

#### **Appendices**

We ask you to use the following format for appendices:

- Identify individual appendices within your article using the format: A, B, etc.
- Give separate numbering to formulae and equations within appendices using formats such as Eq. (A.1), Eq. (A.2), etc. and in subsequent appendices, Eq. (B.1), Eq. (B. 2) etc. In a similar way, give separate numbering to tables and figures using formats such as Table A.1; Fig. A.1, etc.

## Journal specific information

Manuscripts should be prepared according to the guidelines set forth in the most recent publication manual of the American Psychological Association. Of note, section headings should not be numbered.

Manuscripts should ordinarily not exceed 50 pages, including references and tabular material. Exceptions may be made with prior approval of the Editor in Chief. Manuscript length can often be managed through the judicious use of appendices. In general the References section should be limited to citations actually discussed in the text. References to articles solely included in meta-analyses should be included in an appendix, which will appear in the on line version of the paper but not in the print copy. Similarly, extensive Tables describing study characteristics, containing material published elsewhere, or presenting formulas and other technical material should also be included in an appendix. Authors can direct readers to the appendices in appropriate places in the text.

It is authors' responsibility to ensure their reviews are comprehensive and as up to date as possible (at least to 3 months within date of submission) so the data are still current at the time of publication. Authors are referred to the PRISMA Guidelines

(http://www.prismastatement.org/) for guidance in conducting reviews and preparing manuscripts. Adherence to the Guidelines is not required, but is recommended to enhance quality of submissions and impact of published papers on the field.

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# **Chapter Three: Empirical Paper**

# Transitioning Into Parenthood: The Dyadic Experience of Co-Parents Supported by Community Perinatal Mental Health Teams

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# **Submission to Qualitative Research in Psychology (Appendix A)**

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Kirsty Pegg – planning and designing the study, co-developing participant materials, NHS ethics application, chief investigator, data collection (four interviews), data transcribing (four interviews), data analysis, writing the manuscript.

Jo Peterkin – planning and designing the study, project supervision, triangulation, providing comments on the manuscript.

Zoe Rawlings –planning and designing the study, project supervision, triangulation, providing comments on the manuscript.

Rebecca Samuels – planning and designing study, co-developing participant materials, NHS ethics application, data collection (four interviews), data transcribing (four interviews).

Jo Hodgekins – planning and designing the study, project supervision, triangulation, providing comments on the manuscript.

Eleanor Gardner – co-developing participant materials, triangulation of themes.

Lucy Johnson - co-developing participant materials, triangulation of themes.

The authors report there are no competing interests to declare.

#### **Abstract**

To date, literature has neglected the systemic and dyadic nature of the transition into parenthood alongside moderate to severe perinatal mental health difficulties. This study aimed to understand 'What is the couple's experience of the transition into parenthood in the context of the birthing person being a patient of the perinatal mental health service?', alongside understanding 'What changes in their relationship, and the challenges they face?'

Eight couples, currently supported by NHS Perinatal Mental Health services, with infants aged 0-12 months, were interviewed on their experiences of the transition into parenthood alongside the birthing person having a perinatal mental health difficulty.

Thematic discourse analysis explored the dyadic nature of the transition. Three discursive themes explained the transition: 'emotionally charged', 'transformative' and 'challenging'.

Four function and effect themes were also formed to summarise how the discursive themes were expressed: 'ways of expressing strong emotions', 'disconnection', 'protection of the self and other', and 'togetherness'.

This study provides the first narrative of this complex and multi-layered transition, highlighting the rewards and difficulties that can occur. Services need to consider these multidimensional factors when supporting families with perinatal mental health conditions. Future research should focus on gathering further experiences of parents from more diverse backgrounds.

#### Introduction

Becoming a parent involves a transition for the birthing person<sup>1</sup>, the parental couple and the wider family system (Lever Taylor et al., 2019). For some, this may be complicated by challenges such as perinatal mental health difficulties (PMHDs). Mental health difficulties are experienced by 10-20% of women and 10% of men during what is known as the perinatal period, defined as the time between falling pregnant and one year after the baby is born (Sambrook Smith et al., 2019; Singley & Edwards, 2015), although this is likely an underestimate.

The NHS Long Term Plan (NHS England, 2019), aims to increase access to services and psychological therapies for birthing people experiencing moderate to severe mental health difficulties; increase inclusion of partners through assessment; and increase family support (NHS England, 2019). However, barriers remain present, such as limited paternity/partner leave, societal expectations for partners to return to work and birthing people to remain home, disengaging with services until the point of crisis in an attempt to put their child before their own health and wellbeing, and non-birthing parents feeling neglected by services (Hodgson et al., 2021; Lever Taylor et al., 2019; Perera et al., 2014).

# **Individual Theories of Transitioning into Parenthood**

The transition into parenthood is complex, affecting both parents significantly. The Becoming a Mother Theory offers one possible framework for understanding the birthing person's transition involving: 1) Biological changes during pregnancy and preparation, 2) Meeting their baby, learning and physical recovery, 3) Creating a new normal, and 4) Finalising their identity (Mercer, 2004). However, it neglects to consider the cumulative impact of having a PMHD, other than acknowledging that those with depression may

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<sup>&</sup>lt;sup>1</sup> The author acknowledges that a variety of terminology and language is used by parents to define their identities, such as 'mother', 'father', 'birthing person', and 'non-birthing person'. The terms 'birthing' and 'non-birthing' people are used as author preferences, but at times, gendered terms are used to align solely with the cited literature.

experience less confidence in their parenting (Mercer, 2004). Perera et al. (2014) aimed to understand the experience and needs of those transitioning into parenthood alongside mental health difficulties by interviewing eight mothers with mental health difficulties and eleven staff members working in mental health settings in Australia. Using grounded theory, the authors highlight the transition was positive and symbolic, providing meaning to mothers' lives and an identity that went beyond their diagnosis. Mothers also experienced helpful support from partners, ex-partners and extended family. Challenges also existed, such as the additional stressors involved with parenting leading to mental health deterioration, and how the PMHD impacted parenting, such as medication side effects, needing to attend more appointments, and delusions relating to the infant. Guilt and reduced confidence in their ability to parent well were also commonplace, with mothers often subjugating their own needs over their child's. Involvement with child protection services was also common, which provoked anxiety and doubts about their ability to parent. However, this literature was not exclusive to mothers currently in the perinatal period, as children were included up to the age of 10 years, and also included the opinion of mental health professionals. Mothers were also excluded if they were currently acutely unwell. Thus, the narrative shared about transitioning into motherhood is likely to have been biased by experiences beyond the perinatal period, and those of the professionals.

Given the biopsychosocial impact of PMHDs on the birthing person, the transition for partners or non-birthing people may be different. Research suggests that fathers transitioned into parenthood through a process of fulfilling a commitment to being involved in parental responsibilities and being role models when their partner has a PMHD (Leahy-Warren et al., 2022). Ruffell et al. (2019) reviewed 20 articles to explore the experiences of fathers with a partner who had a PMHD using a thematic synthesis. The results were based on the experiences of 277 fathers from the UK, Canada, Australia, USA, Japan and Sweden.

Findings suggest that fatherhood can involve a change in the role of a partner and a new parent, negative emotions, various ways of coping and the need for support (Ruffell et al., 2019). There were contrasts in experiences, with some positives such as togetherness, growth, bonding with the baby and a strengthened relationship with their partner (Ruffell et al., 2019). Others felt burdened, unfulfilled, uncertain, depressed, helpless, shocked and confused, loss, and disconnection from their baby (Ruffell et al., 2019). Coping could be through emotional means, such as using substances or through distancing from their feelings, socially through connection with others outside of the family, and practically by problem-solving (Ruffell et al., 2019). Barriers to receiving support were also common, such as fearing judgment or stigma, a lack of understanding from others, or birthing people not wanting support (Ruffell et al., 2019).

# **Systemic Theories of Transitioning into Parenthood**

Family Systems Theory offers an alternative perspective by suggesting that an individual's mental health can be shaped by dysfunctional dynamics within the family unit (Goodman, 2004; Haefner, 2014). Research into familial dynamics has found that when one parent's coping is reduced, the other parent's coping increases (Garthus-Niegel et al., 2021), highlighting the importance of relational factors. For example, research suggests that fathers can buffer the stress of the transition, reducing maternal mental health symptoms (Antoniou et al., 2021) and providing support with the challenges that may arise (Alligood, 2017).

Literature highlights the importance of such supportive relationships within the perinatal period, and in particular for those with a PMHD, with some birthing people reportedly feeling well supported by their partners and wider family systems, leading to practical help such as looking after the child, psychological support, and understanding (Perera et al., 2014). Supportive relationships have also been evidenced to facilitate recovery in mothers experiencing postpartum psychosis (Wyatt et al., 2015). McKee et al. (2017)

surveyed 54 mothers and 7 fathers, exploring the important considerations for designing a parenting programme. Respondent themes of support that are important for transitioning into parenthood were wide in range, including friends, family, colleagues, healthcare professionals, social networking websites and even pets. For the mothers, spiritual support was also valued. Thus, systemic support outside of the couple play an important role in the transition.

Support in this time, however, is complex. A review of qualitative research examining the experience of mothers with a PMHD engaging in a peer support intervention found five papers from across England, Canada, Alberta and New Brunswick, and Finland, documenting the experiences of 95 mothers. The results suggest that when mothers met another parent experiencing similar difficulties, they felt connection and validation (Jones et al., 2014). Yet, for others, there was a sense of feeling different or a failure, resulting from social comparison (Jones et al., 2014). Similarly, a thematic synthesis of 23 papers exploring the support needs of fathers in the perinatal period found that there is a desire to be supportive of their significant other, but they can feel unsupported and unprepared to do so (Leahy-Warren et al., 2022). This is an important consideration given that it is often partners or close family members who may be the first to notice a deterioration in the mother's mental health (Darwin et al., 2021; Wyatt et al., 2015). The wider influence that broader health professionals and policy have on the family may also have a systemic influence (Leahy-Warren et al., 2022). Together, this highlights the importance of understanding how the couple experiences and discusses this transition and the use of support between each other.

An additional consideration is that relationships, including marriages, may break down due to the transition of a new baby entering the family, concurrent with an experience of PMHDs, resulting in the whole family unit struggling to cope (Beestin et al., 2014; Lever Taylor et al., 2019). When the birthing person experiences mental health difficulties, partners

are exposed to not only navigating their own transition but also observing their partner's transition in the context of deteriorating mental health. Beestin et al. (2014) interviewed fourteen fathers who had been in a relationship with a birthing person who had postnatal depression. They expressed a sense of detachment as a couple, and a need to unexpectedly fulfil two parenting roles, which had been brought on by the PMHD. There was also a sense of pain experienced by some who felt sometimes excluded from the interactions between mother and baby, whereas for others, they were brought closer to their baby (Beestin et al., 2014). However, again, this study included parents outside of the perinatal period.

Additionally, Goodman (2004) reviewed literature on postpartum depression in fathers and found that there was a positive correlation between maternal postpartum depression and paternal postpartum depression. Thus, highlighting the importance of considering the couple as a system as opposed to individual parts.

# **Dyadic Experiences**

An identified area of future research has been to explore the dyadic (partner-partner) or triadic (partner-baby-partner) experience, which moves away from the traditional approach of focusing on the birthing person and baby (Garthus-Niegel et al., 2021). Thus, being able to account for the wider experiences and influences that experiencing PMHDs can have. If research were to explore how couples articulate and make sense of that transition, then there may be implications for how services can support the family.

Wyatt et al. (2015) explored the dyadic experience of seven couples with a mother diagnosed with perinatal psychosis using Interpretative Phenomenological Analysis (IPA). Results suggested that the couples shared both positive and negative experiences. On the one hand, relationships were threatened due to a change in the mother's normal self, and mothers were often left feeling invalidated or isolated by their partners, with the partner often being responsible for recognising the mental health crisis. Couples also described feeling a sense of

guilt and fear of letting the other person down, with mothers fearing abandonment. On the other hand, relationships were shown to have shifted positively with increased trust, respect for one another, and a realisation of their relationship's importance. This goes some way to providing information on couples' experiences and how this could be incorporated into systemic therapeutic interventions. However, the sample included only one couple from NHS teams and did not focus on other diagnoses.

Research by Attard et al. (2022) also interviewed six primipara heterosexual couples in the perinatal period, who identified with having a traumatic birth, to understand their experiences and their journey of recovery. Resulting themes highlight the complexity of birth trauma, demonstrating a sense of needing validation and systemic difficulties, as well as the lasting impact trauma can have. They emphasised the sheer importance of the fathers who provided validation, within a system (e.g. of wider social support, medical settings and professionals) that was sometimes invalidating, not tailored to individual needs, and retraumatising. Additionally, seeking support from each other improved emotional responsivity for some, but had a detrimental impact on the relationship for others. For others, accessing support, such as through birth debriefs or therapy, parents were able to reconcile their sense of self. Yet again, the participants were not required to have a PMHD diagnosis (e.g. of PTSD) and did not need to be engaging with a Perinatal Mental Health Team (PMHT). Thus, there is a large gap in the literature on the dyadic experiences of other PMHDs that are seen within the PMHTs.

Aside from the research by Wyatt et al. (2015), Attard et al. (2022) and Lever Taylor et al. (2019), there is a gap in the research exploring the transitional experience of the couple dyad. Previous research has mainly explored the individual perspective of one of the parents in the dyad. Additionally, participants often experience mild or severe mental health difficulties, focusing on birthing people under the care of primary care services or mother and

baby units, missing or not mentioning those who experience moderate-severe PMHDs, who may be supported by secondary care level services (Ruffell et al., 2019). Participants are also often individuals who identify as married, cisgender and heterosexual, leading to a bias toward the perspective of either the mother or the father (Philpott et al., 2017). Therefore, to address this gap, the current study aims to conduct dyadic interviews with couples where the birthing person is being supported under PMHTs to illuminate how a couple navigates and shares their experience of transitioning into parenthood. This information may then interrelate with the recommendations given in the NHS Long Term Plan (NHS England, 2019), illuminating how couples transition into parenthood whilst being supported by an NHS service.

# **Research Question**

The primary research question is 'What is the couple's experience of the transition into parenthood in the context of the birthing person being a patient of the perinatal mental health service?'. Sub-questions are as follows: 'What changes, if at all, in the relationship as people transition into parenthood in the context of perinatal mental health difficulties?' and 'What are the challenges or hurdles in transitioning into parenthood in the context of perinatal mental health difficulties?' This will be explored using multiple NHS sites.

# Method

#### Design

A qualitative phenomenological approach was used to understand the couple's experiences of their transition into parenthood. Semi-structured interviewing was used in a dyadic interview to explore this in detail. As with the research by Wyatt et al. (2015) and Attard et al. (2022), our research question is focused on a relational experience of a dyad rather than one perspective. Dyadic interviewing allows for in-depth narrative and relational meaning-making to come forth (Morgan et al., 2013). Dyadic interviewing allows for

similarities and differences to be shared and joint narratives to be formed within the interviews (Morgan, 2016; Wyatt et al., 2015). Researchers attempted to gain equal amounts of insights from participants, given that dyadic interviewing may result in one participant talking more dominantly than the other (Morgan, 2016).

#### **Ethical Considerations**

This research was approved by the Cambridge East Research Ethics Committee (24/EE/0063, IRAS ID: 333583). In introducing the study, both parties had to be interested, and could not proceed if only one member was willing to participate. Both the birthing person and their partner were required to consent to the interview, indicated by individual signed consent forms, verbal consent at the start of the interview, and continued consent throughout the interview. Both were aware that if one person were to withdraw, then the interview would be stopped and withdrawn. Participants could also withdraw up to two weeks post-interview. Every effort was taken to anonymise identifiable information, and all names were changed to pseudonyms. Participant information was kept confidential unless there were concerns about participant safety or the safety of others. Data management was maintained as per the General Data Protection Regulation (European Parliament and the Council of the European Union, 2016).

## **Participants**

Participants were a clinical, purposive sample of birthing people and their partner/coparent, recruited as a dyad from across two NHS sites. To examine dyadic shared experiences, birthing people and their partners or co-parents were only included if they were currently engaged in parenting activities. This could include couples that have romantically separated but continue to engage in co-parenting responsibilities. Inclusion criteria included birthing people accessing PMHTs, therefore expected to have a moderate to severe PMHD, who were in the postnatal period (infant aged 0-12 months). There was no exclusion criterion

linked to diagnosis. Participants did not have to be becoming parents for the first time, but the focus was on understanding the transition into parenthood in the context of being under the PMHT since the birth of the most recent baby.

Birthing people were recruited from multiple NHS PMHTs, which offer comprehensive multidisciplinary support to birthing people who are experiencing moderate to severe perinatal mental health difficulties or with pre-existing mental health conditions before pregnancy. Typically, support is offered until the infant is one year old, but in some cases, this can be extended to two years old.

Eight couples were recruited. This sample size is based on comparisons with other research on determining qualitative sample sizes for homogenous groups (Guest et al., 2006) and qualitative research using dyads (see Wyatt et al., 2015).

# **Materials**

KP, RS, and Patient and Public Involvement (PPI) members formed a topic guide to explore the dyadic experience of the transition into parenthood. Discussion with PPI members allowed us to ensure that inclusive and recovery-focused language was used. Ten open questions were used to help guide the interview, including topics such as the impact of PMHDs on the transition into parenthood, the hurdles they faced, and what changes they noticed in their relationship.

#### **Procedure**

Participants who met the inclusion criteria were introduced to the study by the PMHT multidisciplinary team (MDT) and provided with a flyer giving a lay summary of the research. Interested participants (birthing person and co-parent) could either a) provide clinicians verbal consent, recorded in their clinical notes, for their numbers or emails to be provided to the lead researchers, or b) contact the lead researchers using the emails on the flyers. Subsequently, researchers provided a detailed information sheet to both the birthing

person and co-parent, via post or email, and later discussed questions about the study via telephone. Participants interested in participating were each provided with consent forms and demographics information sheets via post or email. Each participant was required to complete their own consent form and demographic information sheet. Electronic completion and signatures were accepted. Demographic information collected included age, sexuality, ethnicity, number of children, age of youngest child, and type of relationship with the other participant. Consent forms and demographic sheets were returned to researchers before the interview and discussed in the preamble to the interview to check consent from both to proceed. Participants then completed a semi-structured dyadic interview either in person in their homes or online, conducted by KP or RS. These interviews were video recorded on Microsoft Teams and audio recorded on encrypted NHS mobiles. Afterwards, participants received a verbal and paper debrief, along with information on services for further support, such as Talking Therapies or Patient and Liaison Services (PALS). The consent, interview, and debrief lasted approximately 90 minutes. Recordings were saved on a secure UEA OneDrive account. Each participant received a £10 voucher as a thank you for taking part.

# Analysis

Discourse Analysis is an approach aligned with social constructivism, exploring the internal reality of a person's world through the examination of their discourse (Taylor & Ussher, 2001). Discourse analysis is concerned with the way that people construct their reality through the use of language and how they then convey this narrative (Starks & Brown Trinidad, 2007). Subsequently, shared meanings are created, and social roles and identities are formed (Gee, 2005; Starks & Brown Trinidad, 2007). Thus, a research question that has a relational component is well-matched to a discourse analysis approach.

An in-depth description of how to analyse interviews using discourse analysis can be found in the work of Potter and Wetherell (1987), which was further adapted into Thematic

Discourse Analysis (TDA) (Taylor & Ussher, 2001). TDA has been used with other research to understand how people talk about a variety of topics, such as sexual practices (Taylor & Ussher, 2001). Advice from Tkachuk et al. (2019) was also sought on how to adapt the TDA approach to account for the dyadic nature of the interviews.

#### **Results**

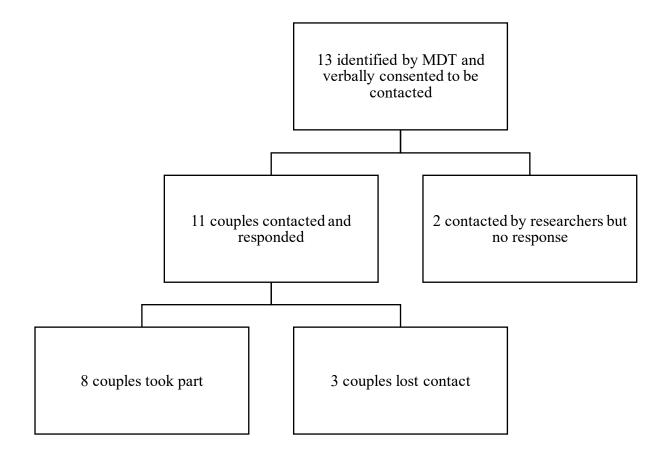
Recruitment occurred across two NHS England trusts, covering a large geographical area with sections of high deprivation and others of prosperity (gross median weekly pay £570 – £664). Eight couples were recruited and completed interviews between August 2024 and December 2024, with interview durations ranging from 56 minutes to 103 minutes. The average interview duration was 75 minutes. Five interviews were completed online, and three were completed in-person in their homes.

# **Participants**

Participants were recruited from multiple NHS sites across a large geographical area. Figure 1 highlights the process of recruitment and how many participants were lost at each stage of the study.

Figure 1.

Recruitment Flow Chart.



Eight couples, who all identified as being in a relationship, were interviewed. One couple was in a same-sex relationship, and seven couples were in an opposite-sex relationship. Most parents were White British, with two participants being of Other White Background. Most parents were aged 25-34 (n = 10), with the remaining aged 35-44 (n = 6). Participants were not required to explicitly share any diagnostic labels, but through their narrative, described having depression, anxiety, OCD, and PTSD, stating that for some this had been a chronic experience, but for others, it was more acute.

Four couples had one baby, and two couples had two children. One couple was a blended family, with two biological children between the parents, and three older

stepchildren. The age of the youngest child varied, with one aged 0-3 months, two aged 4-6 months, three aged 7-9 months, and one aged 10-12 months (see Table 1).

Table 1.Summary Information For Parents and Babies.

Couple	Baby pseudonym	Baby age	<b>Older siblings</b>	Older siblings	
One (B1 & P2)	Kieran (M)	7-9 months	None		
Two (P3 & B4)	Noah (M)	0-3 months	None		
Three (B5 & P6)	Isaac (M)	4-6 months	Yes		
Four (B7 & P8)	John (M)	10-12 months	None		
Five (B9 & P10)	Max (M)	4-6 months	Yes		
Six (B11 & P12)	Layla (F)	7-9 months	Yes		
Seven (B13 & P14)	Owen (M)	7-9 months	Yes		
Eight (B15 & P16)	Fred (M)	4-6 months	None		

*Note.* Gender of baby follows baby pseudonym, F = female, M = male. B = birthing person. P = partner.

# **Thematic Discourse Analysis**

When exploring the thematic discourse of the interviews for how couples discussed the transition into parenthood, challenges, and their relationship, three themes were formed with nine sub-themes. Table 2 outlines coverage of these themes across dyads.

 Table 2.

 Representation of How Many Participants Discussed Each Theme. (N.B. Shaded boxes denote that this theme was present in the interview.)

	Emotionally charged		Transformative				Challenging			
	Distressing	Positive despite			Open	With the assistance	Negative experiences with	Expected	Unexpected	
	emotions	challenges	Identity change	Skills development	communication	of others	others	difficulties	difficulties	
Couple 1										
(B1 & P2)										
Couple 2										
(P3 & B4)										
Couple 3										
(B5 & P6)										
Couple 4										
(B7 & P8)										
Couple 5										
(B9 & P10)										
Couple 6										
(B11 &										
P12)										
Couple 7										
(B13 &										
P14)										

Couple 8					
(B15 &					
P16)					

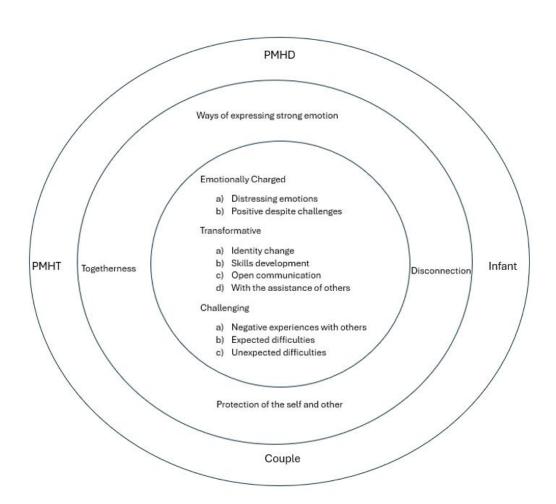
The function and effect were then explored, with four themes being established. This refers to the function of how things are said and what impact this has on the recipient or continuation of the conversation. Figure 2 shows how the themes are interrelated. As previous research has shown, the function and effect can often explain the discursive themes (Potter & Wetherell, 1987).

Figure 2

Visual Representation of TDA Themes (Inner Circle Representing Discursive Themes, and

Outer Circle Representing Function and Effect) Alongside the Contextual Elements (PMHD,

Infant, The Couple and the Support of the PMHT).



# **Emotionally Charged**

This theme covered couples' discussions on the strong emotions that they felt whilst transitioning into parenthood, alongside the PMHDs. This was often discussed using strong descriptive language, emphasised words, and pauses before and after discussing difficult subjects. Two subthemes were formed: 'distressing emotions' and 'positive despite challenges'

# Distressing Emotions

A variety of negative or distressing emotions were expressed by all couples as they transitioned into parenthood. This included expressions of anger, guilt, fear, apprehension, isolation, and loneliness. There was also evidence of couples resisting acknowledging the negative emotions associated with transitioning into parenthood.

For some, anxiety was present as part of the PMHD, which subsequently led to expectations that they would struggle postnatally. For P3 and B4, it meant that they were able to identify the time for support:

B4: I have OCD and I struggle. With anxiety anyway so I was <u>already</u> (emphasis) getting anxious about the thought of <u>struggling</u> (emphasis)... So I already got myself in that (...) ... mentality... it meant as soon as he was here and I was struggling (...) I was like on it straight away. To make sure I got <u>better</u> (emphasis). If that makes sense. I wasn't like in denial, I kinda knew what was happening.

Fear was present in both the antenatal and postnatal periods. B13 shared how they had been told they had lost their baby, and how this impacted their ability to even go to the toilet without feeling scared. P14 expressed terror, and both indicated that they had not felt supported:

B13: From being told, I've lost it. To being told it was actually there (...) Having <u>every</u> (emphasis). Little pain. Like I've refused to go to the toilet, didn't I? (looks to P14) P14: Oh, I was terrified. Every time I was absolutely terrified.

B13: I hated going to the toilet at home, even though I'd got him (gestures to P14)... But like it would have been <u>nice to have had</u> (emphasis) (...) That little extra support <u>around</u> (emphasis).

Some were able to verbalise that they had tried to maintain an illusion of well-being from their partner, who was experiencing perinatal mental health difficulties. P3 and B4 highlighted how this was the case:

P3: I felt like you know one of those stretchy toys, that where you stretch their arms (imitates pulling a 'toy with arms) and they keep stretching ... every day would stretch me that little bit more. And I was like, is there going to be a place where I like <u>ping</u> (emphasis, ping hand movement). But

B4: everyone around you, it knew you were struggling...But you weren't always willing to show that you were struggling (smiles at P3)... Because you would probably be brave for me.

P3: Yeah... I don't think I wanted to struggle. I wanted to hold everything together and be fine... So I do think my well-being went down there was quite a lot of times where I just cry on my way to work cry on my way home... but just sort of tried to... hold it together. I don't think I did that very well did I? (laughter, looks at B4)

The imagery used here of a stretchy toy strongly highlights how much they were trying to adapt to, but at the same time, feeling pulled beyond their means.

# Positive Despite Challenges

Practical and emotional positives were also present despite the acknowledged challenges of having mental health difficulties. This subtheme was discussed by all. For some, this was a clear expression of overt positivity, whereas for others, there was an indication of just how difficult things had been before, and the noticing of a subtle

improvement. B11 noted their ability to apply and successfully obtain housing, offering a safe space to raise their family:

B11: If, if I didn't have my depression and anxiety, I don't think. It would have been as easy for me, for us to get a council house. That sounds <u>really bad</u> (emphasis), but I think we would have been struggling for a couple months before we even tried to apply for a council house probably. I feel like we would have been having to look at renting somewhere that we can't afford. Yeah it's, it's so silly that you have to have mental health issues to be able to get that help.

The use of emphasis highlights where there appears to be an exacerbation of the need for a PMHD to receive adequate housing. Participants also reflected on how they had noticed a positive shift in themselves solely because of their PMHD. B1 described their experience as positive:

B1: I'm not sure, yeah, that if I hadn't had like a bit of a mental health crisis that I would be the same in the same place that I am today... In some ways it was a really, really tough start, but I feel like it turned into something like (moving motion with hand across body).

Better (intonation).

The linguistic use of "a bit" gives the sense of playing down the impact of the "crisis" to highlight the positive changes they experienced concurrently. There is a possible sense of the need to show that things have improved, if even just subtly, from the use of motion and the word "better".

# **Transformative**

Although there is a period of transformation for all new parents, the parents in the current study highlighted additional challenges and experiences due to the compounding effect of having a PMHD. Most couples expressed a sense of the transition being transformative despite the difficulties added by the PMHD. This theme was subdivided into

'identity change', 'skills development', 'open communication', and 'with the assistance of others'.

### Identity Change

Identity change was two-fold. It occurred both individually, in response to developing a PMHD or transitioning into parenthood. It also changed through the interaction between having a PMHD and transitioning into parenthood. Participants spoke about the change of identity both as individuals and as a couple. All but couple one expressed this subtheme. Others discussed what they had learned from each other. P6 spoke about this experience and how their partner's experience of mental health difficulties during this period had led to an increased insight into themselves, "Like about my mental health, you know I learned a lot of things about myself just because of what [B5] has been through" (P6). Thus, there appeared to be individual transitions through the process of learning about their partner's PMHD.

The speed at which the change in identity happens was also reflected on with some sharing that the physical changes associated with growing a baby, meant that there was a contrast in how a birthing parent's identity changes versus how their partner's identity changes, "In many ways being the pregnant one, it's (...) probably in some ways you have maybe more (emphasis) time to prepare because your body changes.... It's maybe a bit more real" (B1). Referring to themselves as the "pregnant one" highlights an identity that perhaps is removed from their usual persona as either a parent or person and instead shifts to being a biological identity or form. It should be remembered that for some, the experience of PMHD started after their baby was born, therefore, they may have experienced changes to their identity through the process of pregnancy, before receiving a PMHD diagnosis.

Others focused more widely on the meaning behind what their identity had meant as a couple, and that there are sudden but also longer transitions and changes:

P2: It's very sudden. One minute it's you know that the baby is not there and the next minute the baby is there. And when the baby is there, everything is different and everything should (emphasis) be different and needs to be different. And that. Role that you have with that child or they have with your wife and (...) you know and the family is a massive (emphasis). It's just a massive it's a massive change (...) It's not as. It's not as static as you think you know. It's it's incredibly quick and then,

B1: but you almost don't have time to like, you're not different and <u>you are</u> (emphasis) in many ways, but you're not like your whole life changes, but you don't change overnight.

P2: No,

B1: it's like a gradual thing.

This had occurred in the context of B1 realising they were struggling with their mental health in the first few weeks postnatally, but still other aspects of their identity were transitioning more slowly. The change appears more systemic with the use of words such as "whole life", with identities becoming greater in number, from being a wife, to now a wife and mother. Again, there was a notion of expecting change through the use of emphasis on the word "should". The repetition of the word "massive" also points to the enormity of the changes that the P2 felt.

# Skills Development

There were a variety of ways parents transitioned by acquiring skills that helped them cope with parenthood and mental health difficulties. This involved the concepts of learning on the job, developing from previous experiences, preparing and persevering. This subtheme was shared by all the couples.

B15 discussed how they had to learn how to meet the baby's needs alongside difficulties with feeding and their mental health:

B15: The transition has basically been that week (emphasis) on the ward where. Erm. I was sort of getting to grips with (...) um like. Errr getting up in the night to change, feed him ... he um couldn't breastfeed to begin with because he had, he had a tongue tie. And also because I had haemorrhaged my milk supply was nada, it just disappeared. So-P16: I mean, you did phenomenally (emphasis) well to get him back to being breastfed...
B15: But I think that period (emphasis) of (...) that was so hard (emphasis) that, like learning to breastfeed for both of us, and because at the same time, my, mental health was all over the place, but (emphasis) I was (sighed) (...) it sounds stupid but because I had the C-section when I des-desperately (emphasis) wanted a natural birth.

B15 emphasises the multiple adversities and how both transitioning into parenthood and having a PMHD were interrelated. For example, the desperation of wanting a different birth experience and the medical trauma of haemorrhaging, in addition to learning how to cope with their PMHD. The use of sighs, emphasis, and pauses seems to highlight a current sense of this emotion. Here, P16 also offers praise for how B15 coped "phenomenally" with these challenges, highlighting partner support.

Many of the participants also spoke about how the duration of their relationship had often been what had supported the transition and maintained the relationship because of how much they had learnt about each other previously:

B7: We were together for seven years, eight years before we.

P8: Yeah. And I-I knew, you know, when when [B7] started going through this, ah you could. It was easier for me to. Not maybe not <u>understand</u> (emphasis). But to know that something wasn't right or to. To offer encouragement or help, or. To know you better (looks to B7) than what you needed.

B7: Yeah (nods).

Here, both agreed that their transition and trajectory of the relationship would have likely been different if they had experienced the birth of their baby and the PMHD much earlier in their relationship. The key to this was the prior learning that they had taken from each other, and how an understanding of how to cope with mental health difficulties or challenges in the past had a protective impact now.

# **Open Communication**

Openly communicating with each other and offering support for each other's well-being was a topic that was discussed by all couples. For P3 and B4, openness about who was doing different jobs with the baby came from an argument late at night. Their resolution of being open with each other was key to being able to work out how to move forward with things in the future, by using a script that they could both agree to avoid feeling criticised:

P3:I remember, that one <a href="mailto:specific">specific</a> (emphasis) moment where. I had done my bit of the night shift and [B4's] come in and been like <a href="has this been done? Has that been done? Have you tried this? Have you tried that?">tried this? Have you tried that?</a> (said quickly with hand chopping action). And it felt to me like it was a criticism of like, you haven't done any of this stuff. And that's how it felt to me (smiling) ... so we just then sort of spoke about it. And like next time, could you use this set phrasing because that won't then get my back up. But yeah. Almost like having a debrief and being like it would help me in future because (...)

Others expressed how they felt supported. B13 highlighted how supportive their partner had been, but how hard it had been to reciprocate the support, given their mental health difficulties:

B13: With your help towards me. It's been brilliant (looks to P14) ... Like when I had that massive panic attack in the kitchen (...) And he brought me out of it. And he sat me on the sofa and he sat with me and he spoke to me. And (...) Got me to calm down and stuff (...) like he's been brilliant (emphasis).

P14: Aww that's nice of you to say, thank you...

## K: How's it been supporting [P14]?

B13: Hard ... 'Cause (...) I'm dealing with my own.

P14: Y-you have d-do what you can do.

B13: Yeah, I know that. But (emphasis)

P14: Yeah, I know I don't ask for anymore.

There are elements of sharing an awareness of each other's struggles by being able to break down the difficulties into more manageable chunks, and attempts being made to help each other that are appreciated. It is evident that reciprocating support is hard for B13 and they want to be able to do more, but reassurance is offered that this is enough.

## With the Assistance of Others

All couples expressed this subtheme. This is demonstrative of the severity of the difficulties families were experiencing with their mental health, as each person was receiving support from PMHTs and others, and how important it was that families received help. The extent of the wrap-around care offered by the perinatal team was discussed by B5 and P6:

B5: My care coordinator ... the nursery nurse... I'm in Talking Therapies, which helps immensely. So it's just all these three things they kind. Of connecting and there's always like, OK, this is not working so what can we offer you, how can we help...

P6: It is not just for you it's also for me which for me is a massive like (...) knowing that if something happens. It's not, I'm not on my own ... it's not just me (emphasis) to deal with that... so I think it's a massive relief for both of us, um.

B5: And it helps with parenting ... he always finds these sessions very useful as well. So it's, it's for both of us and like about how we parent.

There is positivity about the multiple elements of support and a reassurance that they are not facing difficulties alone. There is also the idea that it has helped improve both the

PMHD and parenting within the couple, showing the interrelation between these two factors. For some, this offered the ability to have a person who could offer their own experience:

B13: Really got on with her so <u>I didn't want it to end</u> (emphasis)... It's like I've got [P14] every night... And I've occasionally got like the odd message to like Janet or Kate [friends]... But it was just nice to have. <u>An in-person</u> (emphasis). Adult conversation. Because it weren't always about how I was feeling or. Like how Owen was doing or anything. It was just... Life in general... because the Peer Support Workers <u>are</u> (emphasis) (...) people that have <u>been through it.</u> (emphasis)... So they've got personal experiences of it... And it was just <u>nice</u> (emphasis) being able to talk to <u>somebody like that</u> (emphasis).

Here, having a staff member with lived experience was valued as an additional layer of understanding. The way that the support was offered was also important, with the staff member seeing the family in person rather than by telephone or virtually, and being able to talk about any topic as opposed to solely discussing PMHD or parenting.

# Challenging

The transition into parenthood alongside a PMHD was referred to as challenging. This theme included 'negative experiences with others', 'expected difficulties', and 'unexpected difficulties'.

### Negative Experiences with Others

Negative experiences with other people, including friends, family, and healthcare professionals, were experienced by six out of eight couples. For P3, there was a dilemma of wanting support from others, but receiving opinions that did not seem to understand the full extent or seriousness of their partner's PMHD, as evidenced in the tone of their imitation. There was also a consideration of how much is appropriate to share:

P3: One thing is like knowing (...) (weighing signal with hands) Sort of, who to open up and other people's like...Opinions and perceptions of mental health like your mum was

sort of like "everyone feels a bit sad" (jolly voice) and we had to have that conversation. It it's not just a bit sad it's more than that (...) But also. I don't want to over share (...) something that you're feeling if you're not comfortable with other people knowing (emphasis) that ... Because it's not my experience... although we're experiencing it as a couple.

Others reflected on the healthcare professionals and the hospitals themselves. B15 and P16 were admitted to the ward whilst their baby was in the Neonatal Intensive Care Unit (NICU). They described difficulties with the hospital system and the rules in place on the ward, with the non-birthing parent feeling excluded, causing unduly stress. This was in the context of being without their baby on the ward, whilst other parents had their infant with them:

P16: You were taken off, I didn't know where you were ... and then a nurse says, "well why are you here? Visiting hours are over." ... someone moved our stuff, you didn't know where it was... going into it, someone said to me, you know, "look, one thing I'll tell you about the experience. Um (...) is that (...) no one's going to care about you, the dad, no, no one cares like you're absolutely bottom of the priority list" and that's totally fine, completely understand why but ... it's a lot... I've spoken to other dads about it and that I think is quite a common, a common experience.

There is evidence that this experience is shared beyond P16, and that the norm is for non-birthing parents to be excluded, offering an example of how barriers or exclusions, assumed or otherwise, to receiving any support may start early. Similarly, non-birthing parents may put their partner's and baby's needs before themselves.

Couples also experienced challenges with healthcare professionals in the prenatal period, which also impacted their mental health. B7 outlined how they felt dehumanised during their treatment for gestational diabetes:

B7: I was vomiting everything anyway. So I was like I've I'm going to struggle even more now. But I think to have that and then to just be told <u>you've got to inject all this into your body and take all these pills</u>. <u>And (emphasis)</u> you know, I I found that incredibly overwhelming. And I felt like <u>no one</u> (emphasis) really tried to talk to me or I felt like it was (smiling). <u>That's it (emphasis)</u>...

P8: Yeah, there wasn't really a human aspect from it.

B7: There was no. Yeah, there was no human aspect.... I had a baby in my tummy but I felt like they forgot that I was human too... Erm. And then obviously (...) I had John and that was it (cutting end motion with hands). I never heard from them ever again (laughs)... And I found that quite trauma. I found it quite traumatising, really, that whole that whole process.

Perinatal medical difficulties led to distress and worsening mental health. Also, an abrupt and cutting ending was described as "traumatising", highlighting the lack of care B7 felt and the importance of endings.

# **Expected Difficulties**

Seven of eight couples experienced this subtheme. For B11, being able to leave the house had been difficult before having children. It was something she expected to prove difficult, but was showing signs of this fear starting to improve:

B11: I had personally struggled to get out of the house. A lot. That is one thing, I've always struggled with it, but after birth it was a lot worse. I've managed to get out a bit more and you usually have Layla [infant] so I can take Lily [sibling] out because it is easier with Lily than it is with Layla... So I think it has, like my mental health, was affected for a while but (looks to P12)

P12: Yeah.

B11: But we managed to, I'm finally <u>somewhat</u> (emphasis) I say somewhat get better but able to (...) <u>kind of get out</u> (said tentatively) the house a little bit more. (laughing) I say kind of (laughs)

Although this difficulty was pre-empted, it remained unresolved as evidenced in the tentative tone and use "kind of". It may be that the laughter also highlights how B11 was not getting out as much as they would have desired, or that this was in fact very limited.

Similarly, this required their partner to take their other child, highlighting again the interrelation between their PMHD and a need to juggle multiple children.

B1 had experienced longstanding difficulties with their mental health and had anticipated that they were likely to develop perinatal mental health difficulties. However, they reflected on how the PMHD had been more debilitating than expected:

B1: It was always in the back of my mind ... I would be like a candidate, I guess for like, you know, postpartum depression or anxiety... I realised that I was struggling (...) I didn't have the capacity to actually deal with it (laughing). I guess in the past that's like the only thing that you have to deal with... I kind of know what I need to do ... take some time out... get some support ... make sure I'm well rested ... do some exercise and you're just not capable of doing those things when you've just had a baby (...) ... I wasn't. Prepared for how. Erm (...) Almost like incapacitated I would be I guess. That when you're, like healing and yeah, your life has completely changed and you have to keep the baby alive (emphasis).

Here, there was a cumulative effect of pre-existing mental health difficulties plus becoming a parent, which had led to further mental health deterioration. The description of being "incapacitated" emphasises just how hard this transition was, even though the mental health difficulty was not a new component, and that their previous coping strategies were no longer adequate.

## **Unexpected Difficulties**

All couples experienced this subtheme, which referred to surprises about how difficult the transition was with the addition of a PMHD. P8 and B9 had an awareness of the challenges of parenthood, but were surprised by how much harder this seemed with the addition of a PMHD:

B7: Everyone say it's like it's the <u>hardest</u> (emphasis) thing you'll ever do, but it's like the <u>best</u> (emphasis) thing you'll ever do, it's that it's definitely, it's just, I guess, the diff- the level of <u>extreme</u> (emphasis, eyes widen and chuckles)... It's erm (grins). Yeah, I mean, I certainly didn't think it was going to be. I knew it wasn't going to be easy (shrugs). But I had no idea what's going to be (shakes head). I had no idea (puts hand to chest) I was going to be so affected by. It. By it all... You can't prepare yourself for that (shakes head). P8: (shaking head).

It is possible that the information they had been told had been regarding the transition into parenthood, but had not included how this differs when someone has a PMHD. Similarly, there is an element of surprise for some people who develop a PMHD but have maybe not had mental health problems before, which is something they are therefore unprepared for. For some, giving birth was particularly difficult and negatively impacted the birthing person's mental health, especially when having a caesarean section. B15 reflected on how they felt that they had not given birth for this reason:

P16: It was something that was done to you ... Whereas I think if you had that experience of a vaginal birth (makes sequential hand gesture) ... I think that (sigh), it's a sort of symbolic thing (brings hand close to B15), I think-

B15: Yeah... Yeah because it was sort of a rush and (picks nails)-

P16: Something that I think perhaps might have felt like it was inflicted upon you.

B15: Yeah and also inflicted early (emphasis) um (...)

The use of the word "inflicted" almost has a sense of violence upon someone passive.

The addition that this was "early" highlights how they felt unprepared for this intervention. It was evident from this interview, this had been a significant factor in the deterioration of mental health.

#### **Relational Function and Effect of Discourse**

An additional exploration of the function and effect of the discourse was completed. These factors emphasise the function, and how things are said, and what impact they have on the receiver. These themes are very much interrelated with the above discursive themes, but allow for further understanding of how couples discuss and make sense of this topic. Four themes were found: 'disconnection', 'protection of the self and other', 'togetherness', and 'ways of expressing strong emotions'.

#### Disconnection

This theme shows moments where the couple has demonstrated a sense of disconnect within their discourse. We are clear that this theme does not necessarily represent discord in the relationship, but rather a disconnect within the moment. This included times when the sharing of emotional distress resulted in practical responses rather than an attempt to connect with an emotional response; where confrontation with each other has happened; or when there seems to have been a projection of one's distress onto the other.

Some openly shared elements of noticing a disconnection, such as P14 who was clear in not having an awareness of how much their partner had been struggling:

P14: I was naive enough to think when Owen was born, we'd just get on with life. I didn't anticipate (...) how much it how badly it affected you. And I don't think I even <u>noticed</u> (emphasis) until the first couple of months (...) ... but again, that was more or less you telling me that what was going on so.

B13: Ah-hmm (nodding)

The use of long pauses may indicate an element of thoughtfulness or surfacing emotion, noticing how disconnected they had been from their partner during the difficulties they were facing in their PMHD.

For B4, there was a sense of defensiveness and quick challenge of opinion to quickly defend their ability to be open to different opinions:

P3: Yeah, I think I'll probably just tell you. And you're like, well, that's not going to work for us because of this or (...)

B4: What? I'm still open to things (smiling)

P3: Yeah no definitely

B4: but. Yeah. I dunno.

P3: You're quite good at

B4: I like to hear some of the research you've heard without me having to put the effort in.

# Protection of the Self and Other

This theme encompasses a sense of the fragility of the person with a mental health difficulty, using sarcasm and minimising as a defence mechanism, and thinking things through sequentially to avoid connection to emotion.

P8 emphasised the fragility of their partner, highlighting the severity of the difficulties that they had experienced:

P8: I-It's kind of greater emphasis from me to make sure Ava is OK because because you weren't (looks to B7), if you know what I mean. Th-things have changed slightly. You know, there's new scenarios, new triggers, new things to be wary of (looks to B7) and. You know, you know it's. I need to be there as much as possible. I feel. And yeah, there's this kind of the things you've went through kind of made me realise all the different erm ways it can be affected (looks at B7), different things that play on your mind now and you know

being there to help, it's certainly kind of increased and become a greater focus for me. Erm

I feel since it started.

B7: (nodding).

Sarcasm was also used in a way that seemed to minimise disagreements during the

interview. Given that the nature of the interview was possibly emotionally charged, it would

make sense that participants would try to use linguistic strategies as a protective function to

avoid emotional overwhelm or direct criticism. For example:

P6: I think the question is how do we not strangle each other?

B5: Yeah how do we not strangle each other? Literally. Um. I think what really helps is

that we had ,we've gone through so much together. We've been together for, it's going to

be twelve years in January? Yeah so a long time and it will sound like. Cheesy. But I do

feel that's its very helpful to have that foundation before you have kids.

Here, the intensity of the word "strangle" makes light of perhaps how difficult or

emotive it can be to cope with the transition into parenthood alongside a PMHD.

**Togetherness** 

Couples also used a discourse that represented connection, agreement, and respect for

each other. Often, this could be seen in the way that participants spoke in sync, repeating

some of the same words and adjectives to describe how things were:

B1: We're very open with each other like we are able to talk about. Erm.

P2: A lot of stuff

B1: A lot of stuff, even when it's like

P2: difficult

B1: difficult (emphasis) and.

P2: Sorry I'll wait for you

B1: You know. Yeah, I guess we're able to have difficult conversations and be honest about how we're feeling and. Erm (...) And it works both way.

The use of emphasis and repetition highlights how aware of each other B1 and P2 are. Imagery was also used to show a sense of connection as it provided a means of mentalising the other. P6 used the metaphor of being an "angel" which helped to highlight the sense of connection and support:

B5: We also know that, it's temporary.

P6: Yeah I think that's a big thing, like, we always approach it like whatever comes in our way. We always say like, this is just a phase. You know, this is just and we help each other to just believe that (laughs gently) even though sometimes it was not true... I see it as like you have like an angel and a devil on the shoulder, we try to be the angel on each other's shoulder. Like it's alright, its gonna pass, its gonna go. Um, I don't think we have anything specific. It's not like we have a technique or we have like something that we use.

Interestingly, P6 does not acknowledge this as a technique or skill, yet highlights the ability to mentalise the other person's mental wellbeing throughout this period.

## Ways of Expressing Strong Emotions

This theme summarised how strong emotions such as disbelief, relentlessness, and overwhelm were communicated. It also included how couples would conclude with a positive remark if they had expressed a negative remark.

P3 reflected on the relentlessness of attending to the baby and understanding their needs. The use of emphasis on the "hour" highlights the disbelief at the time needed to sit their baby up between feeds:

P3: I always thought. Maybe naively, like babies fed, slept, nappy change and it was like that cycle and it would all work... Like that. But then for him, it was like no he needs to

be fed. Then you need to sit him up for 20 minutes, 30 minutes, an <u>hour</u> (emphasis) sometimes. And when you eventually put him back to sleep. He has a bit of sleep. Then you're feeding again. So that cycle was really quite quick. I go, "oh, well, if they're feeding every three hours, we'll get 3 hours sleep" ... like understanding that that. Expectation didn't happen. Erm . And knowing every baby is different

B4: He was particularly difficult

The function here appears to be to emphasise how challenging sleep difficulties were for this family, which came as a surprise, and the sheer impact this had on their experience.

Throughout the interviews, there was a sense that families did not want to overly express their problems without acknowledging the positives. The hypothesis for the function of this was to protect the self from overwhelming emotions, or perhaps because of societal expectations of needing to be positive about one's child, especially when talking to trainee psychologists. Often, when negatives were discussed, they were prefaced or followed up with something positive. However, we also acknowledge that both positives and negatives can also be representative of the truth. An example can be seen with B7 and P8, who expressed the hurdles and challenges that came from transitioning into parenthood when a mental health difficulty was also present, but alongside acknowledgements that they would not change their experience:

P8: It's definitely been a bumpy journey ... I think we've had some great moments and s-some. Difficult moments as well, but I wouldn't change any of it at all. ... it's changed my life and I think it's changed it for the better. So I'm I'm really grateful for him (grins) and B7 (looks to B7) (...) What you think? (laughs)

B7: ... I still feel I have sort of an internal battle going on within myself (motions with hands a back and forth)... Overall, I feel like it's been a really positive thing that's happened to us. You know, we, we, we love our son. We wanted (emphasis) to be parents.

... It's still a bit of a transition and ongoing. Transition from me <u>personally</u> (emphasis) trying to find. My feet. Again (emphasis)... I work with children, that's my background (...) Erm. You kind of feel like you're going to be OK. And then when you realise that it's not, it's it's quite. A. Erm. <u>Unsettling</u> (emphasis), er. Feeling, but you know. He's very loved and I wouldn't. I wouldn't change this for the world. It's something I obviously have to go through, but I wouldn't. I couldn't want to think of my life before John. I just think I wouldn't want to go back there.

This highlights how transitions can occur at different paces for both parents, with other factors impacting how this happens. For example, attitudes that working with children prior was going to be a protective factor, yet have not been enough to buffer against some of the challenges seems salient here. The acknowledgement that things have been both difficult and positive seems important for this couple, yet there is some divergence in the extent.

#### **Discussion**

To our knowledge, this is the first study exploring the dyadic lived experience of transitioning into parenthood alongside receiving support from the PMHT, the challenges couples face and how their relationship changes. The transition into parenthood alongside having a PMHD has been shown here to be emotionally charged, transformative, and challenging for the couple. Families were not only navigating the usual transitional challenges of how to be a parent, perhaps for the first time, but also how to navigate the experience of having a PMHD, which was interrelated and added a further layer of transition and complexity. Even if individuals had experienced mental health difficulties before, the addition of a new baby added increased challenges and shifted the relationship between the birthing person and their partner. For some, the couple's relationship became important to help support one another. For others, having a PMHD meant that there was a limited ability to support their partner when they were struggling themselves. Whereas for those with more

chronic mental health difficulties, the length and experience of each other's difficulties provided an advantage and meant that there was little change to the relationship, as they already had an awareness of how to support their partner.

The findings of the study highlight the added complications and burdens associated with having a PMHD, such as unexpected difficulties where things were much harder than they had been informed would be the case, or anticipating difficulties but not realising quite how incapacitated they would be as their previous coping skills were no longer adequate. Similarly, the findings evidenced how families navigate this, such as trying to remain positive and protecting each other, or trying to flex in their relationship to cope with the additional strain of the PMHD, and remain intact as a couple. How couples narrate on this topic is through linguistic elements that highlight disconnection, togetherness, ways of expressing strong emotions, and protection of the self and other. The added element of dyadic interviewing has provided a new way of understanding how couples make sense of their experiences through their language with each other and stresses the systemic influence of having a PMHD.

Much like previous reviews on parental transition (Mercer, 2004; Ruffell et al., 2019), families went through a variety of changes, as described in the 'transformative' theme, such as identity change. However, there were several contrasts whereby the transition was more challenging due to the added complexity of a PMHD and involved both individual identity changes and relational changes. Similar to previous reviews exploring the paternal experiences of transitioning into parenthood with a partner who has a PMHD (Ruffell et al., 2019), our research has demonstrated that there are elements of positives and negatives associated with the transition. Comparable to Wyatt et al. (2015) and Attard et al. (2022), this was extended to both parties of the couple and not unique to fathers. As Ruffell et al. (2019) suggested, the co-parent experienced challenges associated with the additional demands

placed on them of having a partner with a mental health difficulty. However, like other research (Perera et al., 2014; Wyatt et al., 2015) this was also associated with strong emotions, such as guilt, of the birthing person who was often acutely aware of this additional burden. Thus, difficulties were bidirectional and more complex than the transition into parenthood without a PMHD.

Similar to the research by Perera et al. (2014) there was frequent mention of birthing people attempting to put their child before their own needs. However, we found this sense of selflessness in both parents and extended to trying to put their partner before themselves, regardless of the consequences to themselves. Thus, mental health difficulties did not often take priority in comparison to the needs of the partner or baby. The relational discourse and tendency to try to protect oneself and others through the articulation of their experiences often meant that not only were parents describing the content of putting others first, but also using linguistic qualities, as outlined in the theme 'protection of the self and other', which further demonstrates this. Conversely, disconnection was also prevalent, showing the additional complexity of transitioning into parenthood alongside a PMHD and how this can also create distance within the couple. Unlike previous research (Lever Taylor et al., 2019), the couples researched here had intact relationships, referencing times where they had come close to relationship breakdown and when the whole family system had experienced tension and difficulties with coping.

Unlike the Becoming a Mother Theory (Mercer, 2004), which postulated that the transition and formation of a maternal identity happens by approximately four months postpartum in a somewhat linear fashion, our research has highlighted that the transition is more complex in those couples who have a PMHD. Although our research did not quantitatively assess the length of the transition, some couples referenced a time frame. Some stated a week, whereas for others the transition was an ongoing evolving experience

continuing for months. Nonetheless, our findings highlight the necessity and protective function of additional support, including the PMHT and other social support. As highlighted by parents who experienced birth trauma, it may be that the length of transition aligns with the recovery of symptoms or a new understanding of experiences (Attard et al., 2022). Future research may explore this further.

## Strengths of the Study

The use of dyadic TDA was beneficial as it allowed us to explore the relational components in this transitional period. Thus, future research using this approach will be beneficial. 'Positive despite challenges' is a prime example of how the function of words that parents use can emphasise difficulties and the positives. This reveals a protective function, where parents preface a negative with a positive to soften the impact of what was said or to protect themselves from vulnerability. Thus, the understanding of the experience that couples have with their transition is not solely based on what is said but on how it is said, which further impacts the relationship, as well as how they navigate and make sense of their experiences together.

There also appeared to be a therapeutic benefit for the couples completing the interviews. Informal feedback from the participants was that they had found participating helpful, as some of them had never discussed their experiences in such a way, and that respect for each other was more salient. There was also evidence of playfulness, endearment and an opportunity to reflect on what was working well, which they said they had not made time for recently.

Finally, following Johnson et al. (2020), every effort was made to ensure the high quality and rigour of the study. This included the refinement of the research questions, prolonged engagement with the MDT who were discussing the study with patients, the use of

triangulation with supervisors and PPI members, and also providing a variety of rich quotes to demonstrate themes.

#### Limitations

The aim here was not to provide generalisability but rather to offer dyadic accounts of the transition into parenthood alongside a PMHD. Despite this, it is important to raise some of the limitations that may pose additional questions. Akin to other research (Wyatt et al., 2015) our sample unintentionally only included couples rather than parents who were separated but co-parenting. Within this, several of the couples referred to the length of time that they had been together. This may have impacted the narrative of transitioning, as one might expect different rewards and challenges if couples were newly in a relationship, or had separated, as this would involve a dual transition of entering or leaving a relationship and becoming parents (Perera et al., 2014). Several participants referred to how different things would have been if they had gone through this experience earlier in the relationship, and the protective action the length of the relationship had on them.

Similarly, we were limited by the lack of knowledge on what PMHD the birthing person was diagnosed with. For example, there was no mention of psychotic experiences, leading us to believe that this experience was less prevalent in our sample. Future research would benefit from determining diagnostic labels as part of the demographic information to better understand the lived experiences of people with a PMHD, and to understand if there are differences across disorders. Similarly, the length of time participants were patients of the PMHT was unknown, as was the level of support provided. This may have unintentionally impacted results, particularly if participants were all longstanding users of the service. Furthermore, those who have had different experiences of the transition into parenthood alongside having a PMHD, and perhaps dropped out of the service, were not represented here. Their voices would be helpful as their transitions may have been considerably different.

It was also unfortunate that we could not recruit a more diverse sample that was more representative of the geographical areas sampled, particularly regarding ethnicity. Future research should aim to recruit families from a wider background, as it is known that different cultural backgrounds will likely have different discourses about PMHDs and the transition into parenthood (Leahy-Warren et al., 2022; Lever Taylor et al., 2019). These discourses must also be offered the same opportunity to be heard.

Aside from the limitations of the sample, interviewers being trainee clinical psychologists may have impacted the content and way in which information was shared. As argued by Starks and Brown Trinidad (2007), the analyst is important within discourse analysis, and should acknowledge their position. Thus, different expressions of emotion or language, depending on the participants' prior experiences with psychologists or other mental health practitioners, may have occurred. We were also aware of the risk of dyadic interviewing, where a dyadic interview becomes two individual interviews occurring concurrently (Tkachuk et al., 2019). Similarly, there may be things left unsaid (Wyatt et al., 2015). Through reflection on the included studies, there was one interview that was somewhat limited in its richness of dyadic interaction. Although every effort from the interviewer was made to increase the participants' dialogue with each other, it was less rich than the other dyadic interviews. Many reasons can be hypothesised to have influenced this, such as shame, embarrassment, differences in power, an inability to voice, and a desire for privacy. Future research may address this by offering dyadic interviews, as well as individual interviews.

## **Clinical Implications**

Unlike other research, we have used an exclusively clinical sample to show that there are complex experiences associated with the transition into parenthood interrelated with the experience of a PMHD, which should be considered in future planning of NHS services and

perinatal pathways. The dyadic nature of this research stresses the benefit of understanding the relational and systemic influences of how couples discuss and manage their transition into parenthood alongside having a PMHD in therapeutic interventions. Clinicians should be aware of the discourse used by families and the function and effect of what is said. For example, clinicians may be able to establish the function of how families talk to protect themselves or maintain the status quo, which may be a barrier to facilitating systemic change. Clinicians should also be aware and confident in managing group or systemic dynamics if dyadic or family sessions increase, as per the NHS long-term plan (NHS England, 2019). Similarly, families may emphasise or preface difficulties with positives. Experienced clinicians may notice this, whereas clinicians with less experience may find it harder to pick up on these subtleties and assume that couples are predominantly positive in their experience. Therefore, clinicians may need support with upskilling on their understanding of discourse, and families may need support to feel safe to share the difficulties they are experiencing together.

The findings also highlight that support from the PMHT is a crucial component in supporting the couple with the PMHD and allowing them to reduce the burden to not feel alone in coping with the PMHD and parenthood. However, services should be aware of the negative experiences families may have had with other professionals, which may impose a barrier to engagement in the PMHT. Here, families highlighted the importance of partners being offered some level of support, or at least insight into the care that was being received by the birthing person. This buffered against the burden of the PMHD on the non-birthing person. Likewise, the importance of endings was relevant, whereby some parents felt that there was an abrupt stop to treatment or care, which exacerbated their PMHD. Endings are particularly important for people with mental health difficulties as they offer a transitional signpost (Shaharabani Saidon et al., 2018). Families also praised the use of staff with lived

experiences of PMHD and how this increased a sense of understanding and positive regard, as well as a large MDT that can offer wrap-around support. Thus, supporting the role of the MDT and peer support workers who are increasingly being used within the NHS.

Furthermore, the quality, strength and length of the relationship may need to be considered as an additional component within their treatment, as well as understanding if the PMHD is new or chronic. Our sample expressed a sense of being able to adapt more flexibly to the PMHD and transition into parenthood when they had been together for many years or when the PMHD had been chronic, so they had an awareness of what strategies had worked or not in the past. Thus, there is an element of having already transitioned and adapted to coping with the mental health difficulties in a relationship. Couples where there have never been previous mental health difficulties, are in a new relationship, or families that are coparenting may require additional support in being able to mentalise the other person to support each other more effectively as it is possible they are still learning about each other and very new to the transition of what it is like to have a PMHD.

### **Future Research**

Using the same methodological and TDA approach would be beneficial in future research. Gathering additional demographic information would be helpful to build a greater understanding of the sample, including length of time in the relationship, diagnosis, the extent of the MDT involvement and time spent with the service. Greater efforts should be made to hear the dyadic experiences of parents transitioning through parenthood with a PMHD who are from more diverse backgrounds, paying particular attention to sexuality, ethnicity, disability, and relationship status. Similarly, additional focus should be on the diagnosis, paying close attention to severe and enduring PMHDs such as psychosis and eating disorders, as transitions may vary depending on the disorder. Finally, hearing from those who drop out

of perinatal services would be insightful, helping to understand further challenges, family dynamics, and attempting to reduce barriers to support.

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### **Appendix**

# Appendix A – Submission instructions

#### **Instructions for authors**

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# Appendix B – Transcription Guide

Code	Description
()	Extended pause.
	Omission of text.
<u>Underlined text</u> (emphasis)	Denotes that this text is emphasised or said in another tone.
P2 etc	Partner 2 etc.
B1 etc	Birthing person 1 etc.
K or R	Researcher KP or RS
(action)	Words in a bracket denote body language or action.
[text]	Information added for clarity.

# **Chapter Four: Additional Methodology and Results**

Word count: 2,199

This chapter aims to provide complementary information to the systematic literature review and empirical paper. Further information on the analysis chosen, rationales, and personal reflexivity offers additional methodological decisions and experiences.

# Additional Methodology - Systematic Literature Review

For clarity, the following defines the exact search strategy used within the systematic literature review.

# **Search Strategy**

When completing the systematic literature review, the following search terms were used:

- 1. Title (TI) (interventions or treatment or therapy or DBT or MBT or CFT or CBT or program\* or "acceptance and commitment therapy") or abstract (AB) (interventions or treatment or therapy or DBT or MBT or CFT or CBT or program\* or "acceptance and commitment therapy") AND
- 2. TI (perinatal or pregnan\* or prenatal or postpartum or antenatal) or AB (perinatal or pregnan\* or prenatal or postpartum or antenatal) AND
- 3. TI (bipolar or "manic depression" or psychosis or schizophrenia or "personality disorder\*" or "eating disorder\*" or anorexia or bulimia or "major depressive disorder") or AB (bipolar or "manic depression" or psychosis or schizophrenia or "personality disorder\*" or "eating disorder\*" or anorexia or bulimia or "major depressive disorder")
- 4. NOT all text (TX) ("animal studies" or rat or rats or animal or mouse)
- 5. NOT AB (pharmacological) or TI (pharmacological or electroconvulsive or clozapine or antidepressant\*)

'Psychosocial' was not used to ensure that broad interventions, including holistic therapy such as yoga, meditation, dance, etc. that may fall under the remit of psychosocial interventions were able to be included if present. Asterix shows truncation of terms.

# Additional Methodology – Empirical Paper

The following section provides additional information relevant to the empirical paper.

This includes how the project was managed, further details on the recruitment process, including reference to the relevant participant information, a rationale for the use of thematic discourse analysis (TDA), and personal reflexivity.

# **Division of Responsibilities**

The empirical study was completed as a joint project alongside RS (doctoral candidate). We each had unique thesis topics and aims, but used the same interview data. RS focused on the experience of dyadic coping. RS and I completed the NHS ethics form together, as well as the interview topic guide (Appendix A). All patient materials were cocreated (Appendix B, C, D, E & F). Participants were divided equally between KP and RS, for interviewing and the subsequent transcription.

#### **Discourse Analysis**

Discourse analysis is concerned with the way that people construct their reality through the use of language and how they then convey this narrative (Starks & Brown Trinidad, 2007). Choices about the words that a speaker uses are made, with each word choice having its own set of meanings and connotations (Machin & Mayr, 2012) that are mutually understood by the other (Starks & Brown Trinidad, 2007). Pragmatics, meaning situation or context, allows people to make meaning of words and sentences beyond their literal definition. Thus, the context in which someone is talking is particularly important. Information that is known is also useful, as it shapes what someone says and interprets. Subsequently, shared meanings are created and social roles and identities are formed (Gee,

2005; Starks & Brown Trinidad, 2007). Thus, a research question that has a relational component is well-matched to the discourse analysis approach.

The organisation of what is said is also of interest, creating connection or disconnection of topics and ideas (Gee, 2005). Similarly, discourse can inform us about the positioning of power and the relationship we have with others (Gee, 2005). For example, what is said first, in comparison to later, as well as who talks the most and the use of turntaking.

Here, the context is an interview between two parents and an interviewer. Discourse analysis intends to identify patterns of language use across participants, whilst also offering space for agreement and disagreement between participants (Potter & Wetherell, 1987). Some may share narratives that are congruent with their experience of perinatal mental health services, as they are aware that KP and RS are trainee psychologists. This is also a relevant consideration for the overall analysis, as the interviewer may impact the discourse (Starks & Brown Trinidad, 2007). Therefore, the content of what is shared could be similar to what they have previously discussed in similar circumstances (e.g. their psychology sessions, medical appointments, with others who have asked about their experiences), also known as 'intertextuality' (Gee, 2005).

Starks and Brown Trinidad (2007) suggest that for discourse analysis, case studies or several more are acceptable. Research using TDA specifically has variations in sample size, but small sample sizes are expected. A brief literature search showed that TDA can be used on as few as four pieces of data (Acosta, 2020) or five focus groups (Clarke, 2005). Individual interviews with inpatients used a sample of 7 people (Holmes et al., 2017). Otherwise, between 13 (Singer & Hunter, 1999) to 24 individual interviews (Taylor & Ussher, 2001), and in the higher range of 1752 internet posts (Botelle & Willott, 2020).

### **Ontological and Epistemological Position**

Ontology is concerned with whether reality can be examined or measured (Braun & Clarke, 2013). My stance is critical realism, which posits that reality can only be partially accessed because of the social or contextual influences that a person is subject to (Braun & Clarke, 2013). Critical realism also argues that several levels of reality can be accessed.

Epistemology refers to what is knowledge (Braun & Clarke, 2013). My stance fits with social constructivism, which argues that there is no single reality, and that people have different experiences based upon their environment, such as the historical and cultural context. Language is then used to convey this version of reality, fitting well with the approach of Discourse Analysis (McKinlay & McVittie, 2008).

### **Analysis**

The following analysis approach was used:

- 1. Recordings were transcribed verbatim using a naturalised approach (Azevedo et al., 2017). Microsoft Teams transcription software captured the majority of speech but was checked for accuracy and edited where needed. Given the dyadic nature of the interviews, additional information on how things were said, such as tone, emphasis and body language (see Tkachuk et al., 2019) were added from video recordings where possible (see Appendix F for details).
- 2. The transcription was read and re-read for familiarisation of the data.
- 3. Following Taylor and Ussher's process (2001, p. 297) "initial discursive themes" were identified, grouped, and compared for patterns and variability. That is, themes based on differences and similarities in content (Potter & Wetherell, 1987). NVivo software was used to organise codes and themes.
- 4. Transcripts were re-read, and recordings listened to, checking themes against them.

- 5. The "function and effect" of discourse was also explored (Taylor & Ussher, 2001, p. 297). That is, themes based on what linguistic characters are used, such as tone, emphasis, turn-taking and consequence (Potter & Wetherell, 1987).
- 6. Themes were reviewed through the process of triangulation with the research team (JH, JP & ZR) and PPI members, and compared to existing literature.
- 7. Similarities and differences were explored across themes, and themes were reviewed if needed.
- 8. Themes were defined.
- 9. Sections of interviews incorporating quotes from both participants were selected to show the dyadic nature of the themes, as per Tkachuk et al., (2019).

#### **Additional Results**

#### **Additional TDA Results**

Themes were triangulated with the supervisory team and PPI members. Additional results are presented in Appendix G to provide greater examples of the themes discussed.

### **Personal Reflexivity**

The use of personal reflexivity, including a reflective diary and reflective debriefs with RS and supervisors, was an important part of the process of the project conception and completion and should be used alongside discourse analysis (Ballinger, 2003). Here, I will discuss key reflections throughout the process of the empirical study.

# Study Conception and Completion

Recruiting patients accessing an NHS service was pivotal to this project, and thus, required NHS ethics. This was initially a daunting process, requiring a significant amount of pre-planning and preparation. During the panel interview, I felt confident in our research proposal, and it was positive to be able to showcase the effort we had put into forming the project.

Acting as a CI on a project with a doctorate colleague was also an interesting learning experience. Initially, I felt uncertain about being regarded in this role, as I was nervous about leading. However, it has been a helpful experience developing my research skills and leadership, all of which will be imperative in my career.

#### Results

As highlighted in previous literature (Taylor & Ussher, 2001), there is an active component to extrapolating discursive themes, which is likely to be influenced by factors such as the interview questions and the researcher's attitudes and beliefs. This was something that I tried to remember throughout the process of interviewing and analysing the data, trying to bracket off as much as possible to avoid biasing the results.

I quickly realised the depth required for TDA and the vastness of the data we had obtained, particularly due to the dyadic nature of the interviews. Initially overwhelming, I found myself starting to enjoy the process of coding and forming themes. I was cautious that the themes should not replicate the questions from the topic guide and instead offer insight into the experiences of the participants. This prompted me to also consider our discourse within these questions/topic guide. Specifically, how we had asked whether their mental health impacted the transition and whether this was unconsciously read as being directed too much towards the birthing person accessing the PMHT. This caused me to think about whether we had unintentionally biased the interview towards the birthing person, perhaps eliciting a further response of the partner's mental health being ignored or of lesser significance.

In hindsight, it would have been helpful to have gathered information about the mental health diagnoses of participants within the demographic information, which would have been aimed towards both the birthing person and the partner. Some participants alluded to what they were receiving treatment for, but not all. It would have been helpful to clarify if

terms such as "anxiety" and "traumatic" were being used to emphasise medical diagnoses of this nature, or if they were being employed to express emotional distress.

Throughout the process, I had also kept a reflective diary. This included personal reflections on the experience of interviewing participants, as well as reflections I had throughout debriefs with RS about the interviews I had not led. When listening to the interviews that RS had completed, I also reflected on how it felt hearing the information shared by participants, and any observations I had on watching the interviews. When completing the analysis, I would frequently look back at these reflections, which helped me remember things such as the effect certain conversations had on me as an interviewer, and also the resulting dynamics that I had noticed between participants. Some of this was noticed in body language changes, which were captured in the videos. However, there was sometimes also a felt change within the room that I noticed and felt was helpful 'data' for the 'function and effect' component of the analysis in particular.

#### Identity

A perinatal project was of particular interest to me because of a family history of perinatal mental health problems. My status as a mother was important to consider throughout the process. Often, I disclosed I was a mother early on in communications - when arranging interviews, participants were often busy and juggling appointments. As a single parent, I was able to resonate with these demands and felt it helped break the ice to share some semblance of being able to understand how busy life is with a young baby. This was particularly the case when trying to arrange a suitable interview time. Specifically, I felt that I could connect topics such as exhaustion from sleep deprivation, experiencing unhelpful advice, and concurrent health difficulties. As someone with neurodivergence, I could also empathise with those who disclosed their neurodivergence to me, and how much extra pressure this can add to your cognitive load whilst transitioning into parenthood. A colleague

had once referred to this as "PHD parenting" and I felt that this was accurate considering my own experiences, and that being discussed by the participants with neurodiversity.

On the other hand, sharing my status as a mother may have inadvertently impacted the content of the study. Having experienced motherhood first-hand, it is understandable that I would have attempted to understand participants through a lens of my own experiences. The additional clarifying questions used may have gone some way in addressing this. Despite trying my best to bracket off any assumptions, it is possible that some may have been made on the data, particularly when forming themes. The use of triangulation also helped identify any bias or assumptions. For families whom I did disclose to, I wonder how they may have felt knowing that I was a mother. I considered whether there may have been an element of increased trust or participants expecting or assuming that I may understand, thus resulting in less explanation of their experiences. Alternatively, participants may have made assumptions about my parenting and mental health experiences, particularly interviewing in a position of potential power (as a trainee clinical psychologist/a professional), and potentially reduced their disclosure due to fear of stigma from another parent or professional.

# **Chapter Five: Discussion and Critical Evaluation**

Word count: 2,946

This thesis aimed to 1) understand what interventions are offered for mothers with an SMI in the perinatal period, and 2) understand the dyadic experience of the transition into parenthood whilst receiving support from the PMHT. The following chapter will aim to summarise and critically appraise the research compared to previous perinatal literature. Finally, clinical implications will be considered, and future research opportunities will be discussed.

# **Summary of Findings**

The systematic literature review aimed to identify 1) What types of psychosocial interventions have been explored for use in the perinatal period for birthing parents with SMI? 2) How effective are psychosocial interventions in improving symptomatology and/or family functioning? 3) What, if any, recommendations can be made to perinatal services for treating people with SMI? The results were partially able to provide an answer to research questions 1 and 2, but were somewhat limited in providing an answer to research question 3.

The systematic literature review found fourteen articles describing psychosocial interventions offered to birthing people with an SMI in the perinatal period (Barnicot et al., 2022; Battle et al., 2023; Höflich et al., 2022; Kim et al., 2021; Krzeczkowski et al., 2021; Miklowitz et al., 2015; Moureau et al., 2023; Sadeh-Sharvit et al., 2016; Stein et al., 2006; Sved Williams et al., 2021, 2022; Tran et al., 2024; Van Ravesteyn et al., 2018; Wright et al., 2018, 2020). Variation was seen in the approaches used, including CBT, DBT, McMaster Family Therapy, video-feedback interactional treatment, VIPP-PMH, MBCT, and integrative approaches, as well as sessions being offered via individual, group and family therapy. The length of treatment also varied depending on the intervention type. Interventions were predominantly for those exclusively in the postpartum stage (Barnicot et al., 2022; Battle et

al., 2023; Höflich et al., 2022; Krzeczkowski et al., 2021; Moureau et al., 2023; Sadeh-Sharvit et al., 2016; Stein et al., 2006; Sved Williams et al., 2021, 2022; Tran et al., 2024; Wright et al., 2018, 2020).

Overall, interventions were used to treat MDD, bipolar disorder, personality disorder and eating disorders, as well as other interventions that were less prescriptive in terms of which SMI diagnosis was targeted. However, there were no interventions specifically offered for birthing people with perinatal psychosis, highlighting a substantial gap in the research. Interventions showing SMI improvement included MBCT for bipolar disorder, integrative therapy for eating disorders, McMaster Family Therapy and CBT for MDD, DBT for personality disorders, and integrative therapies for non-specific diagnosis (Battle et al., 2023; Höflich et al., 2022; Kim et al., 2021; Krzeczkowski et al., 2021; Miklowitz et al., 2015; Sadeh-Sharvit et al., 2016; Sved Williams et al., 2021, 2022; Wright et al., 2018). In some cases, elements of family functioning also improved with the use of integrative therapy for eating disorder and non-specific diagnosis, video-feedback interactional treatment for eating disorder, McMaster Family Therapy for MDD and DBT for personality disorder (Battle et al., 2023; Höflich et al., 2022; Kim et al., 2021; Sadeh-Sharvit et al., 2016; Stein et al., 2006; Sved Williams et al., 2021, 2022).

A key result of the systematic review was a scarcity of high-quality research studies to fully evaluate the impact of specific, or perinatally adapted, interventions. There was heterogeneity in the studies, including what interventions were being offered for which disorder and the outcome measures being used. There were also only three randomised controlled trials (Barnicot et al., 2022; Stein et al., 2006; Van Ravesteyn et al., 2018). Any effects in the remaining studies cannot fully be attributed to the intervention due to the lack of randomisation. Therefore, it was difficult to offer suggestions for clinical recommendations on treating people with SMI in the perinatal period.

Second, the empirical paper used dyadic interviewing of eight couples under the PMHT to answer: 'What is the couple's experience of the transition into parenthood in the context of the mother being a patient of the perinatal mental health service?' Sub-questions were: 'What changes, if at all, in the relationship as people transition into parenthood in the context of perinatal mental health difficulties?' and 'What are the challenges or hurdles in transitioning into parenthood in the context of perinatal mental health difficulties?'

Through the use of thematic discourse analysis (TDA) it was found that couples go through a complex and multi-layered transition when they become parents, with one of them having a PMHD and being supported by the PMHT, impacting them both individually and as a couple. These findings were divided into three themes and nine subthemes, which highlighted how the transition came with additional challenges and burdens and resulted in relationship changes via the process of transformation, due to the additional factor of a PMHD. Specifically, the findings suggest that the transition into parenthood alongside a PMHD is:

- 1) Emotionally charged
  - a. Distressing emotions
  - b. Positive despite challenges
- 2) Transformative
  - a. Identity change
  - b. Skills development
  - c. Open communication
  - d. With the assistance of others
- 3) Challenging
  - a. Negative experiences with others
  - b. Expected difficulties

### c. Unexpected difficulties

Couples discussed these discursive themes in a combination of ways, known as the 'function and effect', such as demonstrating togetherness, disconnection, protection of the self and other, and finally in manners that facilitated an expression of strong emotion. The results emphasised similarities to the literature, which states that the transition into parenthood alongside a PMHD can be mixed with positives and challenges (Ruffell et al., 2019) and come with additional strong emotions, such as guilt, relating to the additional burden that a PMHD can have on a family (Perera et al., 2014; Wyatt et al., 2015). Families also used complex ways to protect people within the family system, such as their relationship with their partner or their baby, and often put other people's needs before their own. This has previously been the case in birthing people (Perera et al., 2014), but undoubtedly the experience was more complex, with partners also evidencing selflessness.

To our knowledge, this was the first study to explore the couples' experiences of transitioning into parenthood whilst being a patient with the PMHT using dyadic TDA. The analytic approach itself was a helpful method, ensuring that the relational impact of these difficulties was brought to light. It further illuminated the importance of not only what is said, but how something is said, which could be an important consideration for clinicians working in this area.

These findings offer three original contributions. Firstly, providing an initial summary of the limited research that is currently published on the use of psychosocial interventions for perinatal patients with an SMI. This shines a light on the sheer lack of evidence available to guide clinical practice in PMHTs or MBUs. Secondly, offering an insight into the dyadic experiences of transitioning into parenthood alongside a PMHD, which had otherwise only been explored individually. Lastly, emphasising the beneficial use of dyadic TDA as an approach to explore these issues.

### **Clinical Implications**

Together, the systematic literature review and empirical paper have highlighted several clinical implications. Most importantly, the results of both studies have highlighted the essentialness of the PMHT and perinatal psychosocial interventions, as well as the complexity of the treatment needs of this population. Families have emphasised the critical importance of PMHTs in navigating their experiences of a PMHD and helping patients feel less burdened by the PMHD. Similarly, experiencing support from a well-resourced MDT and Peer Support Workers was invaluable and widely praised, allowing for wrap-around care that met the complex needs of families. Therefore, PMHTs and MBUs with an extensive MDT and Peer Support Workers must continue to be offered, funded and developed.

In addition to the funding of perinatal MDTs, the upskilling of staff is important. The findings of the systematic literature review discussed interventions used with moderate to severe SMI difficulties. This covered both those in the community and inpatient settings. People experiencing inpatient treatment may be admitted via a PMHT or discharged into the care of the PMHT. This adds to the rationale for providing patients with consistency in the psychosocial intervention that they are offered, particularly in transitional stages of their care. For example, where possible, continuing the same psychosocial intervention started in the inpatient setting into the community or vice versa. It is thought that this will assist in the orientation to the intervention model and hopefully improve clinical outcomes. Understandably, this relies on MDTs with a variety of intervention training or therapist type to ensure overlap between services. Where teams are smaller, staff may be required to undertake additional training for the interventions used in local services to ensure consistency.

Similarly, services working with people in any stage of the perinatal period should consider the experience that their offer of care can have on someone with a PMHD. We found

that some patients have had negative experiences with other services, which subsequently contributed to their PMHD. There are multiple implications of this. Firstly, clinicians and policymakers should consider the systemic impact that such experiences with a clinician or service can have on someone in the perinatal period. Thus, staff working in any way with someone in the perinatal period should have a basic awareness of the transition into parenthood, and ideally, how a PMHD can make this more complex. PMHD-specific training may target this need in wider medical teams that would see people in this period (e.g. midwives, obstetricians).

Secondly, increased psychological awareness within medical teams and other professionals would also be beneficial, as this may help patients navigate their experiences or improve treatment. For example, professionals increasing their awareness of the importance of endings (Shaharabani Saidon et al., 2018) may offer a protective function for parents with a PMHD. Similarly, professionals treating people in the perinatal period should have adequate training and specialisms for working with PMHDs, which was not always the case for those offering interventions in the systematic literature review findings (e.g. Wright et al., 2018, 2020). This could be achieved in mandatory training or team continuous professional development teaching slots. Third, trauma-informed care is also increasing within maternity services (Sachdeva et al., 2022) such as birthing centres and hospitals, and will continue to be vital for those working with mothers. This is important to continue to be rolled out, utilised and reflected on within services.

Finally, there should be consideration of the whole family system and the wellbeing of the family as a whole. At present, many PMHTs are designed for the birthing person, but have the potential for a family approach to be taken. For example, family therapists could be a core offer within PMHTs to help consider the parent dyad, as well as the parent-infant relationship. Although interventions for perinatal psychosis were missing in the systematic

literature review, lessons could be learned from the approach within Early Intervention in Psychosis Teams that offer family therapy as part of the core treatment for someone with first episode psychosis, due to the positive impact on family functioning, mental health understanding and psychosis symptomatology (Camacho-Gomez & Castellvi, 2020). MDT members of PMHTs may also benefit from training and upskilling on the dyadic experience of transitioning into parenthood alongside having a PMHD, as well as building an awareness of how discourse may have different functions. This knowledge could then be interwoven into the treatment that MDT members offer, such as psychoeducation. It may also help identify challenges families are facing and areas for support earlier, hopefully leading to better outcomes for families.

#### **Future Directions**

Building on the clinical implications and future research discussed here and in chapters 2 and 3, the following will discuss future directions for perinatal mental health research.

First, both the systematic review and empirical paper have shown the complexity of treating PMHDs, as we have seen that there are multiple components to cover. For example, the relationship between each of the parents and the infant, the relationship between the parents, overall family functioning and mental health symptomatology. However, the research studies in the systematic literature review were not always explicitly clear about what specifically was being adapted for in the perinatal period, nor consistent in their treatment approaches. Future research and clinicians currently offering treatment within the perinatal period should be explicit about what specific treatments and adaptations are being offered within the treatment of PMHDs.

Second, further consideration should be given to treatments that are currently being offered in PMHTs and MBUs. Additional exploration and publishing of the subsequent

outcomes of interventions would increase the knowledge about what interventions are currently being offered and the impact on people with an SMI in the perinatal period. Currently, there appears to be a lack of research on what is being offered in the NHS in these environments, and where there is research, there appears to be a lack of consensus on what is provided or the specific perinatal adaptations that are being used. Thus, indicating that PMHTs are having to draw upon a scarcity of evidence-based research, particularly considering only three studies were RCTs (Barnicot et al., 2022; Stein et al., 2006; Van Ravesteyn et al., 2018). Moreover, research needs to understand the mechanism of change in interventions, as at present, conclusions cannot be fully drawn on what interventions are beneficial. Researchers, therefore, should consider the use of RCTs to determine the effectiveness of interventions for SMI in the perinatal period.

In conjunction with this, services would benefit from agreement on outcome measures that could be useful in practice. These outcome measures may need to be specific to the multi-layered topics that are covered in perinatal mental health, such as parental symptomatology and family functioning. Although it is appreciated that there may be differences in the population depending on geographical area or acuity, for example, some consistency across services is likely to be helpful to understand the impact of treatment on patients, and potentially their families. Common examples referenced in our findings were the Edinburgh Postnatal Depression Scale (Cox et al.,1987), the Postpartum Bonding Questionnaire (Brockington et al., 2001) or the Parenting Stress Index (Abidin, 1995). Such outcome measures could be included as part of the PMHTs Standard Operating Procedure, and be key in measuring the impact of service delivery across the NHS.

A third key area for future research relates to the experience of perinatal psychosis.

There were no treatments specifically found to target perinatal psychosis. Similarly, none of the families interviewed in the empirical paper mentioned psychotic-like experiences, leading

us to think that this was not part of their experience. Perinatal psychosis can have a significant impact on both the birthing person, the partner and the attachment with the infant (Forde et al., 2020; Holford et al., 2018). Therefore, more research into the treatment and experiences of parents with perinatal psychosis is fundamental in improving this underresearched diagnosis.

Leading on from the finding that perinatal psychosis was missing, a fourth direction for research should be on people who are pre-conception or in the antenatal period. The findings of the systematic literature review were predominantly focused on the postnatal period. Additionally, the sample of the empirical paper was solely in the postnatal period to answer the research question. Thus, our knowledge on the pre-conception or antenatal period is limited. This provides an opportunity to research what support is being offered to those with a PMHD from the time of conception to the time of birth, as this again appears neglected within the research, or those with an SMI trying to conceive. Although the participants in the empirical study did mention their antenatal experiences, research using dyadic interviewing of couples receiving support for PMHD in the antenatal stages would be helpful. This would aim to capture their experiences in the moment rather than retrospectively.

Finally, the fifth area is the equity of access to the recommended treatments or PMHT support. The results here also seem to focus on people who are from a 'WEIRD' background (western, educated, industrialised, rich, and democratic) (Henrich et al., 2010). The systematic literature review included studies from the UK, USA, Australia, Brussels, the Netherlands and New Zealand. In the empirical study, the majority were white and in heterosexual relationships. It is unlikely that these findings can be generalised to people who are experiencing PMHD from more diverse backgrounds. Thus, further research needs to be conducted on people accessing support from PMHTs who are from ethnic minorities, outreach patients, and LGBTQIA+ patients. Similarly, the couples from the empirical paper

were in intact relationships, and although some had come close to relationship breakdown, they had navigated their difficulties. Previous research has highlighted the link between PMHD and relational breakdown (Lever Taylor, Billings, et al., 2019), which should be an important consideration for clinicians working with this population, as this may have further impact on the person's mental health, their ability to focus on treatment for their mental health, and also potentially have an impact on the infant.

#### **Dissemination**

The systematic review and empirical study will be published in the corresponding journals stated in chapters two and four. Results will also be shared during the UEA Research Conference in September 2025. A report will also be completed for the NHS ethics board outlining the findings of the empirical study.

#### **Conclusions**

To our knowledge, this is the first example of synthesising the literature and treatments currently being offered to people in the perinatal period with an SMI. It is also the first example of dyadic interviewing using TDA to understand the lived experiences of couples accessing a PMHT. In summary, this thesis has emphasised the complexity of treating PMHD, the transition into parenthood for families experiencing a PMHD, and highlighted the need for further good-quality research to ensure a fuller understanding of the treatments for SMI in the perinatal period and support for families who are experiencing a PMHD.

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# **Appendices**

## Appendix A – Topic guide

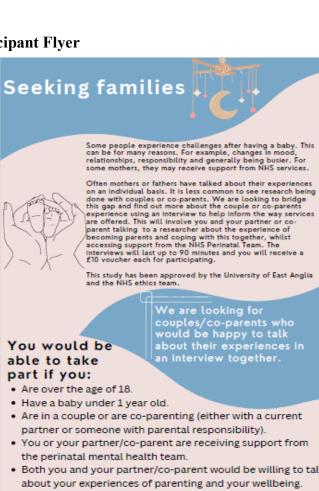
#### **TOPIC GUIDE:**

#### General prompts:

- Can you tell me a bit more about that?
- Was your experience the same or did you experience this differently?
- Can you think of an example of that?
- 1. Can you tell me about your transition into parenthood?
  - a. As individuals? As a couple?
- 2. How did your expectations compare to the reality of this experience?
  - a. Were there differences or similarities in your expectations? If so, why might this have been?
  - b. How did you navigate this?
- 3. Did your experience of perinatal mental health challenges impact on the transition into parenthood, and if so, how?
  - a. What was the impact on your experience of parenting?
- 4. If any, what were the changes in your relationship as you transitioned into parenthood?
  - a. How did this impact the two of you? (Your mental health? Your relationship?)
- 5. Did you experience any challenges or hurdles as a couple in the transition to becoming parents?
  - a. Was there anything that helped manage these challenges or hurdles?
- 6. How do you support each other with the practical side of parenting and looking after your baby?
  - a. What are your experiences of giving/receiving this support?
  - b. Is there anything that has made giving/receiving this support easier? Were there any barriers?

- c. Do you think that this has been impacted by your experiences of perinatal mental health difficulties? If so, in what ways?
- 7. How have you found managing daily tasks and solving problems together during this time?
  - a. Have there been any changes in who takes on different tasks and responsibilities? If so, how do you think the presence of mental health difficulties has influenced this?
- 8. What have your experiences been of supporting each other to cope with both of your mental wellbeing?
  - a. What are your experiences of receiving this support? (To each person)
  - b. How have you found talking to each other about these challenges?
  - c. Have the ways in which you support each other changed over time?
- 9. As a couple/co-parent, what support have your received from others e.g. friends, family, services?
  - a. How has this impacted both of your mental wellbeing/health?
  - b. Would you have liked this support to have been different, and if so in what way?
- 10. Is there anything I have missed or anything else you would like to share about your experiences?

## Appendix B – Participant Flyer



- · You or your partner/co-parent are receiving support from
- · Both you and your partner/co-parent would be willing to talk
- Have a good level of conversational English.

If you would like to hear more and be contacted please provide your preferred details:

Email:

# Who can I contact?

If you have any questions or would like to hear more the researchers can be contacted via email:

Kirsty.Pegg@uea.ac.uk Rebecca.Samuel@uea.ac.uk



# **Appendix C - Participant Information Sheet**

IRAS ID: 333583 Research Number: Version 2 26.3.24



#### INFORMATION SHEET

# The dyadic experiences of couples and co-parents accessing community perinatal mental health services

Lead researchers: Becky Samuel (Trainee Clinical Psychologist) and Kirsty Pegg (Trainee Clinical Psychologist)

Research supervisors: Dr Jo Peterkin (Consultant Clinical Psychologist), Dr Zoe Scott (Clinical Psychologist), Dr Jo Hodgekins (Clinical Associate Professor in Clinical Psychology)

Additional research team members: Ellie Gardner & Lucy Johnson

#### What is the purpose of this research?

This research is interested in exploring couple's and co-parent's experiences of perinatal mental health challenges. Within this research we would like to talk to you and your partner/co-parent about your experiences of becoming parents, coping with perinatal mental health challenges, your experiences of the support you have received from others and the impact of this on your wellbeing. This research is being conducted through NHS sites within Cambridgeshire, Peterborough, Norfolk and Suffolk and as part of two doctoral qualifications within the University of East Anglia. This research has been approved by an NHS ethics committee (IRAS ID number: 333583).

Previous research has shown the many impacts that experiencing a perinatal mental health difficulty can have on mothers or birthing people and partners/co-parents. It has also shown the importance of support from each other and from surrounding networks (e.g. friends, family, services) in the transition into parenthood. Previous research has focused primarily on individual experiences, leading to a gap in our understanding of couple's experiences. This research has been conducted across a range of clinical settings but is limited in understanding these aspects in people accessing perinatal mental health services within the community. With this research we hope to bridge these gaps to help develop perinatal research and services, to better understand and support people going through these challenges. We also hope this will allow services to be better prepared to support partners and couples together in the future.

#### Why am I being contacted?

You have been contacted to ask if you would like to take part in this research as you or your partner/co-parent is accessing a community perinatal mental health service. This research would have been discussed with you or your partner/co-parent within an appointment with

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your clinician and we are now contacting you with further details for you to decide whether you would like to take part.

#### What would taking part involve?

Interviews will take place with the two of you together, with one researcher. The interview will last approximately 90 minutes. During working hours (9am to 5pm) we are able to offer face-to-face interviews which can be either in clinic, or at your home. <u>Unfortunately</u> we are unable to offer travel expenses if you do choose to attend a face-to-face interview. Outside of working hours (evenings and weekends), or if you would prefer, we are also able to offer interviews online via Microsoft Teams. The interviews will be <u>video</u> and audio recorded for research purposes. For online interviews, we would encourage you, where possible, to have your cameras on. If you have any accessibility needs, please do let us know and we can discuss ways in which we can best support you to participate in the research.

We appreciate how difficult it can be managing a busy life and we will try to work around your schedule and preferences. If at all possible, you might find it easier if childcare can be arranged during the interview to support you to participate. However, we also understand that childcare can be tricky and this may not be possible, and this will not exclude you from taking part. The researchers are happy to discuss this further and think with you the best ways for you to participate as fully as possible.

During the interview, we will ask questions about topics such as your mental wellbeing, relationship, and the support you have received during this period.

#### Do I have to take part?

No, participation in this research is completely voluntary. Whether you decide to take part or not will not affect your treatment within the perinatal mental health service in any way.

Please also let us know if you have any questions or concerns which would help to inform you to make the decision of whether you would like to take part or not. If you decide to take part you will be asked to sign a consent form.

### What are the possible benefits of taking part?

Your contribution will help increase our understanding of what it's like becoming a parent alongside receiving support from a community perinatal mental health team. Our learning from this research will be used to shape and inform the development of perinatal services as IRAS ID: 333583 Research Number: Version 2 26.3.24



they expand, in order to best support families. Some people also find that discussing their experiences can be therapeutic. A £10 Love2Shop voucher each will also be provided as a thank you for contributing to this research. This will be posted or emailed to you after the study. If you do not receive this within two weeks of completing the study, please let us know.

#### What are the possible disadvantages and risks of taking part?

Due to the topic of the research, it is possible that some participants may find the interview upsetting. If this is the case, you are able to have a break and/or stop the interview at any point. You are also able to decline to answer any specific questions during the interview. The researchers are trained to support any difficulties that arise during the interview, and can signpost you to relevant sources of support if needed. You can also decide that you no longer want to take part, at which point none of the information that you have given will be used in the research.

#### What will happen to my information?

We will need to use information from you for this research project. All information will be used in accordance with UK General Data Protection Regulation legislation (2018).

This information will include your name, contact details, age, ethnicity, and perinatal service that you are using. Lead researchers will use this information to do the research or to check your records to make sure that the research is being done properly.

Members of the research team who do not need to know who you are will not be able to see your name or contact details. Your data will have a code number instead. We will keep all information about you safe and secure. Once we have finished the study, we will keep some of the data so we can check the results. We will write our reports in a way that no-one can work out that you took part in the study.

All interviews will be recorded, either using Microsoft Teams on an encrypted and password protected laptop, or NHS mobile phone. Recordings will be stored securely and accessed only by the researchers. Your personal information will be stored until the end of the study (for a maximum of 12 months) and will be deleted after this point. The recording of the interview will also be stored for a maximum of 12 months to give researchers time to analyse the results. You can ask for your data to be deleted up until 2 weeks after the interview has been conducted by contacting researchers using the details below. Any information you have provided will be deleted. The reason for this time period is because we will have started understanding your interview and experiences alongside that of other participants. After 2

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weeks, if you would prefer, we can ensure we do not use any direct quotes of things you or your partner/co-parent have said. This will not affect your treatment within the perinatal mental health service in any way.

Information given in the interviews will only be shared with researchers and will not be passed on to your clinical team or other individuals outside the research team unless you told us something which resulted in concerns about your safety or welfare, or the safety or welfare of others. If this occurred, we have a duty of care to inform or escalate this to the relevant services and we would inform you where possible before we did this.

The research findings will be published in academic journal articles. Anonymised quotes from the interviews will be used in journal articles and presentations to highlight the meaning of experiences for readers, we will however make every effort possible to ensure that no identifiable information is used. For example, names and geographical locations will be changed for all participants.

#### Where can you find out more about how your information is used?

You can find out more about how we use your information:

- at www.hra.nhs.uk/information-about-patients/
- · by asking one of the research team
- by sending an email to researchsponsor@uea.ac.uk

#### How do I take part?

To take part please contact either researcher via email using the contact details stated below. You will then be contacted to discuss a convenient time and place to complete the interview.

#### Contact details:

If you would like to take part or have any questions, please contact:

Becky Samuel Kirsty Pegg

rebecca.samuel@uea.ac.uk

kirsty.pegg@uea.ac.uk

If you have any comments or complaints about the <u>study</u> please contact Dr Sian Coker (Programme Director): <u>sian.coker@uea.ac.uk</u>

Thank you for taking the time to read this information sheet.

# Appendix D – Participant Consent Form

IRAS ID: 333583 Participant ID: Version 2 26/03/2024



#### CONSENT FORM

# The dyadic experiences of couples and co-parents accessing community perinatal mental health services

	ime of Researchers: Becky Samuel (Trai inical Psychologist)	inee Clinical F	sychologist) and Kirsty Pegg (Tra	inee
	ame of Supervisors: Dr Joanne Peterkin	(Consultant C	linical Psychologist), Dr Zoe Scott	(Clinical
Psychologist), Dr Jo Hodgekins (Clinical Associate Professor in Clinical Psychology)  Ples				Please initia
1.	I confirm that I have read the information above study. I have had the opportunity t have had these answered satisfactority.		, ,	
2.	I understand that my participation is volu- any time without giving any reason, and v affected. If my partner/co-parent would life be stopped.	without our me	edical care or legal rights being	
3.	I understand that I am also able to withdomethe interview, without giving any reason, being affected. I also understand that if no data, my data will also be removed from	and without o ny partner/co-	ur medical care or legal rights	
4.	I understand that researchers will use an dissemination of the results of this study publications). All names and geographics and researchers will make every effort po	(e.g. presenta al locations wi	tions, conferences, Il be changed in any quote used	
<ol> <li>I understand that the information held and maintained by the University of East Anglia will be held and stored in accordance with UK General Data Protection Regulation (UK GDPR).</li> </ol>				
6.	I agree to take part in the above study.			
Pa	erticipant name:	Date:	Signature:	
Na	ame of Researcher:	Date:	Signature:	

# Appendix E - Demographic Form

IRAS ID: 333583 Participant number: Version 1 29.02.24



#### DEMOGRAPHIC INFORMATION SHEET

# The dyadic experiences of couples and co-parents accessing community perinatal mental health services

Researchers: Becky Samuel (Trainee Clinical Psychologist) and Kirsty Pegg (Trainee						
Clinical Psychologist)						
Research supervisors: Dr Jo Peterkin (Consultant Clinical Psychologist), Dr Zoe Scott						
(Clinical Psychologist), Dr Jo Hodgekins (Clinical Associate Professor in Clinical						
Psychology)						
Sexuality:						
☐ Heterosexual						
☐ Bisexual						
☐ Pansexual						
☐ Gay man						
☐ Gay Woman / Lesbian						
Prefer to self-describe						
☐ Prefer not to say						
Age:						
18 to 24 25 to 34 35 to 44 45 to 54 55 and over						
Ethnicity:						
Number of children:						
Age of youngest child:						
0-3 months						
4-6 months						
7-9 months						
10-12 months						
Type of partnership:						
In a relationship						
Co-parenting						

# **Appendix F - Participant Debrief Sheet**

IRAS ID: 333583 Research Number: Version 1 29.02.24



#### The dyadic experiences of couples and co-parents accessing community perinatal mental health services

#### Thank you very much for taking part in this research project.

You will be sent a £10 voucher each as a thank you for participating. If you have any issues or do not receive this voucher within 2 weeks, please contact the researchers using the details below.

If you would no longer like to take part in the research, you can withdraw your data up to 2 weeks from today by contacting the researchers using the details below. Any information you have provided will be deleted. The reason for this time period is because we will have started understanding your interview and experiences alongside that of other participants. After two weeks, if you would prefer, we can ensure we do not use any direct quotes of things you or your partner/co-parent have said. This will not affect your treatment within the perinatal mental health service in any way.

This research aims to build on our understanding of couple's/co-parent's experiences of perinatal mental health difficulties. Once we have conducted all of the interviews, we will draw themes of experience from the data. This research will likely be completed in 2025. We will be in touch with the research findings if you have opted in.

If any of the topics discussed in this interview were upsetting and you feel you need someone to talk to, please contact your care co-ordinator/perinatal team who will be able to offer support or additional signposting.

Alternatively, you may find one of the below services beneficial for further support:

#### First Response Service:

T: 111 option 2

In an emergency please call 999 or present to A&E.

#### Samaritans:

Offering 1:1 listening support for anyone. T: 116 123 (Free, open 24/7, 365 days) E: jo@samaritans.org

Text: SHOUT to 85258

#### Relate:

Offering counselling for relationships.

W: relate.org.uk (please see the general website for your local centre)

Thank you again for participating, we really appreciate hearing your experiences.

# Contact details:

Becky Samuel rebecca.samuel@uea.ac.uk Kirsty Pegg

kirsty.pegg@uea.ac.uk

If you have any comments or complaints about the <u>study</u> please contact Dr Sian Coker (Programme Director): <u>sian.coker@uea.ac.uk</u>

Subtheme	Quote	Interpretation
Distressing	B15: when [P16] went back to work, I felt that slightly resentful (emphasis) of the fact that	B15 and P16 discussed the challenges of being at home with a baby, causing resentment
emotions	he had a break like he was going out during the day. Um, he wasn't dealing having to deal	about the opportunities to go out, as well as the subsequent guilt P16 felt for being able to
	with the baby all day and then he'd come home and I mean, he's still does it, he gets home	do that. B15's use of the past tense and the word "slightly" appears to be an attempt at
	and he's immediately smiling and laughing at Daddy and so happy to see him and like he'll	distancing from the feeling of resentment. Yet, there is a clear demonstration through the
	have been screaming at me all day and it's just like "why?" (laughs)	use of emphasis and context that B15 is finding it hard to remain at home day and night, bu
	P16: But I think the contrast with that is that I felt very guilty about it	views their partner as having more positive experiences being able to leave the house and
	B15: Yeah, yeah.	receive the reward of a smiling baby on return. The isolation of being at home alone with a
	P16: And still, I think, feel quite guilty for going to work and like I want to be spending time	baby reduced the ease of being able to easily go out and engage in pleasurable activities
	with him, and I think that also ties into the stuff I was saying about paternity and like the	alone to improve one's mental health, potentially perpetuating mental health difficulties.
	rapid turnaround for both of us actually (hand signals both)	Interestingly, P16 describes their sense of guilt in the past and then very quickly in the
		present tense, perhaps demonstrating a longstanding sense of guilt and response to the
		conflictual emotions of their partner.
Distressing	B5: As well it impacts on our relationship, because he sleeps on the separate bedroom,	The experience of mental health difficulties was also perpetuated by sleep deprivation.
emotions	separate floor Broken nights and for me sleep like that's (emphasised) the main kind ()	Couples attempted to manage this by changing their normal sleep locations, but
	of trigger in my mental health (laughed) So that's been really, really difficult.	subsequently, this impacted their relationship. This was distressing for couples due to the
	P6: So usually whenever she wakes up, I try to keep her as quiet as possible and go to the	anticipation that a difficult night's sleep would impact the family unit.
	ground floor so that maybe we can watch TV or talk or do things without waking her up	
Skills development	P10: Kind of sense it in each other.	For B9 and P10, the length of the relationship, experiences of witnessing mental health
	B9: I think we have been together for 10 years I've had like kind of er mental health issues	difficulties and having had a previous child together had assisted them in being better able
	in the past too so like you sort of seen that even without the boys, like when that starts to	to meet each other's needs and support each other. Word choices such as "sense it", and
	show up, he knows what to kind of look for you have your own mental stuff in the past	"picking up on" provide a sense of knowing and mentalising each other from past
	too, so I could sort of tell when he's not acting himself and because of my mental health	adversities and mental health difficulties which then helps in this transition. Similarly, the

stuff, I get really hyper-vigilant to his (emphasis) feelings and emotions. So like if he comes home and he's kind of, you know, a bit kind of (...) quiet or like um, not angry, but like, you know when somebody's just got that kind of dark cloud over them sort of thing. Like I'll be like, OK I need to step up now because he's kind of down here. (Gestures with hand for emphasis).

description of being "hyper-vigilant" suggests a helpful component of B9s own PMHD, albeit this would likely be seen as a clinically disadvantageous experience. Finally, there appears to be a notion that help is offered when one or the other is particularly low, or maybe in crisis, suggesting that the relational components change to help pick-up the other person.

# Unexpected difficulties

B9: I was getting help with like therapy and everything because that was immediately offered, because I was the Mum, whereas (...) there was nothing for [P10] whatsoever. Um, and (emphasis) (...) we really quickly found that you were getting really depressed and we found that especially at that time of year it like we were both kind of struggling but you in particular were just crashing. Erm. And um, so round about December, when Sammy was one two we nearly broke up.

P10: Yeah.

P10: Yeah.

B9: Because of how bad it got. Like um(...) you were just kind of like in self-destruct mode, you'd find some kind of way of expressing how upset you were like it was drinking one year.

B9: Um, and yeah it was just kind of like just, kind of like trying to implode his own kind of happiness the second. Everything was "I don't want it", "I don't deserve it", "I can't cope" and (...) both times luckily you were able to pull yourself out of it.

P10: Yeah.

The transition and unexpected difficulties of their first pregnancy were still prevalent after the birth of their second child for B9 and P10. The use of "we" initially highlights how together the couple had been struggling in a similar way, but this then changes to how P10 was "trying to implode", suggesting a sudden difficulty that was different and new to the couple's experience. There is a sense of P10 being alone in the experience, when the words "self-destruct" are used.

#### Disconnection

B5: (Smiled) During the night when all the meltdowns happen

P6: Yeah that's a completely different story

B5: Nighttime for me, is the loneliest time <u>ever</u> (emphasised) (...) um, sometimes I feel like, for me the sleep topic is so triggering, when I hear other people like complaining. Um like oh my child sleeps and I have to wake him up so that I'm not late for work (mocking voice) or whatever I'm like (gestures with hand to show frustration)...

B5 showed a sense of confrontation around the topic of sleep, which was an emotionally charged scenario. The use of a mocking voice highlights perhaps an attempt to playfully show disagreement following an expression of feeling lonely.

	P6: Like we have the option of waking him up we don't have, we don't have the option of					
	like getting him to sleep in the first.					
Protection of the	B9: You worked on your grandpa's death from like three, four years ago	Fragility of the other was also present when discussing the mental health of the partner who				
self and other	P10: (laughs)	was not the patient of the perinatal team. For B9, a discussion about significant life				
	B9: rather than what was going on for him at the moment, so although it was still helpful and	stressors highlighted the impact on P10s mental health. There is a sense that B9 would have				
	could have been helpful at other times too, that wasn't why he was there and I think they	considered there to be other more pertinent themes to discuss in therapy, but nonetheless,				
kind of like found like oh this is something that I can do (higher voice for emphasis). So it		an appreciation that P10 was attending therapy.				
	was enough to like get you through, because you're processing some emotionsBut yeah					
	we definitely like as a couple really struggled					
	P10: Yeah.					
Protection of the	P14: So I was, she. She was very sort of. She was very supportive. Sh- because we were	Irreverence seemed to be used by healthcare professionals who were referred to and				
self and other	talking about crying. So she said "no some babies just cry because they're arseholes, that's it	discussed by participants. This appeared to have been effective at providing humour at a				
you'll just have to get used to it." And it's like, "oh, OK." And she made us laugh didn't she.		difficult time. A professional referring to an infant as an "arsehole" is unexpected in the				
	B13: (smiles and nods).	moment and effectively worked at stopping the negative cognition relating to the situation,				
P14: That was the point. You know, she made us giggle.		and creating a situation where the parents could laugh.				
Ways of expressing	P6: Yeah three o'clock, we meet, yeah, it's funny because we meet in the toilet because it's	Humour was one way that couples coped with the strong emotions that they were				
strong emotions	the middle room between the two kids rooms. (all laughed gently)	experiencing. B5 and P6 discussed how sleep deprivation had been particularly triggering				
	B5: (smiled) Well yeah	of PMHDs and so had to change how they interacted at night to avoid waking their				
	P6: between both, so we usually end up, we hang out in the toilet for an hour	children. They used laughter and the covering of their face to highlight their disbelief at				
	B5: Yeah, literally (covered face with hand). It's not great.	how they were therefore coping to avoid mental health lapses.				
Ways of expressing	B13: But they were so fast at, getting me on the list and then getting like the Care	Couples also expressed overwhelm by the amount of support they were receiving through				
strong emotions	coordinator. She came out. Had a word with me to see what sort of help that I'd need	laughter, emphasis of the word "whoa" and list-like description of people supporting B13.				
	(emphasis)And then next thing I know, I've got a nursery nurse coming to see me I've					

got a peer support worker. Yeah. And then I've got a psychologist that comes to see me and I'm like, "whoa" (emphasis, laughs), that's a lot of people.