Advancing understanding of Perinatal Anxiety using concept analysis

Abstract

Aim: To clarify how perinatal anxiety is characterised within the current evidence base and discuss how a clearer definition and understanding of this condition may contribute to improving care provision by midwives and other healthcare professionals.

Background: Perinatal anxiety is common, occurs more frequently than depression and carries significant morbidity for mother and infant. The concept of perinatal anxiety is ill-defined; this can pose a barrier to understanding, identification and appropriate treatment of the condition.

Design: Concept Analysis paper.

Method: Rodgers' Evolutionary Model of Concept Analysis, with review based on PRISMA principles.

Findings: While somatic presentation of perinatal anxiety shares characteristics with general anxiety, anxiety is a unique condition within the context of the perinatal period. The precursors to perinatal anxiety are grounded in biopsychosocial factors and the sequelae can be significant for mother, fetus, newborn and older child. Due to the unique nature of perinatal anxiety, questions arise about presentation and diagnosis within the context of adjustment to motherhood, whether services meet women's needs and how midwives and other health professionals contribute to this. Most current evidence explores screening tools with little examination of the lived experience of perinatal anxiety.

Conclusion: Examination of the lived experience of perinatal anxiety is needed to address the gap in evidence and further understand this condition. Service provision should account for the unique nature of the perinatal period and be adapted to meet women's psychological needs at this time, even in cases of mild or moderate distress.

Keywords

Anxiety; perinatal period; motherhood; midwives; perinatal anxiety; pregnancy; concept analysis; health professionals; infant; morbidity.

What does this paper add to the wider, global, clinical community?

- A deeper understanding of perinatal anxiety, a condition potentially affecting the global perinatal population.
- Discussion of pertinent considerations when caring for women in the perinatal period and implications for clinical care provision regardless of setting.
- Evidence of the paucity of evidence examining women's subjective experiences of perinatal anxiety.

1. INTRODUCTION

Anxiety during the perinatal period can adversely affect women's physical, emotional and social function, for example through disrupted sleep and social withdrawal as well as impacting engagement with health professionals (Highet, Stevenson, Purtell, & Coo, 2014; Thorsness, Watson, & LaRusso, 2018). The link between maternal distress and anxiety in pregnancy and the behavioural development and emotional regulation of children in infancy and beyond is well documented (Bendiksen, 2015; Glover & Barlow, 2014; Porter, Lewis, Watson, & Galbally, 2019). Alongside the human cost the economic burden of perinatal anxiety is also significant; each case in the UK (classified as generalised anxiety, panic disorders, phobias, obsessive compulsive disorder and post-traumatic stress disorder, not co-morbid with depression) costs around £35k. £21k of this cost relates to the mother, taking into account increased use of public services, loss of quality-adjusted life-years and productivity losses, and £14k to the child, covering four key outcomes: pre-term birth including cognitive impairment, emotional and conduct problems, and chronic abdominal pain (Bauer, Parsonage, Knapp, Iemmi, & Adelaja, 2014). Poor mental health can drive a 50% increase in costs of physical care (NHS-E, 2016a).

During pregnancy alone this impact can be seen in increased contact with health professionals, and care decisions made based on a picture of worsening mental health, for example the decision to medically induce labour rather than awaiting spontaneous onset of labour. This highlights the importance of containment: health professionals supporting women with psychological challenges before an escalation in mental ill health triggers clinical interventions.

Estimates of the prevalence of perinatal anxiety are varied, with rates of 15-21% suggested by some authors (Fairbrother, Janssen, Antony, Tucker, & Young, 2016; Heron, O'Connor, Evans, Golding, & Glover, 2004), and one review indicating numbers as high as 39% (Leach, Poyser, & Fairweather-Schmidt, 2017). Challenges in establishing prevalence include heterogeneity across methodologies and a lack of validated self-report measures for perinatal populations (Leach et al., 2017; Meades & Ayers, 2011). A lack of evidence exploring the experience of perinatal anxiety further adds to inadequate understanding of the condition among health professionals, and creates a barrier to identification and treatment (Goldfinger, Green, Furtado, & McCabe, 2019). Questions about the nature of perinatal anxiety include: Is anxiety a normal reaction to the perinatal period, or an irrational response, and is it triggered by psychological or biological processes? Is it a unique diagnosable condition, with symptoms that can be classified? Or is it essentially characterised in a similar way to general anxiety, but simply defined within the context of the perinatal period? Is perinatal anxiety understood differently by those who have experienced it, compared to those who treat it?

As a starting point for further examination of the phenomenon of perinatal anxiety, a concept analysis was undertaken based on Rodgers' Evolutionary Model of Concept Analysis (Rodgers, 1989).

AIMS: To clarify how perinatal anxiety is characterised within the current evidence base and discuss how a clearer definition and understanding of this condition may contribute to improving care provision by midwives and other healthcare professionals.

2. METHODS

Concept analysis, a method of defining the characteristics of a concept to aid understanding of its meaning and contribute to the development of theory, has been widely used in nursing (Walker & Avant, 2005). Whilst its value has been questioned by some (Beckwith, Dickinson, & Kendall, 2008; Bergdahl & Berterö, 2016; Draper, 2014), Meleis (2018) argues that clarifying a concept is essential in order to advance knowledge within a discipline. The 'evolutionary model' of concept analysis described by Rodgers (1989) accounts for the use of a concept within the interrelationships that exist within the world, focussing on consensus, the evolutionary background to a concept with a cross-disciplinary focus, and rejecting the traditional entity (positivist) view of concepts as rigid (Rodgers & Knafl, 2000). The evolutionary view, which regards concepts as abstract ideas expressed and evolving over time, fits with how perinatal anxiety is observed, which is about the context of pregnancy and motherhood, interpretation of this period of transition, and the mind-body interaction over a distinct time period. It would be incongruent to analyse a concept which is to do with mental state from a positivist perspective, in purely physical terms with a rigid set of conditions. Tofthagen and Fagerstrøm (2010) advocate for this evolutionary view, but caution the need to be clear that a concept may be unique to a particular discipline, and that care should be taken to be explicit about the basis on which the understanding is formed. This is particularly relevant to the concept of perinatal anxiety, which will share characteristics with other psychological concepts and be described across psychological and physical disciplines, whilst very specifically applying to the pregnancy and postpartum context.

Rodgers' (1989) model describes naming the concept and identification of surrogate terms and a sample to examine. From this literature sample, the researcher identifies the attributes, references, antecedents, consequences and related concepts, and presents a model case to exemplify the concept. This initial analysis provides the starting point for both understanding the concept in practice, and for development through further testing and investigation. Rodgers and colleagues recently conducted a review of papers using concept analysis models, and concluded that the plethora of repetitive papers was an issue and that conceptual work should move beyond analysis to become solution-focussed in order to add value to nursing science (Rodgers, Jacelon, & Knafl, 2018). This paper

uses this initial analysis as a platform for considering the clinical and research implications of the findings.

2.1 Naming of the concept and surrogate terms

The first phase of analysis involves naming the concept of interest, in this case Perinatal Anxiety, and surrogate terms. Surrogate terms and uses are identified to address the fact that a concept may be described in several different ways across disciplines and fields and between medical and lay language. The surrogate terms identified were *'worry'*, *'pregnancy'* and *'postpartum'*. When considering surrogate terms and uses it could reasonably be asked whether perinatal anxiety is a distinct concept from non-perinatal anxiety, therefore in addition to the main data analysis a high level review of the literature around general anxiety was undertaken (see figure 1).

2.2 Sample selection

Sample selection focussed on a pool of data from a number of sources and disciplines, in order to characterise the concept using a range of voices including women with lived experience of perinatal anxiety, and the physical and mental health professionals working in the field. Literature was reviewed using a scoping approach – not to synthesise or critically appraise the evidence, but to understand how the concept is described and understood.

Anxiety as a term would be used broadly across a wide range of literature, so specific inclusion and exclusion criteria were set. Papers were those dated 1956-2020 and included a cross-disciplinary sample of qualitative or quantitative studies exploring or examining anxiety or worry during the perinatal period, prospective or retrospective studies, editorials, letters and discussion papers. Excluded were papers that were non-English-language and those that primarily focussed on fathers, other psychological or physical co-morbidities, or concomitant adverse social experiences, e.g. examining prisoners, immigrant populations, experiences of a sick neonate or perinatal loss. This was

not to undervalue the contribution of these groups, but rather an attempt to remove as many other variables as possible and focus on anxiety alone.

A search was undertaken including the CINAHL, Medline, Scopus, Psychinfo, Science Direct, and Social Science Citation Index databases. Search terms were 'perinatal anxiety' or 'perinatal worry' in the abstract and 'antenatal' or 'prenatal' or 'pre birth' or 'pregnancy' AND 'anxiety disorders' or 'anxiety' or 'generalized anxiety disorder' AND 'postnatal' or 'postpartum' or 'puerperium' or 'perinatal' in the title (See figure 2 for PRISMA diagram of results returned).

Reference lists were searched for references pertaining to qualitative analysis of women's experiences, as it became apparent that these papers were underrepresented in the sample. This did not yield any further qualitative papers, but a further two papers and three books were added, making the total number of references reviewed 40 (table 1). It was reassuring that the reference list search did not yield a significant number of additional results as this indicated the initial search strategy had been robust.

A coding sheet detailed each stage of the review process and enabled systematic extraction of data relating to each component of the analysis process. The separation of each category facilitated scrutiny of the data extraction for consistency in the type of data across the different components, confirming that logic within the process was sound and consistently applied.

3. RESULTS

3.1 The attributes of the concept

The attributes refer to how the concept is most regularly used and offer a sense of related language and themes, with a focus on clarification rather than exploring meaning (Rodgers, 1989). The attributes chosen were derived from literature within the perinatal context, with attention to biopsychosocial aspects, based on the authors' personal understanding that the emotional and

physical course of pregnancy and the postpartum is multi-dimensional. Final attributes were selected based on consensus across the sample.

Once the attribute data was extracted, it was re-examined and organised to first identify broad themes from which the final detailed attributes were chosen. The data from each discipline (psych-fields, physical health and sociology) was analysed separately before being brought back together to see whether the findings were consistent and if there was consensus across disciplines, which is important to add validity to the development of the working definition (Rodgers & Knafl, 2000).

Due to the small number of papers from the sociological and physical health fields, it would be tenuous to suggest that the concept was similarly defined across all fields; however themes of context and diagnosis were referenced in papers from all three fields whilst the theme of presentation was not present in the sociological literature.

3.1.1 Broad themes derived from the attributes

The three broad themes that emerged from analysis of attributes of perinatal anxiety were:

- Context: during the transition to motherhood a degree of anxiety can be normal, but it can become debilitating if escalation occurs, and anxiety may be exacerbated by intrinsic and extrinsic pressures.
- Presentation: the typology of perinatal anxiety is common to that of the classified anxiety disorders, anxiety may or may not have a parenting-related focus and may be experienced by women with existing anxiety or be of new perinatal onset.
- Diagnosis: perinatal anxiety is not well understood in comparison to depression, with an insubstantial evidence base and issues with identification, diagnosis, and treatment.

Context

The perinatal period is a time when women are at risk of mental health vulnerabilities arising from a spectrum of influencers, as the adjustment to pregnancy and motherhood, as well as economic, work,

physical and relationship stresses, can contribute to mothers' ability to recover from mental ill health (Hine, Maybery, & Goodyear, 2018; Steen & Thomas, 2016). It is also recognised that women from socially vulnerable and black and minority ethnic groups are more likely to experience poor mental health (Steen & Thomas, 2016). These interrelated factors have been modelled (Halbreich, 2005; Ross, Sellers, Gilbert Evans, & Romach, 2004), and such models demonstrate the interaction between biological, psychological and social factors: the analysis showed that a combination of these elements could serve to trigger or worsen the condition. Regardless of sociodemographic status, perinatal distress is mismatched with a societal expectation of pregnancy and motherhood as a time full of joy (Miller, 2005), which can serve to generate a singular form of pressure and also exacerbate symptoms of anxiety.

Presentation

The analysis confirmed that the somatic presentation of perinatal anxiety is similar to that of other anxiety disorders, however the occurrence and focus of the anxiety in the perinatal period is what makes it unique. Unlike generalised anxiety and peripartum (perinatal) depression, perinatal anxiety is not recognised as a distinct disorder in the DSM-5, nor is the peripartum considered a specifier for anxiety disorders (APA, 2013), meaning health professionals may fail to recognise the condition. This is in spite of the fact that the psychological significance of pregnancy and the postpartum are noted and the impact of adjustment on women's mental health is readily recognised (Aber, Weiss, & Fawcett, 2013; Mihelic, Morawska, & Filus, 2018). Anxiety is a key element of adjustment and the lack of exploration of anxiety as a component of transition to motherhood again highlights the need to understand this condition in the perinatal context (Hart & McMahon, 2006). The lack of diagnostic definition further complicates the situation when it may be hard for women themselves to recognise and describe perinatal anxiety (Segre & Davis, 2013).

Diagnosis

Illness classification may help in terms of identification, and is important because diagnosis facilitates treatment, however the value of looking beyond diagnostic parameters is also noted. Franks et al. (2017) explored women's views on factors that contribute to their mental ill health from the perspective of underlying influencers as opposed to a diagnostic lens; and note that taking a deeper view beyond the diagnostic focus aids understanding of how mental ill health is experienced outside of purely psychiatric terms. Classification of perinatal anxiety should therefore be considered alongside the broader picture of the illness, which can best be understood from the perspective of women's lived experience. Highet et al.(2014) note there is minimal qualitative research exploring women's experiences of perinatal anxiety and that symptoms are most often described in terms of psychiatric classification, when in fact both viewpoints need to be considered.

3.1.2 Key attributes

The broad themes of ***context, presentation and diagnosis*** allow more concise definition of the key attributes of perinatal anxiety:

- A psychological challenge bound up in the transition to motherhood.
- Not unique from general anxiety in its somatic or mental presentation, but often with a focus on perinatal concerns.
- An unfamiliar concept to health professionals.

Psychological challenge bound up in the transition to motherhood

Anxiety in the perinatal period can be a normal and anticipated part of the transition to motherhood; indeed pregnancy is itself described by Rowe and Fisher (2015)[p.58] as "inherently anxiety arousing". However it becomes problematic when pre-existing anxiety is exacerbated or new onset anxiety manifests in an uncontrolled fashion, the consequences of which can be debilitating. The existence of parental-themed worries, for example to do with maternal, fetal or neonatal wellbeing, finances or returning to work is not necessarily remarkable. More notable are the societal pressures felt by

women to perform as mothers, for example the ability or desire to breastfeed: the impact of such pressures is highly distressing and can increase anxiety levels. The psychological adjustment to motherhood as an attribute is represented within the literature from all three health and social fields.

Not unique from generalised anxiety in its somatic or mental presentation

The typology of diagnoses described in relation to anxiety in the perinatal period across the papers was consistent with that of the spectrum of anxiety disorders as classified in the DSM-5 (APA, 2013). Onset of anxiety may be new in the perinatal period, or there may be an exacerbation of an existing condition, and over the course of pregnancy into the postpartum period the severity of symptoms may reduce. This attribute regarding presentation was only a feature of the literature from the psychological and physical health disciplines.

An unfamiliar concept to health professionals

The literature consistently referenced the paucity of evidence solely examining perinatal anxiety, with the term 'under-researched' frequently used. Many of the papers which did relate purely to perinatal anxiety detailed efforts to evaluate symptom-measurement scales, and the range of scales noted (23 in total) indicates that identification can be problematic. Regular reference was made to the comparison with depression as a condition far more thoroughly investigated, and to the frequent comorbidity of anxiety and depression which possibly serves to further confuse perinatal anxiety as a distinct entity. This attribute was present in the psychological and sociological literature; the idea of perinatal anxiety being 'unfamiliar' came directly from one of the papers within the physical health domain, suggesting that a lack of familiarity exists among health professionals across disciplines including psychiatrists, psychologists, General Practitioners, midwives, health visitors and obstetricians.

The attributes the concept is associated with become the definition of the concept (Rodgers, 1989), and the authors' proposed theoretical definition is as follows:

"Perinatal anxiety does not have a unique somatic or mental presentation, albeit the focus of worry will often relate to parenting concerns. It is an unfamiliar concept which causes health professionals issues with identification and treatment and presents women with psychological challenges bound up in the biopsychosocial aspects of transitioning to motherhood."

3.2 References, antecedents, consequences of the concept (see figure 3)

References relate to the events or phenomena over which the concept is used within the real-world context. In the case of perinatal anxiety, two references were established:

- Anxiety experienced during pregnancy and/or during the postpartum period up to one year after birth.
- When anxiety exists prior to pregnancy and continues during the perinatal period, or begins during the pregnancy or postpartum.

Antecedents are the events or phenomena that take place prior to the concept occurring (Rodgers, 1989), i.e. what is likely to have been happening before perinatal anxiety occurs. The papers reviewed described a range of situations from which perinatal anxiety might arise.

The key antecedents identified relate to events across a biopsychosocial profile. Biological antecedents may include the pregnancy itself, disordered sleep, medical comorbidities or pregnancy conditions, or a personal or family history of a psychiatric condition. Psychological antecedents may be an unplanned or unwanted pregnancy, or intrinsic beliefs about self, the ability to cope and negative expectations about the future. Social antecedents include adverse childhood experiences, poor relationships, experience of intimate partner violence, low socioeconomic status or poor educational attainment.

All these phenomena are potentially present prior to onset or exacerbation of anxiety in the perinatal period. Therefore, the overarching antecedent could be described as:

- A trigger or triggers from the biopsychosocial spectrum, either as a single factor (e.g. hormonal changes in pregnancy), or a combination of factors (e.g. an unplanned pregnancy in the context of an abusive relationship).

Halbreich (2005) and Ross et al.(2004) proposed biopsychosocial models of the processes involved in the manifestation of perinatal mood disorders, which demonstrate the interplay between these different influencing factors. Buist (2006)[p.145] also describes the roots of perinatal mood and anxiety disorders in general as "a complex, interactive aetiological pathway."

Consequences are events arising as a result of the concept. The analysis showed that consequences related to the fetus and neonate could be low birth weight, compromised bonding and attachment, and reduced breastfeeding initiation. For the infant there may be poor cognitive and motor development and separation anxiety and the older child may have adverse socio-behavioural development. For the mother, consequences can include impaired social and occupational functioning, intrusive thoughts/obsessions, hypervigilance and infant avoidance.

A similar spread across the biopsychosocial spectrum is observed in the consequences as in the antecedents, however consideration of the consequences builds a picture of the far-reaching nature of the concept, in terms of its repercussions beyond the individual mother to the fetus and infant. It is this broader, ultimately intergenerational impact that adds weight to the critical nature of the study of the concept of perinatal anxiety (Glover, 2007). It is also noted that some terms can potentially be an antecedent and a consequence, for example disordered sleep, which may trigger, exacerbate or result from anxiety.

In summary, the consequences of perinatal anxiety can be described as:

- Events arising from the experience of perinatal anxiety which have short, medium or long-term negative sequelae for the fetus, neonate, infant, child or mother, which may be of a biological, psychological or social nature.

The references, antecedents and consequences illuminate perinatal anxiety as a complex concept, where many factors combine with potentially far-reaching implications. The next stage of analysis moves to a slightly broader view of the concept, by examining related concepts.

3.3 Related concepts

This step highlights concepts that may be related to the concept under analysis, and the relationships between them. The related concepts in this case were those that were notable from the emphasis given by authors in the frequency or depth of discussion. The related concepts noted within the sample were:

- Depression
- Adjustment
- Stigma

Depression was frequently discussed in relation to anxiety, and consideration of it as a related concept is interesting because although distinct diagnoses, the two are frequently comorbid and differentiation between them can be blurred, which can obscure the nature of anxiety and contributes to its unfamiliarity as a standalone concept, as previously highlighted. Adjustment to pregnancy and motherhood is often referenced in the discourse around maternal anxiety and it is this transition that can provide the focus of anxiety symptoms linked to frustration and loss. The stigma of suffering from perinatal mental ill-health is also a recurrent theme, leading to a sense of shame and reluctance to disclose feelings of anxiety and seek help, often driven by fear of involvement from social services.

3.4 Model case

The 'Model case' aims to identify an everyday example which brings together the attributes of the concept. No model cases were present in the data, so the (real-life) case of HS is referred to as a model:

- HS was a 34-year-old woman expecting her second baby. After the birth of her first child, she had been diagnosed with postnatal depression and Obsessive Compulsive Disorder (OCD) and

had commenced medication. At the birth of her first child she was living far from her parents, with her husband working away for long stretches, so she became socially isolated. In the first trimester of her second pregnancy her OCD and general anxiety symptoms rapidly escalated with extreme fear of contamination preventing her from travelling to her place of work, and repeatedly re-washing clean piles of clothes and linen. She increased her contacts with health professionals significantly, seeking constant reassurance about the wellbeing of her baby and compulsive thoughts about the need to establish a routine for her toddler. She also simultaneously re-visited thoughts of self-harm for the first time in several years.

Due to the multifactorial nature of perinatal anxiety, numerous examples could have been presented, all of which would be unique in their detail. Yet all would have a common thread, as can be seen above: the combination of biological (symptoms starting and/or escalating during the perinatal period), psychological (the manifestation of uncontrolled symptoms) and social factors (lack of support).

As well as resonating with the biopsychosocial aspects revealed in the references, antecedents and consequences, this model case also aligns with the attributes identified: in terms of context and presentation the condition became debilitating during pregnancy and involved intrinsic and extrinsic pressures related to the wellbeing of the baby and toddler; with fears around contamination inducing behaviours common to non-perinatal OCD. Examination of the case shows that in this situation there was a clear diagnosis, however two questions arise: first, why did the condition escalate during pregnancy so significantly that the woman's daily life and safety were compromised by her OCD symptoms and her vulnerability to respond to thoughts of deliberate self-harm? Secondly, could maternity and mental health services have responded differently in such a way that could have prevented this exacerbation? These are complex questions, which cannot be answered via superficial examination and instead warrant a detailed method of investigation.

4. DISCUSSION

Perinatal anxiety may be the most commonly experienced mental health disorder of pregnancy and the postpartum; as a form of anxiety is clinically distinct; and has far reaching implications for the health of the mother, fetus, infant and older child (Blackmore, Gustafsson, Gilchrist, Wyman, & O'Connor, 2016; Brunton, Dryer, Saliba, & Kohlhoff, 2019). The wider consequences for the infant can be regarded through the lens of Bronfenbrenner's Ecological Systems Theory: the child's primary ecological microsystem is in utero and from birth expands so all aspects of their immediate environment begin to converge, shaping their development (Urie, 1979). If the infant's environment is compromised by poor parental mental health, then so can be their development: the biopsychosocial aspects which characterise the antecedents and consequences of perinatal anxiety play into the infant's physical health and social and emotional development.

In spite of its prevalence and sequelae, the concept of perinatal anxiety has not been clearly defined and the condition is under-researched (Furtado, Van Lieshout, Van Ameringen, Green, & Frey, 2019). This concept analysis has described the characteristics of perinatal anxiety, revealing it as a condition defined by biopsychosocial factors set within the unique context of the perinatal period. Questions have arisen about the perinatal period as a time of adjustment within which particular attention to mental health is warranted: issues of illness presentation, classification and diagnosis and the interplay between these factors in determining access to services may also exist within general mental health, but it is the perinatal context with its broader ramifications for women and their infants that makes it particularly pertinent. The analysis leads us to understand *what* perinatal anxiety is but leaves questions about *why* it manifests in the way that it does. Explaining the condition purely in biological, psychological or social terms as defined by health or social care professionals, may not be enough to help clinicians understand the true nature of perinatal anxiety. There is therefore a need to hear from women about how anxiety is experienced during the perinatal period and how services can best meet perinatal psychological health needs.

4.1 Women's voices

The perspective largely absent from the discourse around perinatal anxiety is that of women living with the condition. Tools to identify and measure symptoms have been evaluated and form a critical part of effective care provision, but the lack of rich description from the voices central to the issue is striking. It is also noted that the views of health professionals have not been widely explored via qualitative research, when such an examination could help clarify why perinatal anxiety is an unfamiliar concept among those planning and providing care. In developing the concept it is important to ensure that future research includes both the perspectives of women in the perinatal period and the health professionals involved in their care.

Women should be at the core of co-designed services; and understanding of the lived experience of perinatal anxiety would add to the body of mostly quantitative data which, whilst of great value to inform identification, is potentially reductive when it comes to understanding how it actually feels to live with the condition. Inviting women to openly describe the experience of perinatal anxiety is particularly crucial when the stigma attached to mental ill health is amplified during the perinatal period, as women struggle to live up to the behaviour and feelings that are expected of them (Dolman, Jones, & Howard, 2013; Forder et al., 2020).

Further qualitative research is proposed to help address issues of unfamiliarity highlighted in this concept analysis as well as enabling a deeper exploration of the meaning of the concept as articulated by women. This next stage of concept development would inform how services can effectively meet the needs of women experiencing perinatal anxiety and support and empower them to manage and recover.

4.2 Access to treatment and support

In the UK at present, specialist perinatal mental health services are available for women with moderate to severe mental ill health. The remaining women, considered to have a mild to moderate need and numbering an estimated 240,000 in the UK, fall under the umbrella of Improving Access to Psychological Therapies (IAPT) services, receiving assessment and therapy from practitioners usually

with no specialist perinatal training (Hogg, 2013). Mild to moderate psychological distress in pregnancy can be highly debilitating (Furber, Garrod, Maloney, Lovell, & McGowan, 2009) and this concept analysis has demonstrated that the perinatal period is a unique time *regardless* of the severity of a woman's mental ill-health. The perinatal period offers a key opportunity to positively impact complex issues affecting generations of families, so it would be desirable for specialist mental health support to be available for women beyond the minority of those with more severe conditions.

Even if support can be accessed there is little substantial evidence to suggest the most effective approach to reducing perinatal anxiety (Matvienko-Sikar et al., 2020), adding another layer of complexity regarding not just diagnosis but appropriate management, including which services are best placed to deliver psychological care. Health professionals and service users in the UK find that mental healthcare systems are not well integrated and are hard to navigate (NHS-E/I, 2019): this raises questions about the role of midwives, as the primary healthcare professionals during the perinatal period, in supporting integrated mental health care and/or delivering psychological therapy. As experts in facilitating holistic maternity care, midwives with enhanced skills in mental health may be in an ideal position to provide a level of psychological care that meets the needs of women with mild to moderate perinatal anxiety. Such care provided by caseloading midwives could simultaneously augment the benefits already identified in continuity of carer models and complement the UK drive towards improved perinatal mental health (NHS-E, 2016b).

4.3 Strengths and limitations

Throughout this concept analysis a systematic method was adopted and a rationale for selection of the papers used was provided, both of which helped achieve an ethical and transparent approach. A check of reference lists added further rigour.

As described the process did not fully yield the expected results, being heavily weighted with quantitative papers, and the expectation of analysing data pertaining to first-hand descriptions of the experience of perinatal anxiety did not materialise. However, this has served to highlight a gap in the

evidence which should be addressed. The data analysis was undertaken by the first author, and this process could have been strengthened with investigator triangulation.

5. CONCLUSION

Although anxiety in the perinatal period may have a similar presentation as at other times the perinatal focus makes it unique, partly due to the potential impact on the future health of mothers and infants. The characteristics of perinatal anxiety described offer an understanding of the nature of the condition, and can inform how to direct support, i.e. how do midwives and other health professionals mitigate biopsychosocial triggers, support women with containment and prevent the consequential range of negative sequelae for mother, fetus and infant? However evidence that illuminates the lived experience of women with perinatal anxiety is needed in order to further understanding of this complex condition and inform service delivery that accounts for the needs of the many thousands of women who do not currently meet the criteria for specialist perinatal mental health services in the UK.

RELEVANCE TO CLINICAL PRACTICE

Attention to perinatal anxiety as a unique condition is recommended, to facilitate recognition, diagnosis and appropriate treatment. This paper advances the concept of perinatal anxiety, provides evidence of the paucity of literature examining women's subjective experiences and suggests further research to address this gap in knowledge and aid understanding of how clinicians can effectively support women to manage and recover from the condition.

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