Title Page

<u>A Rapid Evidence Review of Clinical Risk Factors for Poor Perinatal Mental Health in Women's Prisons in England</u>

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Abstract

Pregnancy and the first year after childbirth are a high-risk period of a woman's life, and research shows that women in prison are at heightened risk for poor mental health, self-harm and suicide. Whilst there has been a recent focus on studies into the health care for women in prison, research looking into the specific risk factors for poor perinatal mental health in women's prisons is sparse, with the majority having been conducted within a U.S. context that will have different provisions available and population need. This rapid evidence review explored academic literature published to identify clinical risk factors of poor perinatal mental health for women in prison in England. Following the initial search, 21 documents were identified which were then thematically analysed resulting in the identification of 72 clinical risk factors. Meta-themes identified included 'individual', 'relationships', 'prison context', 'provision 'and 'processes'. The recognition and mitigation of identified clinical risk factors is critical to ensuring quality care for women in prison and reduction of poor perinatal mental health.

Key Words: Perinatal Mental Health, Pregnancy, Prison, Women, Health

Introduction

In recent years, there have been increased interest in the health needs of women in prison (Bard et al., 2016). It is well documented that women in prison have multiple and complex needs and have higher rates of mental health, physical health and substance misuse difficulties, compared with women in the community (Abbott, 2021). Women make up a small proportion of the English prison population, occupying approximately of 5% of prison places (Ministry of Justice, 2022). The number of pregnant women in prison is estimated to be approximately 5% of the total female population in prison (Ministry of Justice, 2020).

It is recognised that there are gendered differences in offending, with women committing fewer and less serious crimes than men, with women more likely to be charged with non-violent offences (Rennison, 2009). However, females are often imprisoned in prison environments designed for males that lack a gender-sensitive understanding which is crucial for working with females (Bartlett & Hollins, 2018), this is despite women in prison having higher rates of mental health issues than male prisoners (Rosinski, 2019). Women in custody have a five times

higher risk of developing mental disorder than the general female population (78% compared to 15%; Plugge et al., 2006). Research suggests that over half the female prison population have a serious mental illness (SMI): almost half (47%) suffer from a major depressive disorder, 6% a psychotic disorder and 3% have a diagnosis of schizophrenia (Offender Health Research Network, 2009).

Women often come from backgrounds of poverty, homelessness, poor education and unemployment. The Prison Reform Trust (2019) reported that 53% of women in prison had experienced emotional, physical or sexual abuse as a child and 49% reported being a victim of domestic violence at some point in adulthood. For many women, entering custody means separation from their children and this has been found to be one of the most distressing aspects of their prison experience (Celinska & Siegel, 2010). It is frequently recognised that a custodial sentence impacts a woman and her children, who experience the negative impact of being separated from their primary care giver (Baldwin, 2018).

Within the cohort of women in prison, there will be women who are pregnant, or have recently given birth. _Women in prison are already a high-risk group, and many of their experiences (domestic violence, childhood sexual abuse and a history of mental health difficulties) are risk factors for a decline in mental health during the perinatal period. Perinatal Mental Health refers to a woman's mental health during pregnancy and the first year after birth (NHS England, 2018). This includes pre-existing, stable mental health conditions at risk of destabilisation during this period, mental health conditions manifesting during pregnancy or the postnatal period, and conditions exacerbated during pregnancy or postnatal period.

Pregnancy and the first year after childbirth are a high-risk period of a woman's life. Women experience marked physiological and psychological changes and therefore this is a period of increased vulnerability in regard to a woman's physical and mental health outcomes. For example, in community samples, 20% of women will experience a perinatal mental health difficulty during this period (Howard & Khalifeh, 2020) and suicide is the leading direct (pregnancy-related) cause of death within a year after birth (MBRRACE-UK, 2021). Other areas of known risk in this period are domestic violence, with over a third of women in community samples reporting violence starting or worsening during pregnancy (Howard et al., 2013). It is well documented that the wellbeing of the mother is crucial to the development of her child's emotional wellbeing, physical health and resilience and that this influences their long-term health and social outcomes. The first '1001 critical days', spanning pregnancy and the first two years of a child's life, is considered a crucial period for infant health outcomes and there is increased investment from the UK government, to provide timely support and interventions to families in this period (HM Government, 2021).

As expected, available literature has indeed shown that mental health problems occur at a high rate in women in prison during the perinatal period (Dolan, 2018), and that they are at risk of experiencing one or more mental health problems during the perinatal period (Baldwin et al., 2020; Bard et al., 2016; Birmingham et al., 2006; Dolan, 2018; Dolan et al., 2019; Edge, 2006; Foley and Papadopoulos, 2013; Gregoire et al., 2010; Kelsey et al., 2017; Paynter et al., 2019; Powell et al., 2017). Women in prison are already at elevated risk of suicide when compared to women in the community, and completed suicide is the leading direct cause of maternal death in the UK (MBRRACE-UK, 2021). However, research looking into the specific risk factors for poor perinatal mental health in women's prisons is sparse, with the majority having been conducted within a U.S. context that will have different provisions available and population needs.

Recent qualitative research has indicated that irrespective of having experienced past trauma, women experienced the prison environment itself as traumatic (Kelman et al, 2022). The lack of autonomy, control and power dynamics with staff at the same time as having inadequate support were noted. Women with history of trauma were more likely to experience the system as neglectful, hostile and chaotic. This is relevant to women who are either pregnant, or have recently given birth. It is well documented that women who have histories of trauma are at an increased risk of experiencing the perinatal period as reactivating and distressing. For women in the perinatal period who enter prison, they are also experiencing a further trauma in addition to this, likely to further impact on their wellbeing.

Aims

This scoping review aims to:

- synthesise the existing U.K. based research on clinical risks, defined as factors that relate to mental health decline, self- harm and suicidality, to women's mental health in prisons.
- 2. investigate the extent, range and nature of research in this area.
- 3. highlight gaps in the evidence base where further research is required.

Design

The structure of this review was based on Powell et al.'s (2017) Rapid Evidence Assessment, due to the Rapid Evidence Assessment's utility at gaining a comprehensive overview of available evidence on a topic within a limited timeframe (Civil Service, n.d.). The Rapid Evidence Assessment remains 'rigorous and explicit in method 'but allows for limits around the extent of the search – something crucial for this paper due to time constraints and limited resources within the research team. The Rapid Evidence Assessment allowed the identification of a range of appropriate papers, for which we then used Braun and Clarke's Thematic Analysis (2006) to identify clinical risk factors from the papers.

Search method

To identify potentially relevant documents, the first 200 hits from the following databases were searched from the year 2000 onwards: PubMed, Science Direct, PsychNet, Web of Science. The following keywords were used in the four chosen databases: (pregnant OR perinatal OR prenatal OR postnatal OR antenatal OR mother) AND (prison OR "criminal justice system") AND (baby OR infant).

Inclusion criteria

To be included in the review, papers needed to include data or reflections about women in the perinatal period within prisons in England. The perinatal period was defined as being either pregnant or within the first 2 years post-partum. Literature was included if it was written between the years 2000 - 2022 and were written in English. Papers were excluded if they did not fit into the conceptual framework of the study (i.e. not related to the mental health of women in English prisons in the perinatal period). Review papers were also excluded, as most include studies based on non-England contexts that would limit the generalisability. Non-published and thus non-peer reviewed papers were excluded.

Selection of sources of evidence

Two independent researchers screened all titles and abstracts and obtained any potential includable records in full. Papers were included if they discussed the mental health or the psychological wellbeing of women in the perinatal period in prison (including experiences, prevalence and risk factors). Literature was excluded if it discussed motherhood outside of the first 2 years postpartum. There was no restriction by study design; we included case studies, empirical studies, and intervention evaluations.

Data charting process

Clinical risk was defined as factors that relate to mental health decline, deliberate self-harm, and suicidality. Both researchers reviewed the included papers to identify and chart risk factors and themes. Data extraction included the names of the authors, year of publication, aims/purpose, study population and sample size (if applicable), methods, risks, key findings.

Data analysis

All articles were reviewed in full and any identified clinical risks were coded. The analysis was based upon Braun and Clarke's (2006) framework for thematic analysis, in that: articles were read and reread to become intimately familiar with the data (Step 1: Familiarisation); articles were coded in relation to any identified clinical risks (Step 2: Identifying initial codes); individual codes were collapsed

into organising categories of similar underlying concept (Step 3: Generating themes); generated themes were reviewed, considering the relations between coded data and the entire dataset (Step 4: Reviewing potential themes); and then themes were defined (Step 5: Defining and naming themes).

Procedure

See Figure 1 for details.

Results

Based on the search outlined above, 21 documents were identified as meeting the criteria for inclusion in the review. These documents were subjected to thematic analysis to identify clinical risks, where a total of 72 clinical risks were identified. Clinical risks were organised into five meta-themes: Individual; Relationships; Prison Context; Provision; and Processes.

Individual

The first meta-theme was individual, comprising two sub-themes relating to clinical risks associated with the individual. In total, 18 clinical risks were identified within this meta-theme.

Women's Biography

For the theme of 'women's biography', nine clinical risk factors were identified from the papers included in the review. Papers consistently identified factors related to the women's history and personal circumstances that are known risk factors for poor mental health in the perinatal period, including (1) unemployment (Dolan, 2016; Gregoire et al., 2010), (2) a history of mental health difficulties (Dolan, 2016), experience of (3) domestic violence, (4) substance misuse, (5) homelessness, and (6) poverty (Brandon et al., 2013, Sleed et al., 2013). All increase the women's vulnerability of developing a perinatal mental health difficulty. Factors relating to the pregnancy that could further predispose women to perinatal mental health difficulties include the (7) pregnancy being unplanned (Birmingham et al., 2004), being a (8) lone parent (Gregoire et al., 2010), and (9) poor maternal physical health (Price, 2005).

Unmanaged Mental Distress

Nine clinical risk factors from the review produced the theme 'Unmanaged mental distress'. There was recognition that the perinatal period is a time of heightened emotional distress, some of which increased in response to the journey of being a mother in prison. This included feelings of (1) guilt, anxiety, shame (Powell et al., 2020) as well as (2) anger and hostility which can become entrenched

and infant-directed without intervention (Baradon et al., 2008; Sleed et al., 2013). There was reference to women likely to be separated from their children (3) using strategies to suppress and block their emotions, such as using substances and rejecting their children completely to help them cope with their distress around the impending separation (Abbott et al., 2020). Women separated from their children are a cohort already identified as having more severe and complex mental health difficulties and who are at an increased risk of self- harm and suicide (Gregoire et al., 2010).

There was an identified risk that (4) women do not always disclose mental health and trauma history, including experiences of childhood abuse, rape and domestic violence (Dolan et al., 2019; Gregoire et al., 2010), all of which are (5) experiences of trauma that increase a women's distress and risk of developing perinatal mental health difficulties. Sometimes, women may be less honest about the severity of their mental health issues for (6) fear of repercussions on childcare arrangements (Dolan et al., 2019), meaning their distress cannot be addressed. Several papers commented that (7) poor screening and delays to accessing of mental health care was of concern (Gregoire et al., 2010) and there was often (8) absence of specific pathways of recognition, detection and treatment of a women's mental health in prison (Birmingham et al., 2006; Gregoire et al., 2010). Once identified, there was (9) limited access to treatment for mental health problems (Birmingham et al., 2004; Windham Stewart., 2016).

Relationships

The second meta-theme was relationships, comprising three sub-themes relating to the relationships women have with others. In total, 17 clinical risks were identified within this meta-theme.

Mother-Infant Relationship

Six clinical risk factors made up the theme 'the mother-infant relationship'. Papers commented on areas that could be interpreted as being risks to bonding and attachment difficulties. Part of this linked to the women's own history, current mental health difficulties, confidence as a mother and perpetuated by lack of access to appropriate support. There was recognition that women themselves had (1) insecure attachments, which are risk factors of intergenerational trauma (Baradon & Target, 2010) and (2) increased pressure on the mother as caregiver (Windham Stewart., 2016). For women on an prison Mother & Baby Unit (MBU), (3) the intensity of the relationship between mother and baby may heighten less adaptive characteristics of their relationship, including parentification of the child, and spousal-like representation of the mother-baby relationship. Sleed et al. (2013) commented that baby could function as a source of comfort and emotion regulation to their mother, a role reversal that is a key risk factor for development of disorganised attachment relationships.

In terms of bonding, it was deemed that there was (4) little parenting support, including (5) for breastfeeding, that addresses the psychological and emotional difficulties that can accompany bonding and parenting in prison (Price, 2005). Women (6) anticipating a separation from baby or feared this, were hypothesised to be less engaged with their baby and more likely to withdraw, impacting on maternal sensitivity and reflective functioning (Powell et al., 2020; Powell et al., 2017; Sleed et al., 2013).

Separation of Mother and Infant

Six clinical risk factors were identified from the review and grouped into the theme 'Separation of mother and infant'. Separation from their baby was identified consistently as leading to a decline in mental health, impacting on a woman throughout her pregnancy in anticipation of this, and following being together on a prison MBU. A woman may (1) become less engaged with their infant which in turn impacts their sensitivity, parenting skills, and bond (Sleed et al., 2013). Women separated from their babies are also at (2) higher risk of self-harm, suicide, reoffending, substance misuse, and further trauma (Baradon et al., 2008; Dolan et al., 2013; Powell et al., 2020; Powell et al., 2017), which may relate to (3) the guilt, anger and shame they experience (Baradon et al., 2008; Powell et al., 2020; Sleed et al., 2013).

Separations in prison directly after birth can be (4) poorly planned and so women are less able to prepare for them adequately (Powell et al., 2020; Sleed et al., 2013), this risk factor is further intensified by (5) poor continuity of care when mothers return to the mainstream prison following separation (Powell et al., 2020). Women who are separated from their baby are more likely to (6) have complex mental health problems which suggests women who might only successfully parent with support, may not be given the opportunity (Gregoire et al., 2010).

Social Support

The theme of 'social support 'encompassed five clinical risk factors found from the papers reviewed. The lack of social support is frequently cited as a difficulty for many women. Due to the (1) smaller number of women's prisons, friends and family may have long distances to travel and may result in seeing prisoners less frequently (Abbott et al., 2021; Marshall, 2010; Sleed et al., 2013; Windham Stewart, 2016). Separation from family may contribute towards (2) family breakdown, which can be an added stressor and risk factor for mental decline for women in this period (Abbott et al., 2021; Dolan, 2016; Windham Stewart, 2016).

It was highlighted that (3) professional and healthcare support was notably decreased post birth, particularly if a mother was separated from her child, when she may be the most vulnerable and

need it the most (Powell et al., 2020; Dolan et al., 2019). One paper identified that few women received breastfeeding support, which impacts bonding with the baby and the perinatal mental health of the mother (Price, 2005). Whilst another found women on the MBU could experience isolation, boredom, loneliness and experience exclusion at being a new mother on an MBU (Baradon et al., 2008).

Prison staff can be seen as (4) unsupportive, where were some reports of feeling bullied by staff who were untrained about mental health presentations or warning signs and generally unaware of the needs of perinatal women and how to provide emotional support to them (Powell et al., 2020; Sleed et al., 2013). Prison staff may also (5) lack an understanding of the impact on a mother of being separated from their child, and this may perpetuate the distress and impact of separation (Powell et al., 2020). This unsupportive nature may relate more to prison staff being unsure of how their role encompasses supporting women in the perinatal period, rather than them being uncaring towards the women.

Prison Context

The third meta-theme was 'prison context', comprising two sub-themes relating to the influence of the prison environment. In total, 14 clinical risks were identified within this meta-theme.

Prison Environment

Nine clinical risk factors were found within the review papers which the researchers grouped together into the theme 'Environmental conditions'. Several studies referenced (1) the stress of being in the prison environment as contributing to mental health difficulties. This stress often related to (2) feelings of uncertainty, particularly around admission onto the MBU or care arrangements of their child, which can precipitate feelings of anxiety and despair (Abbott et al., 2020). Furthermore, (3) women experienced stress surrounding feeling watched during the birthing process and (4) feeling under pressure from staff (Abbott, 2014). These conditions can impact individuals 'wellbeing and lay the foundations for or trigger a mental health decline, particularly in the psychologically and physiologically vulnerable perinatal period.

For many women in prison, a sensation of feeling unsafe may be a traumatising or retraumatising experience. For example, (5) having difficulties with or feeling vulnerable around other prisoners (Windham Stewart, 2016), and (6) actual/perceived punitive treatment by prison staff (Abbott et al., 2010; Sleed et al., 2013) can reproduce conditions that many women in prison have experienced in an abusive past. Indeed, prison environments are noted to (7) lack a trauma-informed perspective (Sleed et al., 2013) and Price (2005) references their tendency to (8) prioritise security and

control over women's health. An example of this is (9) lack of access to confidential space to access health care appointments (Powell et al., 2020).

Autonomy

Five clinical risk factors made up the theme 'Autonomy'. Lack of autonomy was a recurrent theme leading to distress in women in prison. Women often have (1) little choice regarding midwifery care and (2) birth planning and prison security measures mean (3) privacy is often limited leading to feelings of shame and experiencing a loss of dignity (Abbott et al., 2020; Price, 2005). This can also lead to women feeling they are not believed about concerns or queries they may have as prison staff can (4) invalidate women's concerns about their own bodies during the perinatal period (Abbott et al., 2020). Women often have very (5) little choice about their babies 'futures, including caregivers, impacting their identity as a mother (Abbott, Scott, Thomas. & Weston, 2020; Abbott et al., 2021; Sleed et al., 2013).

Provision

The fourth meta-theme was 'provision', comprising two sub-themes relating to the provision of health care services for perinatal women in prison. In total, 10 clinical risks were identified within this meta-theme.

Variable Provision

Six clinical risk factors were identified which referenced variable provision of perinatal health care from the papers included in the review. Another aspect that emerged was the variability of care between different prisons. This can be contributing factor for perinatal mental health problems due to the inequality of care provisions across the country. This also relates to the finding that, despite being entitled to as much, (1) pregnant women in prison may not receive the same quality of care as those in the community (Gregoire et al., 2022). For example, women in prison (2) do not always receive 24-hour access to midwifery services, or (3) antenatal classes/written information at the same standard as those outside prison (Price, 2005).

The care of women in the perinatal period is often managed between a number of agencies and professionals. This care was often characterised by (4) inconsistencies in provision, (5) unclear responsibilities by professionals and (6) poor information sharing (Powell et al., 2020; Thomson et al., 2022). This can lead to poor health care being provided, (Powell et al., 2020; Price, 2005), perpetuating perinatal mental distress.

Unsupported Prison Staff

Four clinical risk factors created the theme 'unsupported prison staff'. Papers recognised the immense challenge of prison officers offering care to women without (1) adequate training (Powell et al., 2020), and (2) emotional support themselves following being part of mother- infant separations which can be distressing and runs the risk of vicarious trauma (Powell et al., 2020). This impacts on their capacity to detect women's mental health difficulties but also (3) repeated poor interactions with staff mean women may not (4) feel able to trust and share their distress (Sleed et al., 2013; Powell et al., 2020; Windham Stewart, 2016).

Processes

The fifth and final meta-theme was 'processes', comprising two sub-themes relating to procedures and processes concerning relating to being in a prison environment. In total, 13 clinical risks were identified within this meta-theme.

Transitions

Seven clinical risk factors made up the theme 'transitions'. Factors that could also be a risk factor for triggering mental health decline involve those around key periods of change, including (1) entries into prison, such as unexpectedly receiving a custodial sentence when care arrangements for their baby have not been made and (2) sudden transfers to other prisons or changes in key staff could also act as a precipitating factor for mental health problems (Windham Stewart, 2016). The (3) transition to the MBU may also be a vulnerable time for a woman's mental health. Similarly, a woman's continuity of care may falter on their (4) return back to the mainstream prison post-separation (Powell et al., 2020).

Transitions (5) back into the community were also identified as risk factor for poor perinatal mental health. There may be inadequate continuity of care as women may not be (6) appropriately referred to perinatal mental health services in the community (Gregoire et al., 2022). In some cases, it may be difficult to (7) trace their location to alert local health services of their needs, (Gregoire et al., 2022; Price, 2005), resulting in disrupted mental health treatment and a decline in support.

Mother and Baby Unit (MBU) Process

Six clinical risk factors which were grouped into the theme 'Mother and Baby Unit (MBU) process' from the papers. The (1) process of applying, gaining admission and moving onto the MBU is a significant period of change and uncertainty in a prisoner's life, which may contribute towards a sense

of instability, anxiety or hopelessness. The uncertainty of this leading to stress and anxiety during an already vulnerable time. Some studies identified that (2) not all women were adequately informed about the existence of the MBU or the process of application (Dolan, 2016; Price, 2005; Thomson et al., 2022). Women have (3) frequently reported that processes and decisions related to admission were slow, leading them to experience long periods of anxiety

This can be impactful to a woman's mental health, as not only does it mean that she may have less access to greater liberties and professional support, but she may also be separated from her child, which has been repeatedly documented to have adverse effects on perinatal mental health outcomes. Thus, it has been repeatedly found that MBU places may be underused in some prisons, where (4) eligible women are not applying, which increases the possibility of a separation from their baby and increase the risk of a perinatal mental health problem (Dolan, 2016). This was found to be especially true for (5) women serving shorter sentences and those on remand, who were less likely to apply for a space on the MBU. The (6) variety of practice and admissions procedures also increased uncertainty between prisons (Dolan et al., 2019).

Discussion

The population of women in the perinatal period within English prisons is a small number, within an already minority group. There is therefore a risk of their needs being overlooked and their specificities unknown. This paper has synthesised these clinical risks within five domains relating to the *individual*, the *relationships* the individual has, the *prison context* where the individual is situated, the *provisions* of health care available to the individual and the *processes* that shape the care of the individual in the prison setting. Across these domains, within the identified literature, 72 clinical risks were identified related to processes and organisational decisions that are distressing to already mentally vulnerable women because of their personal socio-economical situations and history of trauma, with little specialist and trauma informed care and support to manage this distress. It is paramount that these clinical risks are identified and mitigated in practice to prevent perinatal mental health decline. In so doing, the individuals mental health and quality of life will be improved, the infant's development and health and social outcomes will be improved, and the reproduction and transmission of harm and adverse experiences women have faced may be prevented onto their children.

The prison environment has the potential to be a window of opportunity to improve perinatal outcomes (Bard et al., 2016). A systematic review of largely U.S. based studies on pregnant prisoners, found that imprisoned women had physically healthier pregnancies (higher birthweight and fewer

pre-term births), than similarly disadvantaged populations (in terms of their socio-economic factors), in the community (Knight & Plugge, 2005). Possible benefits that prison can provide include the provision of consistent food and shelter, mental health treatment with likely shorter waiting times than in the community, a potentially moderated environment regarding the use of drugs and alcohol, protection against abusive partners, stability, and access to antenatal care (Bard et al., 2016). In addition, there are six MBUs in England (HM Government, n.d.), which enable mothers to stay with their babies up to 18 months and research suggests mothers and babies can thrive in this environment (Mulligan, 2019; Sikand, 2015) and infants in this environment can succeed in forming secure attachments to their mother (Edge, 2006). MBU's provide several protective features for both maternal mental health and infant development, and represent an environment where mothers can, in a secure and supportive manner, experience motherhood, something which appears to motivate change for their child's benefit, this is compared to becoming a mother followed by separation (Chambers, 2009; Goshin et al., 2014, Rahimipour Anaraki & Boostani, 2014). Whilst the studies included in this review indicate the positive impact of MBU's, in November 2022 a report was published that had reviewed social worker decision making between 2017-2021. The report outlined there were cases where the decision to reject an MBU application was not deemed reasonable. More common was a lack of social worker involvement in cases that went onto be rejected. There was recognition that the MBU process lacked scrutiny and that women were not routinely supported through the process. This indicates further work is required to ensure that all women are subject to a fair, equal and supportive process when applying for an MBU placement.

There is a lack of existing literature on the experiences and outcomes of perinatal women in prison, future research in England should aim to fill this literature gap in order to explore the clinical risk factors for this group and potential policies which could be implemented to mitigate these risks. Longitudinal studies could be helpful, particularly as it is important to understand the efficacy of any mental health interventions with a view of its long-term impact. For example, it would be useful to consider whether mental health interventions during pregnancy improved wellbeing both during and after pregnancy, and whether they had an influence on the relationship between mother and baby. Initial research in this area has demonstrated promising results. For instance, Bard et al.'s paper (2016) highlighted that prison interventions must focus not only on quality care during the antenatal period and supportive MBU stays for the mother and child, but also on coordinated care when women are released from prison. This 'wrap-around 'care was associated with reductions in recidivism rates over a 10-year period post-release.

However, there are methodological barriers to research on this topic, especially so when combined with the complex and regimented nature of the prison environment which is already

understood to create obstacles when conducting research (Bard et al., 2016; Bretherton, 2010). Indeed, the high turnover of staff, short sentences, and the prioritisation of security act as methodological issues (Price, 2005). Furthermore, the most mentally ill, distressed women, as a result of child separation or perinatal ill health may not want to participate in research, which could result in limited or unrepresentative samples when exploring mental ill health in perinatal women (Gregoire et al., 2010). Similarly, some women choose not to reveal their status as mothers to the relevant authorities and making their own informal 'care' arrangements (O'Keefe & Dixon, 2015), resulting in difficulty truly capturing women's voices when experiencing perinatal care in prison (North, 2004; Sikand, 2015).

There also remains an absence of centrally collected routine data about pregnancies and births in prison in a standardised manner (Galloway, Haynes, & Cuthbert, 2014). This results in challenges holding people to account when things 'go wrong', collecting this data would indicate a real interest in the welfare of perinatal women in prison and represent crucial movements forwards in this field (Abbott, 2018, Albertson et al., 2012, Dolan, 2016, Dolan et al., 2019, Galloway et al., 2014, North., 2004). Whilst we must hold onto the risks identified, and continue to understand, mitigate and research these, we feel hopeful that with increased focus and investment in rigorously researching this area, women under our care will have improved health outcomes.

Limitations

A key limitation of this rapid evidence review is that this does not include a full systematic review of the literature. Due to time constraints, the researchers searched the first 200 hits in each of the four databases which could have resulted in peer reviewed- evidence being missed. Researchers also made the decision to omitted grey literature and non-published papers from the review. Themes within the grey literature include the impact of early experiences of trauma being experienced through the prison environment, such as loss of control and power, little privacy and a feeling of vulnerability (Abbott & Delap, 2016; O'Keefe & Dixon, 2015). Other literature reinforced importance of transitions and timely decisions being made about placements on MBU's (Sikand, 2015; North, 2004) and the impact of this on bonding with her baby (Kennedy et al., 2016). Whilst these themes are echoed in the findings of this review, there is a quality issue in that grey literature by definition is not peer- reviewed.

Whilst several risk's were identified in the papers reviewed, the separation of these into discrete themes is unlikely to reflect the complex relationships between these observed in clinical practice. Further research should not only investigate the risk factors identified in more detail, but seek to explore the relationships between these as well as the extent to which they influence each other. For example, the risk factors identified under 'unmanaged mental distress' are likely to predisposed by a women's history of trauma and

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disruptive attachment relationships in their own life, perpetuated by the prison environment combined with a lack of social support and lack of autonomy. Such an approach calls for a more nuanced and holistic approach to how women are assessed within the prison environment, to develop a more targeted and cohesive plan of support for women to achieve the best possible outcomes.

Nevertheless, this paper represents the first known review that has specifically focused on the identification and synthesis of the individual risk factors to perinatal mental health for women in prison. In so doing, future research can now be directed into both the identified gaps within the evidence base as well as an interrogation of how the identified risk factors intersect and interact.

Implications

Due to the scarcity of research on this topic, much of the evidence included predates current policies and Prison Service Instructions (PSI) which dictate perinatal care in prisons. Therefore, many of the clinical risk factors identified in papers predate the new policies and PSIs may now be invalid. We therefore recommend a formal review now takes place of the PSI in relation to the clinical risk factors identified. Alongside this, further research into the specificities of the mental health and distress of women in the perinatal period and their outcomes are required. Detailed analysis of this would enable greater understanding of their needs for treatment and prison specific adaptions that can be made.

The current review indicates several important practical implications to be embedded across the female prison estate. We often accept the notion that women in prison should be given 'equivalent care' to those in the community, however the number of risk factors identified in this population, including those specific to the setting indicate that equivalent care for perinatal mental health and distress should be the minimum. A preventative model should be adopted and health services should ensure there is a lower threshold to access support and treatment and that this should be delivered by specialist perinatal mental health services. Clinicians need to work with women across transitions, including separations and ensure women have choice and autonomy over their care and treatment. The development and evaluation of treatment interventions in the prison setting require review further research and evaluation.

A core part of perinatal mental health service delivery in prisons should be training in perinatal mental health and distress to all professionals. Whilst there is a wish to develop trauma-informed care prisons as a whole, there is a need to understand the ongoing trauma that a women may be experiencing during the perinatal period due to being pregnant in prison or separated from her baby. Skilling up prison officers to recognize distress and red flags indicting perinatal mental health is essential, given they are often with women day- to – day. The emotive nature of this work cannot be underestimated and

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reflective practice and case consultation is considered imperative to an approach which aims to work at multiple systems, beyond the individual patient. Finally, effective communication and joint working between all agencies is central to good clinical care and risk management in the perinatal period.

Conclusions

Overall, the range and scope of research on perinatal mental health in prisons in England is limited, which has significant implications for practice and achieving a high quality of care for women in prison as well as their babies. There are recognised gaps in the evidence base as well as limitations to the studies identified, which calls for further research to address these omissions. Several prospective lines of enquiry are outlined in this paper, and it is hoped that this paper will act as a catalyst for research to improve women's perinatal mental health as well as a reference point against which policy can evolve to mitigate the risks identified herein.

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Figure 1: Flowchart showing search and analysis stages

Stage 1: Initial academic article search

Searched Psych Net, Science Direct, Web of Science, and Pub Med, potentially relevant studies found using title search: (pregnant/perinatal/prenatal/postnatal/antenatal/mother prison/criminal justice system, baby/infant)

Search yield: 38,857

Titles reviewed (first 200 hits from each database): 800



Stage 2: Categorisation

Review of studies based on their titles and abstracts

Number relevant: 17



Stage 3: Hand searching identified papers

Reviewing reference lists of identified papers to find more relevant articles

Number of additional papers identified: 4

Total number of papers included in current review: 21



Stage 4: Coding

Included documents were coded by two researchers to identify clinical risks.

Number of clinical risks identified: 72

Meta-themes across risks identified: 5