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Original Research

Pregnancy and breastfeeding in mental health policy: a narrative review

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Abstract

Objectives: Mental health difficulties are often exacerbated during the perinatal period. Policy and guidelines are increasingly being used to enhance the quality of healthcare. We conducted a literature review of published research relating to pregnancy and breastfeeding in mental health policy.

Methods: Relevant terms were searched in Medline, CINAHL, APA PsycINFO and EMBASE for articles published in English from 1970 until 2020. Only papers that referenced policy, guidance, legislation or standards were included. While a systematic approach was used, the nature of the results necessitated a narrative review.

Results: Initially, 262 papers were identified, 44 met the inclusion criteria. Reproductive health is given sparse consideration in research relating to mental health policy. Despite this, some key areas emerged. These included: the need for proactive preconception psychoeducation, proactive screening of mothers of infants and young children for perinatal mental health issues, enhanced prescribing practice for women of child-bearing age, enhanced monitoring during pregnancy, development of safe modification of coercive practices should they need to be employed in emergency circumstances and targeted measures to reduce substance misuse. Themes that arose relating to breastfeeding and bonding are also described.

Conclusions: Female reproductive health is often ignored in research relating to mental health policy, guidelines and standards. These tools need to be harnessed to promote good healthcare. Reproductive health should be included in the care plan of all mental health patients. These topics need to be integrated into existing relevant policies and not isolated to a separate policy.

Keywords: Breast feeding; health policy; inpatients; mental health; pregnancy

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Introduction

Women with mental health disorders are more likely to be parents than men with mental health disorders (Nicholson *et al.* 1999; Nicholson *et al.* 1998). Also, pregnancy increases vulnerability to mental illness (Austin and Highet 2011). Perinatal mental illness presents a major public health challenge, given its contribution to maternal morbidity and mortality (Austin & Highet 2011), adverse obstetric outcomes (Frayne *et al.* 2019) and impact on child development (O'Connor *et al.* 2002; Stein *et al.* 2014). Partners' quality of life and mental health may also be affected (Paulson *et al.* 2010) and other children in the family may experience a greater risk of mental illness and adverse social and behavioural outcomes (Halligan *et al.* 2007; Murray & Cooper 1996; Stein *et al.* 2014).

For a long time, women with mental health problems were discouraged from having children. In many countries this was (and sometimes still is) (Pearson, 1995) sanctioned by legislation (Amy & Rowlands 2018). Thankfully, the rights of individuals to have families are increasingly being protected by instruments like the United Nations Convention on the Rights of Persons with Disabilities (CRPD), in particular Article 23, which provides a number of protections (United Nations 2006). It is vital that mental health professionals champion these rights and support individuals in having families.

Women are more likely to be admitted in the 2 years following delivery than at other times of their lives, particularly during the first 6 weeks after birth. A Danish study found that women were more than seven times more likely to be admitted 10–19 days post-partum compared to women who had given birth 11–12 months prior (Munk-Olsen *et al.* 2006). Women from lower socioeconomic backgrounds have greatly increased rates of admission in this period with 79% more likelihood of being admitted involuntarily compared to non-pregnant individuals (Langan Martin *et al.* 2016).

In many jurisdictions there are no dedicated mother and baby mental health facilities. This absence makes adherence to Article 23 of the CRPD highly challenging. It states that 'In no case shall a child be separated from parents on the basis of a disability . . .'. As mental healthcare becomes more complex, policies, standards and guidelines are used to maintain quality (Institute of Medicine 2000). In their review of mental health policy in an Irish regional

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mental health unit, McGuire *et al.* (2020) found there to be a lack of consideration given to pregnant or breastfeeding patients. They also highlighted a complete absence of consideration of this cohort of patients in *The Quality Framework for Mental Health Services* (Mental Health Commission 2006) document, on which national inpatient policies are based.

Pregnancy creates a temporary situation where the mother–baby dyad has to be considered. This time period is often treated as an exceptional period. Consequently, it is addressed in separate policies and in isolated sections of textbooks or included in areas of special interest (Kaplan & Sadock 2000). However, pregnancy is an inherent and essential part of the human condition with all humans having been involved in at least one pregnancy. The isolation of policy and guidelines relating to pregnant women and nursing mothers, leads to a *post hoc* consideration of their needs and implies that pregnancy and motherhood are the exception rather than the norm.

We aimed to conduct a literature review to identify how pregnancy and breastfeeding are considered in mental health policy, particularly in relation to hospitalisation. We attempted to identify areas that should routinely be addressed in mental health policy.

Methods

The nature of this study and the research available on the topic did not allow for a systematic review. While a systematic approach was taken, results were often highly limited. We contacted relevant experts in the field requesting suggested information on this topic and on ward policy.

A literature search was undertaken in Medline, CINAHL, APA PsycINFO and EMBASE from 1970 until 2020. Terms searched were pregnancy, reproductive age, child-bearing, perinatal, postnatal, prenatal, breastfeeding, lactation, mental health, psychiatry, inpatient, hospitalisation, policy, guidance, legislation and standards. Terms relating to the topics of pregnancy and breastfeeding were searched using the logical operation 'OR'. The same process was used for terms relating to mental health, in patient care and policy or guidelines. Then each of the four topics were combined using the logical operation 'AND'. Search terms were limited to title or title and abstract. The search was then limited by human, English language and date of publication 2000 until present due to the small number of papers published before this date. A hand search of references was also performed. Guidelines for inpatient policy both in general adult wards and mother baby units (MBUs) were also reviewed.

Exclusion criteria included papers that did not relate to policy or were not in the English language. Two authors reviewed each paper for relevance and referred any disagreements to a Consultant Perinatal Psychiatrist.

We tried to focus on the implications for *inpatient* policy for perinatal patients but in some areas it was not possible to separate out the specific considerations for admitted individuals. As a consequence, some of the discussed topics are not exclusively related to inpatient care.

Results

Of the 262 papers identified in our initial search, 44 met the criteria (Fig. 1) and are briefly summarised here. The papers largely fell into 10 distinct categories. The main findings from these papers are outlined in Table 1. The findings of these papers informed our recommendations for policy which are presented in Table 2.

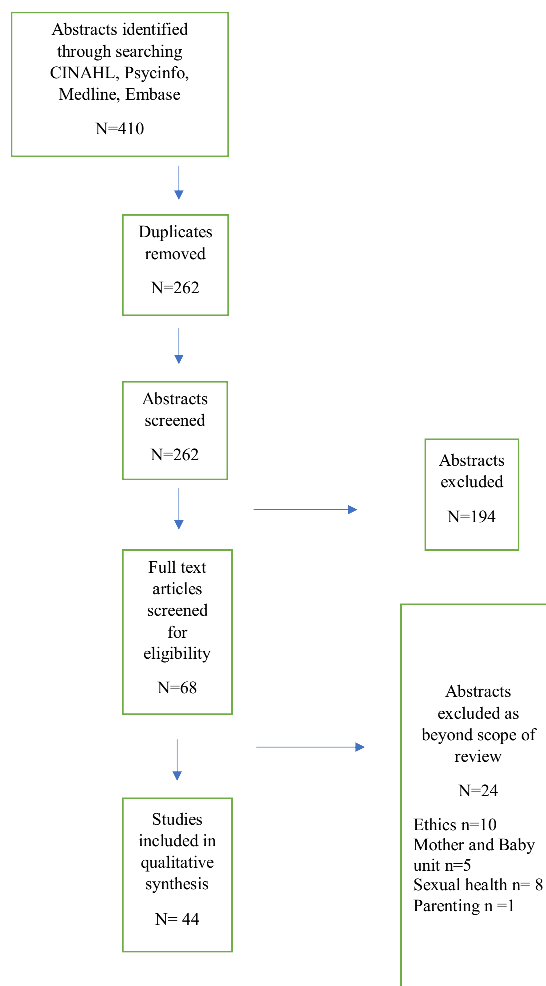

Figure 1. PRISMA flow chart. PRISMA preferred reporting items for systematic reviews and meta-analysis.

Discussion

Proactive preconception psychoeducation

Fertility among individuals with mental illness has increased in parallel with de-institutionalisation (Ødegård 1980). Many of these pregnancies are unplanned or unwanted (Guedes *et al.* 2009; du Toit *et al.* 2018). Given the bidirectional nature of the association between unplanned pregnancies and mental illness (du Toit *et al.* 2018) fertility and contraception should be considered and discussed both at the initial consultation and at all other interactions with individuals of reproductive age. Solari *et al.* (2009) suggest improving education and reducing barriers to accessing birth control. Access to abortifacients is unfortunately not ubiquitous. Policy should highlight the needs of this cohort of patients and outline strategies to ensure that these women are not discriminated against by virtue of their illness, inpatient legal status or location.

Screening

Screening can help identify mental health disorders at both the antenatal (Sharif *et al.* 2016) and post-partum period (Turella *et al.* 2016; Wisner *et al.* 2013). However, the effectiveness of screening varies. In their robust appraisal of a well-established screening

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Table 1. Key findings from relevant papers

Proactive preconception psychoeducation	
Solari *et al.* 2009	Patients with schizophrenia have no less sexual desire but quality and relational context of sexuality may be different Expect exacerbations antenatally and postnatally May require significant support for parenting Should undergo active family planning as tend to have less knowledge of contraceptive options
Screening	
Sawati & Wijesiriwardena 2013	Good compliance with NICE guidelines for screening for perinatal depression in a district general hospital but poor quality of same Recommend increased communication between mental health and obstetric teams to improve quality of screening and documentation of co-ordinated plans
Sharif *et al.* 2016	Screening for perinatal psychiatric illness should be accompanied by adequate training of staff and clear referral pathways
Turella *et al.* 2016	Difficulties in engaging migrant women
Wisner *et al.* 2013	Mothers with highest intensity of self-harm ideation were identified with EPDS score of 10 or higher Most common diagnosis in screen positive was major depressive disorder with co-morbid generalised anxiety disorder Strategies to differentiate unipolar from bipolar depression post-partum are needed
Prescribing	
Davis *et al.* 2001	Clinical evaluation of potentially teratogenic and/or toxic exposures must consider maternal, embryonic and foetal aspects of pregnancy. Counselling of such patients should consider both risks associated with ongoing treatment and discontinuation
Goldspink *et al.* 2020	Prescription of valproate to women of child-bearing age in the study currently falls well short of best practice. Urgent action at both clinician and organisational levels is required to address this risk
Gotlib *et al.* 2013	Retrospective chart review of women of child-bearing age treated with valproic acid showed poor adherence with guidelines
Jones *et al.* 2015	Audit of valproate prescribing in reproductive females in a hospital Trust showed poor compliance with NICE guidelines. Prescribing protocol designed to improve compliance
Atturu *et al.* 2013	Trends in valproate prescribing
Martin *et al.* 2013	High rates of prescribing of psychotropic medications for pregnant women admitted to psychiatric unit
Symptom Monitoring	
Viguera *et al.* 2007	Recommend shared decision making with informed patient when considering treatment of BPAD in pregnancy Recommend close follow-up and co-ordinated care with obstetricians Guidelines for management of BPAD in pregnancy and post-partum period
Kelly & Sharma 2010	No specific validated screening tool for BPAD post-partum identified Consider BPAD if symptoms of hypomania, atypical depression, family history or rapid onset of symptoms post-delivery
Davis *et al.* 2001	Comprehensive holistic treatment strategy for BPAD in pregnancy. Emphasises the need to consider the individual patient; her past psychiatric history; the number, severity and frequency of manic episodes; her past response to various treatments; and her personal preference Cognitive-behavioural, supportive, psychoeducative and family therapy can augment treatment
Gilbert 2010	Case report of patient with BPAD and her journey through pregnancy, treatment with quetiapine as part of the New Zealand National Register of Antipsychotic Medication in Pregnancy (NRAMP)
Emergencies	
Ladavac *et al.* 2007	Recommend clear guidelines for managing psychiatric emergencies in pregnancy Use smallest amount of medication if necessary
Rodriguez-Cabezas *et al.* 2017	There is a lack of guidelines on the treatment of psychiatric emergencies in pregnancy This retrospective analysis of emergency room presentations showed that most received psychotropic medication but less were restrained
May 2014	Recommend guidelines for treatment of catatonia in pregnancy Suggest that ECT may be safer than pharmacotherapy
Holistic treatment	
Grube 2005	Reduced length of hospital stay with supportive male partners
Substance misuse	
Gopalan *et al.* 2019	Symptom triggered benzodiazepine withdrawal protocol associated with lower benzodiazepine use compared to standard tapered regimes Preliminary maternal/neonatal outcomes similar between symptom-triggered and taper groups
Thibaut *et al.* 2019	Small amounts of benzodiazepine should be used for acute alcohol withdrawals in chronic users during pregnancy Brief interventions effective for low to moderate levels of alcohol use Low level of evidence for efficacy and safety of pharmacological alcohol abstinence strategies suggest that they should not be used in pregnancy
Hilder 2013	Highlights the high levels of psychiatric co-morbidities in patients presenting in the perinatal period e.g. substance misuse co-morbid in 9% adjustment disorders and 61% anxiety disorders

(*Continued*)

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Table 1. (*Continued*)

Proactive preconception psychoeducation	
Eating disorders	
Mazer-Poline & Fornari 2009	Highlight risks to mother and foetus
	Recommends team approach
Bonding	
Ces *et al.* 2018	Risk factors for separation of mother and baby include factors from mother's environmental and interactive past, mother's current mental health and child's health
Hurt & Ray 1985	Suggests an interdisciplinary protocol for facilitating the bonding process
Policy	
McGuire *et al.* 2020	Lack of consideration of the pregnant or breastfeeding patient in ward policy Recommends that the rights of the reproductive female should be comprehensively considered in inpatient mental health care policy
Lee *et al.* 2019	Australian National Perinatal Depression Initiative (NPDI) which saw increased screening for perinatal depression led to more admissions prenatally and less admissions postnatally
Chambers *et al.* 2018	Increase of 5% in perinatal mental health consultations from 2009 to 2014. This is in line with a changing policy environment Disparity in access to care according to remote geographic regions
Rowan *et al.* 2015	State mandates in the US targeting perinatal mental health issues are probably not influencing clinical outcomes Home visits with a mental health component are effective for post-partum depression
Jankovic *et al.* 2020	Access to community mental health facilities during the perinatal period varies across ethnic minorities and should be facilitated for Black African, Asian and White Other women. This may reduce involuntary admissions. Access, rather than utilisation, is the problem

programme, Rowan *et al.* (2012) found that universal screening alone did not lead to increased uptake of behavioural healthcare, and suggested that this may be due to barriers such as lack of coverage, lack of proximity of an acceptable provider, difficulty obtaining time off from work, stigma and wariness of psychopharmacologic treatment (Horowitz *et al.* 2009). Lee *et al.* (2019) and Chambers *et al.* (2018) identified that those in rural areas and those from ethnic minorities had less access to this specialised service. Two studies (Wisner *et al.* 2013; Turella *et al.* 2016) noted difficulty in contacting vulnerable women from lower socioeconomic groups and migrant populations for follow-up. Policy should aim to target and minimise these barriers. The screening of all mothers of young children may well be warranted (Wisner *et al.* 2013), particularly for those presenting with subthreshold symptoms.

Sawati and Wijesiriwardena (2013) noted a number of shortcomings in the quality of screening in a general hospital. This can lead to a sense of inadequacy on the part of providers and may contribute directly to the failure to provide universal screening (Horowitz *et al.* 2009). Policy should focus on equipping staff to screen for and identify perinatal mental health problems. Also, there is increasing evidence to support screening for trauma symptoms in relation to pregnancy and delivery (Dikmen-Yildiz *et al.* 2017, HSE, 2017).

Undoubtedly, an appropriate service should be available to treat women who screen positive. Policy should outline clear referral and treatment pathways.

In Australia, Chambers *et al.* (2018) noted that changing mental health policies, with more emphasis on prevention, screening and early detection, resulted in an increased uptake of services by women and an associated increase in cost of provision of services. Lee *et al.* (2019) identified that universal screening resulted in an increase in admissions antenatally but a reduced number of admissions postnatally, particularly for adjustment disorders. This implies that early detection and management is effective at reducing postnatal morbidity. These studies highlight the need for adequate provision of appropriate structures, policies and training in admission units to ensure high quality care for these women.

Reproductive health-informed psychotropic prescribing

The need for pre-pregnancy planning is well established for women with bipolar affective disorder (BPAD) (Viguera *et al.* 2007) and schizophrenia (Solari *et al.* 2009) but is also important in depression, anxiety and other mental health disorders. Guidelines and information should be shared with women in order that they can make a fully informed decision regarding their treatment (HSE 2017). Decisions should highlight future reproductive choices where relevant and where known. With such high rates of unplanned pregnancy (du Toit *et al.* 2018) it is vital that this is considered at the time of changing or initiating medication.

Detailed consideration is of particular importance with sodium valproate (which is not licensed for women of child-bearing age in many countries), other mood stabilisers and medications (Ornoy *et al.* 2017) including venlafaxine (Anderson *et al.* 2020). In New Zealand, a collaborative patient–clinician system has been developed which targets patient education and recommends electronic alerts for prescribers (Goldspink *et al.* 2020). The European Medicines Agency (2018) has published strong guidelines to prevent foetal exposure to valproate including a ban on its use for migraine and BPAD during pregnancy and conditions on its use in epilepsy. Individual EU Countries have incorporated these guidelines, many of which are legally binding, into their national prescribing policies and have produced their own information on the topic. It is important that this information is integrated into local and national guidelines.

Rybakowski *et al.* (2019) recommend minimising polypharmacy prior to a planned pregnancy or in some cases reducing and discontinuing medication altogether. Counselling of patients should include address the risks and benefits of drug

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Table 2. Key factors to be considered in in-patient mental health policy relating to pregnancy

Topic	Relevant sources	Suggested points to be covered in policy
Proactive preconception psychoeducation	Solari *et al.* 2009 Ødegård 1980 Miller & Finnerty 1996 Guedes *et al.* 2009 du Toit *et al.* 2018	Contraception advice should be offered at first contact and where appropriate during treatment Clear pathways for access to TOP and emergency contraception for inpatients should be present were legal
Screening	Sharif *et al.* 2016 Turella *et al.* 2016 Wisner *et al.* 2013 Lee *et al.* 2019 Sawati & Wijesiriwardena 2013	Screening programmes for emerging mental health problems should be carried out both antenatally and postnatally and should be accompanied by appropriate training for ward staff and mental health professionals Policy should highlight vulnerable individuals from lower socioeconomic and migrant groups and engage them with screening and treatment programmes
Prescribing	Solari *et al.* 2009 Viguera *et al.* 2007 Kelly & Sharma 2010 Ornoy *et al.* 2017 Anderson *et al.* 2020 Goldspink *et al.* 2020	Consideration should be given to future reproduction when prescribing psychotropic medication Specific medication recommendations for the perinatal period should be included in national mental health policy Policy should also consider medication for depression and anxiety not just mood stabilisers
Symptom monitoring	Viguera *et al.* 2007 Kelly & Sharma 2010	Clear guidelines for mental healthcare in pregnancy should be available and should be agreed in advance with each patient on an individual basis
Emergencies	Aftab & Shah, 2017 Solari *et al.* 2009 Gonzales *et al.* 2014 May 2014 Ladavac *et al.* 2007	Seclusion and restraint policy should provide advice for the treatment of pregnant women Consideration should be given to breastfeeding or expressing for nursing mothers (e.g. pumping facilities) Rapid tranquilisation, catatonia and other emergency treatment guidelines should consider pregnancy
Holistic treatment	Solari *et al.* 2009 Grube (2005) Matthey *et al.* 2000 Kitamura *et al.* 1996 Marks & Lovestone 1995	Consideration of dietary needs of the pregnant or breastfeeding individual Consider alternative visiting arrangements to allow for maximum family support while admitted
Substance misuse	Xiaong Lai *et al.* 2015 Thibaut *et al.* 2019 Mongan *et al.* 2007 O'Connor & Whaley 2007 Gopalan *et al.* 2019	National guidelines should make clear recommendations for identifying and managing all forms of substance misuse, including alcohol, in pregnancy Pregnant individuals should be priorities for accessing services
Eating disorders	Mazer-Poline & Fornari 2009	Risks to mother and foetus should be highlighted A team approach should be recommended in policy (including the obstetric team)
Bonding	Ces *et al.* 2018 Hurt & Ray 1985	Policy should focus on maximising facilities and supports to promote mother–infant bonding and facilitate breastfeeding if this is the mothers choice Specific visiting areas should be described in ward policy Special visiting allowances for fathers and a clear interdisciplinary approach to promote bonding
Policy	McGuire *et al.* 2020 Lee *et al.* 2019 Chambers *et al.* 2018 Rowan *et al.* 2015 Jankovic et al. 2020	Consideration of the pregnant or breastfeeding female should occur at both a national and local level when all mental health policies are being created or reviewed

administration and discontinuation in pregnancy. Specific medication recommendations, such as these, may be included in mental health policy.

Psychotropic use while pregnant or breastfeeding has been widely examined (Winans 2001; Kennedy 2007; Pacchiarotti *et al.* 2016). Adverse outcomes such as gestational diabetes and hypertension are higher in women prescribed antipsychotics compared with unexposed women, yet diabetogenic drugs are not adequately monitored in this context (Newman & Thamban 2015). With the high prevalence of gestational diabetes and its high transition rate to type II diabetes (Zhu & Zhang 2016) it is important that policy considers all pharmacological options. Policy should recommend the drafting of guidelines to appropriately prescribe for and monitor women for side effects during this period. In addition to the direct effect on the baby through the presence of psychotropic medication in the breastmilk, the

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physical health consequences for the woman and the impact and risk of maternal sedation should be considered.

Symptom monitoring

Given the heterogeneity of symptom profiles, and the dynamic nature of risk of relapse throughout the perinatal period, close monitoring of the patient throughout their perinatal period, with rapid intervention at the first sign of relapse, is paramount. Viguera *et al.* (2007) suggest the use of a streamlined but flexible treatment algorithm based on illness history and the acceptability and safety of pharmacologic or non-pharmacologic treatments. Adaptation of generic guidelines as suggested by Kelly & Sharma (2010), may provide a framework on which local and national policy makers could build an adaptable strategic policy to address this. Wards and community teams should have high levels of flexibility. Rigid policy on missed appointments or criteria for home visiting may need to be adapted to reflect the demands of this period.

Emergencies

McGuire *et al.* (2020) highlighted the lack of consideration given to the pregnant and breastfeeding patient in inpatient policy, in particular during emergency situations. Seclusion and restraint policies should consider both pregnancy and breastfeeding, as involuntary treatment in the perinatal period is sadly common (Langan Martin *et al.* 2016). It is when restraint is required the simple strategy of using a wedge under the woman's right hip may prevent aortocaval compression (Aftab & Shah. 2017; Solari *et al.* 2009). This could also be used when positioning a patient during ECT (electroconvulsive therapy). In the case of catatonia or severe agitation, generic guidelines recommending the use of high dose benzodiazepines may pose a threat to the pregnant woman and her foetus (Gonzales *et al.* 2014). Ladavac *et al.* (2007) recommended using the minimal amount of sedation in these situations. These practices may also limit someone's ability to breastfeed or to express breastmilk. This enforced abrupt cessation of breastfeeding raises important ethical problems and can also directly worsen an individual's mental state (Nam *et al.* 2017). Policy makers should aim to implement programmes to promote breastfeeding continuation during the post-partum period. Wards that cannot admit the mother with the baby should facilitate the expression of breastmilk if the woman desires and is well enough. Policy should make clear recommendations for treating the pregnant or breastfeeding female in emergency situations.

Holistic treatment

Mental health policy recognises the need for the holistic treatment of patients. Food orders for pregnant and breastfeeding women should be modified to increase the amount provided to them and they should also be provided with the necessary vitamin supplements (Solari *et al.* 2009). Grube (2005) found that having a supportive male partner was associated with reduced length of hospital stay for women admitted during the perinatal period and had a positive impact on the woman's outcome in the postnatal period (Matthey *et al.* 2000; Kitamura *et al.* 1996; Marks & Lovestone 1995). Policy should ensure that women have access to this vital support during their admission. This may require enhanced levels of flexibility and accommodation in relation to ward policy.

Substance misuse

It is well recognised that dual diagnoses with substance misuse disorders and mental health disorders are common, particularly in relation to depression and anxiety. International guidelines (Thibaut *et al.* 2019) recommend brief interventions in the case of low or moderate risk of alcohol use, the use of low doses of benzodiazepines to prevent alcohol withdrawal symptoms when necessary and avoidance of the use of other pharmacological treatment for maintenance of abstinence in pregnancy. This is due to the low level of evidence and/or low benefit to risk ratio associated with these treatments. The perinatal period presents a unique opportunity to address substance misuse issues as many women have higher levels of motivation during this period. Given the positive impact that brief interventions have been shown to have on both maternal abstinence and neonatal outcomes (O'Connor & Whaley 2007), policy should make clear and strong recommendations for the management of alcohol misuse in pregnancy. Consideration should also be given to the screening for and treatment of co-occurring substance use disorders, such as benzodiazepine or hypnotic drug addiction (Gopalan *et al.* 2019). Where inpatient detoxification and stabilisation services are limited, policy and guidelines should acknowledge the unique opportunity that the perinatal period presents and prioritise pregnant women and young mothers.

Eating disorders

Women with eating disorders are at a particularly high risk for miscarriage, preterm labour, delivery by caesarean section and for post-partum depression (Mazer-Poline & Fornari 2009; Bulik *et al.* 1999; Franko *et al.* 2001). The risks to the newborn include a greater likelihood of low birth weight, microcephaly and being small for gestational age. Patients with anorexia and bulimia nervosa need to have a 'team approach' to treatment with coordinated care from the dietitian/nutritionist, obstetrician and mental health clinician (Mazer-Poline & Fornari 2009). Clearer practice guidelines are needed for the care of pregnant women with eating disorders.

Bonding

Women with major mental illness are more likely to be separated from their babies in the post-partum period with more than one quarter (27.2%) of mother–baby dyads separated at the end of their MBU stay (Ces *et al.* 2018). While there are risks to children being cared for by a parent with a psychotic illness (Hammond & Lipsedge 2015) there are also risks associated with care in an institution (Johnson *et al.* 2006). A decision to separate a child from their mother should always be a last resort.

In order to facilitate the bonding process when a woman is admitted in the post-partum period, Hurt & Ray (1985) recommend an interdisciplinary protocol to include family meetings, staff meetings with the father and baby's visits with the mother. Ces *et al.* (2018) call for strengthening of training for psychiatrists and other health professionals involved in the care of these women. In the absence of MBUs, local policy should ensure that there is a private room available which could accommodate a mother and baby, with adequate paediatric supports if required. At the very least, a visiting area specifically designated for children should be available. Inpatient admission for women in the perinatal period may provide an opportunity to optimise their social support situation and this should be highlighted in policy.

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Multidisciplinary input at this time may also be invaluable with significant roles for social work and occupational therapy. A prioritisation of pregnant women and new mothers should be included in policies relating to multidisciplinary input.

Targeted national or regional policy

Specific policy targeted at women in the perinatal period has been shown to be effective. Rowan *et al.* (2015) described state level interventions in the USA, to enhance the treatment of post-partum depression. Thirteen states enacted policies to address perinatal mental health issues. These policies were found to fall into four broad categories – education mandates, screening mandates, post-partum depression awareness campaigns and task force mandates. Two other states (Vermont and Illinois) enacted policies that addressed psychosocial issues in the perinatal period. While these mandates had very little impact on influencing clinical outcomes overall, it was found that home visits postnatally with a mental health component may be effective (Rowan *et al.* 2015) They suggested that state policies should mandate for insurance to cover this, along with three sessions of counselling.

The Australian National Perinatal Depression Initiative (NPDI, 2008/09) (Chambers *et al.* 2018) saw the universal routine screening of perinatal women and provided follow-up support and care. A number of free perinatal-specific counselling sessions were introduced for economically disadvantaged perinatal women with a mild to moderate psychiatric diagnosis. This resulted in an increased incidence of antenatal admissions for depression and a reduced incidence of post-partum admissions. Lee *et al.* (2019) suggest that this may be due to earlier detection and improved patient and carer awareness which may have positive flow implications for the well-being of the child. These studies suggest that universal screening for perinatal mental health problems along with the provision of increased psychosocial supports during this period may improve outcomes for both mother and child.

Limitations

While our study highlights an important and neglected area, it has many limitations. First, pregnancy and breastfeeding represent an important but very narrow segment of reproductive health. Mental health policy should also consider *inter alia* sexual functioning, fertility, access to contraception and, where legal, access to termination of pregnancy. In addition, many individuals attending mental health services will be parents and policy should also consider this, in particular early parenting. These important topics were outside the scope of our current review.

Second, our study design and the majority of studies that we reviewed gave a voice to the clinician or allowed the clinician to shape how the questions relating to the individuals attending mental health services were answered. Qualitative research of the view of people of child-bearing age admitted to mental health services would be vital in further expanding this area of research. Also, narrative reviews by their nature are prone to certain biases including selection bias.

Third, policy is a blunt instrument and is ineffectual without support from and training of staff. The inclusion of many of the identified items in ward policy would not be sufficient to implement change unless accompanied by health policy leadership, appropriate training (Heiman *et al.* 2015) and engagement with service users.

Finally, policy does not always capture all the pertinent issues in a given topic and research into the impact of policy is less developed compared to clinical matters, hence our methodological approach may omit key areas.

Conclusion

Female reproductive rights are given sparse consideration in mental health policy. This is despite the fact that many women who attend mental health services are of reproductive age, and many psychotropic medications have serious implications for sexual and reproductive health. These topics need to be prospectively considered by all mental health professionals and governing bodies and not just considered after the fact. Key areas that need to be covered include psychotropic medication, visiting by the partner and baby, emergency situations, early parenting and screening.

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References

Aftab A, Shah AA (2017). Behavioral emergencies: special considerations in the pregnant patient. *Psychiatric Clinics of North America* **40**, 435–448. https://doi.org/10.1016/j.psc.2017.05.017.

Amy JJ, Rowlands S (2018). Legalised non-consensual sterilisation - eugenics put into practice before 1945, and the aftermath. Part 1: USA, Japan, Canada and Mexico. *European Journal of Contraception Reproductive Health Care* **23**, 121–129.

Anderson KN, Lind JN, Simeone RM, Bobo WV, Mitchell AA, Riehle-Colarusso T, *et al.* (2020). Maternal use of specific antidepressant medications during early pregnancy and the risk of selected birth defects. *JAMA Psychiatry* **77**, 1246–1255.

Atturu H, Odelola D, Etuk E, Harris SP (2013). Breaking bad news – a valproate reaudit. *European Neuropsychopharmacology* **23**, S368–S369. https://doi.org/10.1016/S0924-977X(13)70581-9.

Austin MP, Highet N (2011). *The Guidelines Expert Advisory Committee. Clinical practice guidelines for depression and related disorders – anxiety, bipolar disorder and puerperal psychosis – in the perinatal period. A guideline for primary care health professionals*. Beyond Blue: The National Depression Initiative: Melbourne.

Bulik CM, Sullivan PF, Fear JL, Pickering A, Dawn A, McCullin M (1999). Fertility and reproduction in women with anorexia nervosa: a controlled study. *Journal of Clinical Psychiatry* **60**, 130–135.

Ces A, Falissard B, Glangeaud-Freudenthal NMC, Sutter-Dallay AL, Gressier F (2018). Pregnancy in women with psychotic disorders: Risk factors associated with mother-baby separation. *Archives of Women's Mental Health* **21**, 699–706

Chambers GM, Randall S, Mihalopoulos C, Reilly N, Sullivan EA, Highet N, *et al.* (2018). Mental health consultations in the perinatal period: a cost-analysis of Medicare services provided to women during a period of intense mental health reform in Australia. *Australian Health Review* **42**, 514–521. https://doi.org/10.1071/AH17118.

Davis LL, Shannon S, Drake RG, Petty F (2001). The treatment of bipolar disorder during pregnancy. In K. Yonkers & B. Little (Eds.), *Management of psychiatric disorders in pregnancy*. (pp. 122–133). Oxford University Press.

Dikmen-Yildiz P, Ayers S, Phillips L (2017). Screening for birth-related PTSD: psychometric properties of the Turkish version of the Posttraumatic Diagnostic Scale in postpartum women in Turkey. *European Journal of Psychotraumatology* **8**, 1306414.

du Toit E, Jordaan E, Niehaus D, Koen L, Leppanen J (2018). Risk factors for unplanned pregnancy in women with mental illness living in a developing country. *Archive of Women's Mental Health* **21**, 323–331.

European Medicines Agency (2018). *Medicinal products containing substances related to valproate*. Pharmacovigilance Risk Assessment Committee: London.

Franko DL, Blais MA, Becker AE, Delinsky SS, Greenwood DN, Flores AT, *et al.* (2001). Pregnancy complications and neonatal outcomes in women with eating disorders. *American Journal of Psychiatry* **158**, 1461–1466.

Frayne J, Nguyen T, Allen S, Hauch Y, Liira H, Vickery A (2019). Obstetric outcomes for women with severe mental illness: 10 years of experience in a tertiary multidisciplinary antenatal clinic. *Archives of Gynecology and Obstetrics* **300**, 889–896. https://doi.org/10.1007/s00404-019-05258-x.

Gilbert H (2010). Kristina's Story (Antipsychotic medication use during pregnancy). *Australian and New Zealand Journal of Psychiatry* **44**, A45–A45

Goldspink R, Pumipi T, Dey S, Menkes DB (2020). Sodium valproate prescription to women of childbearing age in a New Zealand inpatient psychiatric unit. *Australasian Psychiatry: Bulletin of Royal Australian and New Zealand College of Psychiatrists* **28**, 555–558. https://doi.org/10.1177/1039856220934317.

Gonzales N, Quinn DK, Rayburn W (2014). Perinatal catatonia: a case report and literature review. *Psychosomatics* **55**, 708–714. https://doi.org/10.1016/j.psym.2014.01.009.

Gopalan P, Moses-Kolko E, Valpey R, Shenai N, Smith E (2019). Benzodiazepine withdrawal in pregnant women with opioid use disorders: An observational study of current clinical practices at a tertiary obstetrical hospital. *General Hospital Psychiatry* **57**, 29–33.

Gotlib D, Perelstein E, Kurlander J, Zivin K, Riba M, Muzik M (2016). Guideline adherence for mentally ill reproductive-aged women on treatment with valproic acid: a retrospective chart review. *Journal of Clinical Psychiatry* **77**, 527–534. https://doi.org/10.4088/JCP.15m10046.

Grube M (2005). Inpatient treatment of women with postpartum psychiatric disorders – the role of the male partners. *Archives of Women's Mental Health* **8**, 163–170

Guedes TG, Moura ERF, Evangelista DR, da Conceicao MAV (2009). Reproductive aspects in women with mental disorder. *Revista Enfermagem UERJ* **17**, 153–158

Halligan SL, Murray L, Martins C, Cooper PJ (2007). Maternal depression and psychiatric outcomes in adolescent offspring: a 13-year longitudinal study. *Journal of Affective Disorders* **97**, 145–154.

Hammond J and Lipsedge M (2015). Assessing Parenting Capacity in Psychiatric Mother and Baby Units: A case report and review of literature. *Psychiatria Danubia* **27**, S71–S83

Heiman HJ, Smith LL, McKool M, Mitchell DN, Roth Bayer C (2015). Health policy training: a review of the literature. *International Journal of Environmental Research and Public Health* **13**, 20. https://doi.org/10.3390/ijerph13010020.

Hilder L (2013) Population audit of perinatal mental health co-morbidity, New South Wales 2000-2006. *Journal of Paediatrics and Child Health* **49**, 59–80.

Horowitz JA, Murphy CA, Gregory KE, Wojcik J (2009). Community-based postpartum depression screening: results from the CARE study. *Psychiatric Services* **60**, 1432–1434.

HSE (2017). Specialist perinatal mental health services model of care. (https://www.hse.ie/eng/services/list/4/mental-health-services/specialist-perinatal-mental-health/specialist-perinatal-mental-health-services-model-of-care-2017.pdf). Accessed 01 September 2020.

Hurt LD, Ray C (1985). Post-partum disorder: Mother-infant bonding on a psychiatric unit. *Journal of Psychosocial Nursing and Mental Health Service* **23**, 15–20.

Institute of Medicine (2000). *To err is human: Building a safer health system.* National Academy Press, Institute of Medicine, Committee on Quality of Health Care in America: Washington, DC.

Jankovic J, Parsons J, Jovanović N, Berrisford G, Copello A, Fazil Q, *et al.* (2020). Differences in access and utilisation of mental health services in the perinatal period for women from ethnic minorities-a population-based study. *BMC Medicine* **18**, 245. https://doi.org/10.1186/s12916-020-01711-w.

Johnson R, Browne K, Hamilton-Giachritsis C (2006). Young children in institutional care at risk of harm. *Trauma Violence Abuse* **7**, 34–60. https://doi.org/10.1177/1524838005283696.

Jones S, McDonald L, Melville J (2015). Prescribing sodium valproate to women of childbearing age-an audit THE INTERNATIONAL MARCÉ SOCIETY FOR PERINATAL MENTAL HEALTH BIENNIAL SCIENTIFIC CONFERENCE. *Archives of Women's Mental Health* **18**, 269–408. https://doi.org/10.1007/s00737-014-0488-6.

Kelly E, Sharma V (2010) Diagnosis and treatment of postpartum bipolar depression. *Expert Review of Neurotherapeutics* **10**, 1045–1051. https://doi.org/10.1586/ern.10.81.

Kennedy D (2007). Antipsychotic drugs in pregnancy and breastfeeding. *Australian Prescriber* **30**, 162–163.

Kitamura T, Shima S, Sugawara M, Toda MA (1996). Clinical and psychosocial correlates of antenatal depression: a review. *Psychotherapy and Psychosomatics* **65**, 117–123

Ladavac A, Dubin W, Ning A, Stuckeman P (2007). Emergency management of agitation in pregnancy. *General Hospital Psychiatry* **29**, 39–41

Langan Martin J, McLean G, Cantwell R, Smith DJ (2016). Admission to psychiatric hospital in the early and late postpartum periods: Scottish national linkage study. *BMJ Open* **6**, e008758. https://doi.org/10.1136/bmjopen-2015-008758.

Lee WS, Mihalopoulos C, Chatterton ML, Chambers GM, Highet N, Morgan VA (2019). Policy impacts of the Australian national perinatal depression initiative: psychiatric admission in the first postnatal year. *Administration and Policy in Mental Health and Mental Health Services Research* **46**, 277–287 https://doi.org/10.1007/s10488-018-0911-9.

Marks M, Lovestone S (1995). The role of the father in parental postnatal mental health. *British Journal of Medical Psychology* **68**, 157–168.

Martin L, Raignoux S, Gaudoneix M, Beauverie P (2013). Overview of the prevalence and care of pregnant women in a psychiatric hospital. *International Journal of Clinical Pharmacy* **35**, 5.

Matthey S, Barnett B, Ungerer J, Waters B (2000). Paternal and maternal depressed mood during the transition to parenthood. *Journal of Affective Disorders* **60**, 75–85.

May A (2014). The challenges of treating catatonia in pregnancy 2014 American Neuropsychiatric Association Annual Meeting Abstracts. *The Journal of Neuropsychiatry and Clinical Neurosciences* **26**, 5. https://doi.org/10.1176/appi.neuropsych.262abstract.

Mazer-Poline C, Fornari V (2009). Anorexia nervosa and pregnancy: Having a baby when you are dying to be thin—case report and proposed treatment guidelines. *International Journal of Eating Disorders* **42**, 382–384. https://doi.org/10.1002/eat.20607.

McGuire E, Curtis C, Duffy RM (2020). Fertile ground: reproductive health consideration in mental health ward policy. *Irish Journal of Psychological Medicine* **28**, 1–6. https://doi.org/10.1017/ipm.2020.27.

Mental Health Commission (2006). Quality framework mental health services in Ireland [Online] (https://www.mhcirl.ie/File/qframemhc.pdf). Accessed 04 January 2020.

Miller L, Finnerty M (1996). Sexuality, pregnancy, and childbearing among women with schizophrenia-spectrum disorders. *Psychiatric Services* **47**, 502–505.

https://doi.org/10.1017/ipm.2023.32 Published online by Cambridge University Press

Mongan D, Reynolds S, Fanagan S, Long J (2007). *Health-Related Consequences of Problem Alcohol Use. Overview 6*. Dublin: Health Research Board.

Munk-Olsen T, Laursen TM, Pedersen CB, Mors O, Mortensen PB (2006). New parents and mental disorders: a population-based register study. *JAMA* **296**, 2582–2589.

Murray L, Cooper PJ (1996). The impact of postpartum depression on child development. *International Review of Psychiatry* **8**, 55–63.

Nam JY, Choi Y, Kim J, Cho KH, Park E-C (2017). The synergistic effect of breastfeeding discontinuation and cesarean section delivery on postpartum depression: A nationwide population-based cohort study in Korea. *Journal of Affective Disorders [Internet]* **218**, 53–58.

Newman K, Thamban MSS (2015). Our experience in the use of anti-psychotics in pregnancy. *Archives of Women's Mental Health* **18**, 331–332. https://doi.org/10.1007/s00737-014-0488-6.

Nicholson J, Nason MW, Calabresi AO, Yando R (1999). Fathers with severe mental illness: Characteristics and comparisons. *American Journal of Orthopsychiatry* **69**, 134–141

Nicholson J, Sweeney EM, Geller JL (1998). Mothers with mental illness: I. The competing demands of parenting and living with mental illness. *Psychiatric Services* **49**, 635–642.

O'Connor MJ & Whaley SE (2007). Brief intervention for alcohol use by pregnant women. *American Journal of Public Health* **97**, 252–258. https://doi.org/10.2105/AJPH.2005.077222.

O'Connor TG, Heron J, Glover V (2002). The ALSPAC Study Team. Antenatal anxiety predicts child behavioral/emotional problems independently of postnatal depression. *Journal of the American Academy of Child & Adolescent Psychiatry* **41**, 1470–1477.

Ødegård Ø (1980). Fertility of psychiatric first admissions in Norway. *Acta Psychiatrica Scandinavica* **62**(3), 212–220. https://doi.org/10.1111/j.1600-0447.1980.tb00609.x.

Ødegård, Ø (1980). Fertility of psychiatric first admissions in Norway. *Acta Psychiatrica Scandinavica* **62**, 212–220. https://doi.org/10.1111/j.1600-0447.1980.tb00609.x

Ornoy A, Weinstein-Fudim L, Ergaz Z (2017) Antidepressants, antipsychotics, and mood stabilizers in pregnancy: what do we know and how should we treat pregnant women with depression. *Birth Defects Research* **109**, 933–956.

Pacchiarotti I, León-Caballero J, Murru A, Verdolini N, Furio MA, Pancheri C, *et al.* (2016). Mood stabilizers and antipsychotics during breastfeeding: Focus on bipolar disorder. *European Neuropsychopharmacology* **26**, 1562–1578.

Paulson JF, Sharnail D, Bazemore MS (2010). Prenatal and postpartum depression in fathers and its association with maternal depression. *JAMA* **303**, 1961–1969.

Pearson V (1995). Population policy and eugenics in China. *British Journal of Psychiatry* **167**, 1–4.

Rodriguez-Cabezas L, Clark C, Yang A, Pendergrast T, Miller E, Wisner K (2017). Put your oxygen mask on first-perinatal psychiatric emergencies: a reproductive psychiatrist's perspective. *Obstetrics & Gynecology* **129**, 93S.

Rowan P, Greisinger A, Brehm B, Smith F, McReynolds E (2012). Outcomes from implementing systematic antepartum depression screening in obstetrics. *Archives of Women's Mental Health* **15**, 115–120

Rowan PJ, Duckett SA, Wang JE (2015). State mandates regarding postpartum depression. *Psychiatric Services* **66**, 324–328. https://doi.org/10.1176/appi.ps.201300505.

Rybakowski J, Cubała WJ, Gałecki P, Rymaszewska J, Samochowiec J, Szulc A, *et al.* (2019). Recommendations of the Polish Psychiatric Association regarding the treatment of affective disorders in women of childbearing age. Part II: Bipolar disorder. *Psychiatria polska*, **53**, 263–276. https://doi.org/10.12740/PP/103555.

Sadock & Sadock (2000). *Kaplan & Sadock's Comprehensive Textbook of Psychiatry*. Philadelphia: Lippincott Williams & Wilkins.

Sawati AT, Wijesiriwardena A (2013). An audit into the management of risks for perinatal mental illness-a district general hospital experience BJOG. *An International Journal of Obstetrics and Gynaecology* **120**, 427.

Sharif S, Shangaris P, Jefferies C, Gangopadhyay R, Pann M (2016). Screening for perinatal mental health and medical personnel awareness in a London Hospital. Scientific Abstracts Reproductive Sciences 23, 201A.

Solari H, Dickson KE, Miller L (2009). Understanding and treating women with schizophrenia during pregnancy and postpartum—Motherisk Update 2008. *The Canadian Journal of Clinical Pharmacology* **16**, e23–e32

Stein A, Pearson RM, Goodman SH, Rapa E, Rahman A, McCallum M, *et al.* (2014). Effects of perinatal mental disorders on the fetus and child. *Lancet* **384**, 1800–1819.

Thibaut F, Chagraoui A, Buckley L, Gressier F, Labad J, Lamy S (2019). WFSBP and IAWMH Guidelines for the treatment of alcohol use disorders in pregnant women. *The World Journal of Biological Psychiatry* **20**, 17–50. https://doi.org/10.1080/15622975.2018.1510185.

Turella E, Donolato A, Ciulli B, Riolo R (2016). Postpartum depression: From a screening project to a regular support program among a maternity population. *Psychiatrische Praxis* **38**. https://doi.org/10.1055/s-0031-1277925.

United Nations (2006). *Convention on the rights of persons with disabilities*. United Nations: Geneva.

Viguera AC, Whitfield T, Baldessarini RJ, Newport DJ, Stowe Z, Reminick A, *et al.* (2007). Risk of recurrence in women with bipolar disorder during pregnancy: prospective study of mood stabilizer discontinuation. *American Journal of Psychiatry* **164**, 1817–24.

Winans EA (2001). Antipsychotics and breastfeeding. *Journal of Human Lactation: Official Journal of International Lactation Consultant Association* **17**, 344–347. https://doi.org/10.1177/089033440101700408.

Wisner KL, Sit D, McShea MS, Rizzo DM, Zoretich RA, Hughes CL, *et al.* (2013). Onset timing, thoughts of self-harm, and diagnoses in postpartum women with screen-positive depression findings. *JAMA Psychiatry* **70**, 490–498.

Xiaong Lai HM, Cleary M, Sitharthan T, Hunt GE (2015). Prevalence of comorbid substance use, anxiety and mood disorders in epidemiological surveys, 1990-2014: A systematic review and meta-analysis. *Drug and Alcohol Dependence* **154**, 1–13. https://doi.org/10.1016/j.drugalcdep.2015.05.031.

Zhu Y, Zhang C (2016). Prevalence of gestational diabetes and risk of progression to type 2 diabetes: a global perspective. *Current Diabetes Reports* **16**, 7. https://doi.org/10.1007/s11892-015-0699-x.

https://doi.org/10.1017/ipm.2023.32 Published online by Cambridge University Press