Caring for women with serious mental illness in the perinatal period.

Dr Megan Galbally
Head of Unit, Perinatal Mental Health
Caring for Women with Mental Illness in Pregnancy

Mental Illnesses such as Bipolar and Schizophrenia carry risks in pregnancy to both mother and fetus.

Changes in maternal physiology alter pharmacokinetics of psychotropic medication:
- Delayed absorption due to slowed gastric emptying
- Altered plasma protein binding
- Increased volume of distribution

This requires specialist care:
- Psychiatric expertise
  - Monitor mental state
  - Adjust medication
- Obstetric expertise
  - Monitor and manage high risk pregnancy
Pregnancy and Mental Illness

Pre-conception

• >50% pregnancies in general pop are unplanned

• Folate supplementation, rubella immunisation, general nutrition and health

• Pregnancy planning-NZ study only 17% women given information who had significant psych illness

• Vitamin D levels
Pregnancy and Mental Illness

Pregnancy Risks

• Schizophrenia and Bipolar Disorder have increased risk of obstetric complications such as antepartum haemorrhage, prematurity, low birth weight, intrauterine growth retardation

• Eating Disorders and Borderline Personality Disorder

• Medications used to treat MMI are associated with
  • teratogenicity (eg. cardiac malformations, neural tube defects, facial deformity),
  • pregnancy complications (eg. gestational diabetes, polyhydramnios, foetal macrosomia)
  • delivery complications
  • neonatal complications (eg. neonatal toxicity, neonatal hypothyroidism, hypotonia)
  • unknown longer term neuro-developmental effects
Pregnancy and Mental Illness

• Patients with Schizophrenia and Bipolar Disorder are potentially at risk of poor self-care and nutrition. Encouragement of consideration of extensive organic screen prior to conception or early in pregnancy with investigations such as FBE, U&E, LFT, TFT, Vitamin D, B12 & Folate and Iron Studies etc.

• Access to Dietician during Antenatal period:
  • Specific dietary recommendations, supplementation appropriate for pregnancy for effects of illness and medications such as Atypical Antipsychotics
Pregnancy and Mental Illness

Postpartum risks

• There is a high risk of relapse in the early postpartum in both Schizophrenia and Bipolar Disorder

• Mothers with Schizophrenia have been found to have more compromised interactions with their infants characterised by less sensitivity towards the infant and more intrusiveness.
  • This is more pronounced in those with active symptoms compared to those who are well.
  • Sensitivity of parenting is a predictor of attachment in infants which has been related to a range of child and adult mental health outcomes.


• Women with Eating Disorders and the Postpartum
• Borderline Personality Disorders and the Postpartum
Puerperal Psychosis *cf.* Bipolar


- Those with Bipolar Disorder need continuous treatment in the perinatal period to reduce the risk of relapse
- Those with puerperal psychosis only require initiation of medication after delivery
Psychotropics and Pregnancy

Antipsychotic-related risks include:

**Typical Antipsychotics**
- High potency antipsychotics safest, aliphatic least safe
- Risk of infant developing EPSE at birth

**Atypical Antipsychotics**
- Gestational diabetes
- Macrosomia/IUGR

Also:
- Neurodevelopmental risks largely unknown
- Recent fine motor findings in a single study
Psychotropics

Mood stabiliser- for some of the mood stabilisers the related risks include:

- Teratogenicity
  - Neural tube defects
  - Facial abnormalities
  - Cardiac abnormalities

- Neurodevelopmental effects
  - Developmental delay

- Neonatal complications
  - Toxicity
  - Sedation
  - Hypothyroidism

When prescribing psychotropic medications in pregnancy also discuss risks if any with LACTATION.
Monitoring for Antipsychotic and Mood Stabilisers in Pregnancy
TABLE I
MERCY HOSPITAL FOR WOMEN. Galbally, Snellen, Walker, Permezel
LITHIUM CARBONATE – PREGNANCY MONITORING

<table>
<thead>
<tr>
<th>Base Line</th>
<th>8/40</th>
<th>12/40</th>
<th>16/40</th>
<th>20/40</th>
<th>24/40</th>
<th>28/40</th>
<th>32/40</th>
<th>36/40</th>
<th>37/40</th>
<th>38/40</th>
<th>39/40</th>
<th>40/40</th>
<th>After Birth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lithium Level</td>
<td>Lithium</td>
<td>Lithium</td>
<td>Lithium</td>
<td>Lithium Level</td>
<td>Lithium</td>
<td>Lithium</td>
<td>Lithium</td>
<td>Lithium</td>
<td>Lithium</td>
<td>Lithium</td>
<td>Lithium</td>
<td>Lithium</td>
<td>Lithium Level</td>
</tr>
<tr>
<td>U&amp;E</td>
<td>U&amp;E</td>
<td>U&amp;E</td>
<td>U&amp;E</td>
<td>U&amp;E</td>
<td>U&amp;E</td>
<td>U&amp;E</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TFT (TSH, FT4, FT3)</td>
<td>TFT</td>
<td>TFT</td>
<td>TFT</td>
<td>TFT</td>
<td>TFT</td>
<td>TFT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FBE &amp; LFT</td>
<td>FBE/LFT if indicated</td>
<td>FBE/LFT if indicated</td>
<td>FBE/LFT if indicated</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Iron Studies</td>
<td>Iron studies if indicated</td>
<td>Iron studies if indicated</td>
<td>Iron studies if indicated</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B12 &amp; Folate</td>
<td>B12/folate if indicated</td>
<td>B12/folate if indicated</td>
<td>B12/folate if indicated</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>Ultrasound for NT assessment*</td>
<td>High Resolution U/S for early cardiac assessment. Doppler Flow Studies</td>
<td>Morphological scan with attention to fetal echo</td>
<td>Review growth at 28 and 34 weeks or as indicated</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Observe baby for withdrawal / toxicity
INFANT: Cord Blood Lithium Level, TFT & U&E

*NT=Nuchal Translucency

Please mark above when investigation performed
<table>
<thead>
<tr>
<th>Base Line</th>
<th>8/40</th>
<th>12/40</th>
<th>16/40</th>
<th>20/40</th>
<th>24/40</th>
<th>28/40</th>
<th>32/40</th>
<th>36/40</th>
<th>40/40</th>
<th>After Birth</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Drug Level</strong></td>
<td><strong>Drug Level</strong></td>
<td><strong>Drug Level</strong></td>
<td><strong>Drug Level</strong></td>
<td><strong>Drug Level</strong></td>
<td><strong>Drug Level</strong></td>
<td><strong>Drug Level</strong></td>
<td><strong>Drug Level</strong></td>
<td><strong>Drug Level</strong></td>
<td><strong>Drug Level</strong></td>
<td><strong>Drug Level</strong></td>
</tr>
<tr>
<td>FBE &amp; LFT</td>
<td>FBE &amp; LFT</td>
<td>FBE &amp; LFT</td>
<td>FBE &amp; LFT</td>
<td>FBE &amp; LFT</td>
<td>FBE &amp; LFT</td>
<td>FBE &amp; LFT</td>
<td>FBE &amp; LFT</td>
<td>FBE &amp; LFT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TFT (TSH, FT4, FT3)</td>
<td></td>
<td>TFT if indicated</td>
<td></td>
<td>TFT if indicated</td>
<td></td>
<td>TFT if indicated</td>
<td></td>
<td>TFT if indicated</td>
<td></td>
<td></td>
</tr>
<tr>
<td>U&amp;E</td>
<td></td>
<td>U &amp; E if indicated</td>
<td></td>
<td>U &amp; E if indicated</td>
<td></td>
<td>U &amp; E if indicated</td>
<td></td>
<td>U &amp; E if indicated</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Iron Studies</td>
<td></td>
<td>Iron if indicated</td>
<td></td>
<td>Iron if indicated</td>
<td></td>
<td>Iron if indicated</td>
<td></td>
<td>Iron if indicated</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B12 &amp; Folate</td>
<td></td>
<td>B12/folate if indicated</td>
<td></td>
<td>B12/folate if indicated</td>
<td></td>
<td>B12/folate if indicated</td>
<td></td>
<td>B12/folate if indicated</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td>High Resolution ultrasound for NT assessment*</td>
<td></td>
<td>High Resolution U/S particular attention to neural axis, face and heart</td>
<td></td>
<td>High Resolution ultrasound for NT assessment*</td>
<td></td>
<td>High Resolution ultrasound for NT assessment*</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CONSIDER: Maternal alpha-fetoproteins or Amniocentesis</td>
<td>Review of fetal growth at 28 and 34 weeks or as indicated</td>
<td></td>
<td>Review of fetal growth at 28 and 34 weeks or as indicated</td>
<td></td>
<td>Review of fetal growth at 28 and 34 weeks or as indicated</td>
<td></td>
<td>Review of fetal growth at 28 and 34 weeks or as indicated</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Observe baby for withdrawal, sedation, hepatotoxicity, hypoglycaemia and abnormal clotting. Careful paediatric morphological examination</td>
</tr>
</tbody>
</table>

*NT= Nuchal Translucency
Please mark above when investigation performed
### Table III: Anti-Psychotics – Pregnancy Monitoring

<table>
<thead>
<tr>
<th>Base Line</th>
<th>8/40</th>
<th>12/40</th>
<th>16/40</th>
<th>20/40</th>
<th>24/40</th>
<th>28/40</th>
<th>32/40</th>
<th>36/40</th>
<th>38/40</th>
<th>40/40</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height</td>
<td>Weight</td>
<td>BMI</td>
<td>B/P</td>
<td>Weight</td>
<td>B/P</td>
<td>Weight</td>
<td>B/P</td>
<td>Weight</td>
<td>B/P</td>
<td>After Delivery</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fasting</td>
<td>Early GTT</td>
<td>Glucose</td>
<td>Challeng</td>
<td>Test</td>
<td>GTT if indicated</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glucose</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lipids</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FBE</td>
<td>FBE if indicated</td>
<td>FBE if indicated</td>
<td>FBE if indicated</td>
<td>FBE if indicated</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LFT</td>
<td>LFT if indicated</td>
<td>LFT if indicated</td>
<td>LFT if indicated</td>
<td>LFT if indicated</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U&amp;E Mg &amp; Ca</td>
<td>U&amp;E if indicated</td>
<td>U&amp;E if indicated</td>
<td>U&amp;E if indicated</td>
<td>U&amp;E if indicated</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TFT</td>
<td>TFT if indicated</td>
<td>TFT if indicated</td>
<td>TFT if indicated</td>
<td>TFT if indicated</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B12 &amp; Folate &amp; Iron Studies</td>
<td>B12/folate/iron if indicated</td>
<td>B12/folate/iron if indicated</td>
<td>B12/folate/iron if indicated</td>
<td>B12/folate/iron if indicated</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECG</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>High Resolution U/S for NT assessment*</td>
<td>High Resolution U/S</td>
<td>Review Growth at 28 and 34 weeks or as indicated</td>
<td>Observe baby for withdrawal / toxicity / sedation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*NT= Nuchal Translucency

NB. Ensure clozapine monitoring is included as per standard protocol.
ECT and Pregnancy

Joint Austin Health-Mercy Hospital for Women Guidelines for ECT in Pregnancy
- Collaboration: Obstetrics, Paediatrics, Anaesthetics and Mental Health

Careful risk vs benefit analysis

Recent Review found 339 cases in the literature

Maternal risks:
- Status epilepticus; haematuria; uterine contractions or premature labour; abdominal pain; placental abruption.
- Induction of premature contractions or labour is the commonest maternal adverse event.
- Theoretically, pregnant women are more at risk of aspiration, though there are no reports of this in the literature.

Fetal risks:
- Bradyarrhythmia, believed to be due to foetal hypoxia and the risk may be reduced by ensuring adequate pre-oxygenation.
- Other foetal risks include sedation from anaesthetic drugs, which readily cross the placenta, and foetal distress from fluctuations in maternal blood pressure and uterine hypo-perfusion.
ECT con’d

Summary of Guidelines

1. **Prior to ECT**

2. **ECT Procedure**
   - Women who are pregnant should be first on the ECT list that day, in order to minimise the time they have to spend fasting.
   - Specialised anaesthetic requirements in patients 14+ weeks gestation include:
     - *Maintenance of uterine perfusion*
     - *Avoidance of maternal hypoxaemia*
     - *Maternal airway protection*
     - *Adequate dosing of intravenous anaesthetic agents*
   - Obstetric care requirements, before ECT can commence, include;
     - *If gestational age is 14 – 25 weeks, a Midwife to be present in order to monitor the foetal heart rate via handheld Doppler.*
     - *If gestational age is 26+ weeks, a Senior Obstetric Registrar and Midwife to be present in order to continuously monitor the foetus using CTG pre, during and post-ECT until the trace returns to normal. They may initiate in-utero resuscitation of the foetus and co-ordinate further care if a non-reassuring trace develops.*

3. **Post ECT**
   - Anaesthetic monitoring as above with full documentation of the anaesthetic on a standard anaesthetic chart (**NOT** that usually used for standard ECT).
   - The patient should still remain in the left lateral position and maternal blood pressure requires close monitoring and control in the recovery phase.
Perinatal Mental Health Plan

Suggested inclusions:

• Statement of diagnosis
• Medication list
  • Explicit outline of risks associated with medications
  • Detail extra monitoring required
• Recommendations for postpartum care
  • Single room
  • Opportunity to rest as much as possible
  • Extended stay
• Mental health review plan
  • Timing, frequency
  • Contact numbers
Perinatal Mental Health Plan

- Care of infant
  - Signs of sedation, withdrawal, toxicity etc.
  - Paediatric review
- Breastfeeding advice
  - Whether contraindicated
  - Avoidance of dopamine agonists to suppress lactation
- Postnatal care plan
  - Maternal and Child Health Nurse
  - Mental health professionals

Copy to all relevant professionals, postnatal ward, and patient if appropriate
Major Mental Illness Clinic

Multidisciplinary team:
• Fetal-maternal medicine specialists
• Psychiatrist
• Paediatrician
• Physician
• Genetics
• Social work
• Midwifery

Close liaison with external agencies involved in care
Pilot Data (up to Oct 2011)

Clinic running for 18 months
44 patients referred in that time

Mean age
• 30.7 years (22 - 41)

Parity
• Mean G6.8(0 - 12) P5.8(0 – 11)

Mean gestation at referral
• 19.8 weeks (5 – 36)
Medication

Three patterns of management:

• Antenatal prophylaxis
  • Medication maintained during pregnancy

• Postnatal prophylaxis
  • Plan made antenatally to commence a particular agent immediately postpartum

• Postnatal reactive management
  • No medication commenced unless symptoms emerge postpartum
## Mean Dose Change

<table>
<thead>
<tr>
<th>Medication</th>
<th>Mean Dose at Referral (mg)</th>
<th>Mean Dose at Delivery (mg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quetiapine</td>
<td>475 (50 – 1000)</td>
<td>760 (300 – 1200)</td>
</tr>
<tr>
<td>Olanzapine</td>
<td>12 (2.5 – 30)</td>
<td>14 (5 – 30)</td>
</tr>
<tr>
<td>Aripiprazole</td>
<td>12.5 (5 – 20)</td>
<td>16.7 (10 – 20)</td>
</tr>
<tr>
<td>Clozapine</td>
<td>250 (200 – 300)</td>
<td>287.5 (225 – 350)</td>
</tr>
<tr>
<td>Zuclopenthixol</td>
<td>150</td>
<td>0</td>
</tr>
<tr>
<td>Flupenthixol</td>
<td>60</td>
<td>0</td>
</tr>
<tr>
<td>Risperidone</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Lithium</td>
<td>833 (675 – 1250)</td>
<td>943 (675 – 1250)</td>
</tr>
<tr>
<td>Carbamazepine</td>
<td>1000</td>
<td>1000</td>
</tr>
<tr>
<td>Sertraline</td>
<td>25</td>
<td>50</td>
</tr>
<tr>
<td>Duloxetine</td>
<td>30</td>
<td>0</td>
</tr>
<tr>
<td>Escitalopram</td>
<td>25 (20 –30)</td>
<td>30</td>
</tr>
</tbody>
</table>
### Pregnancy Outcomes

<table>
<thead>
<tr>
<th></th>
<th>Major Mental Illness (20)</th>
<th>Other conditions (12)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mean gestation</strong></td>
<td>$36^6 (32^4 – 41^4)$</td>
<td>$38^3 (37^4 – 40^1)$</td>
</tr>
<tr>
<td><strong>Mode of delivery</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vaginal</td>
<td>12</td>
<td>9</td>
</tr>
<tr>
<td>Caesarean section</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>Elective</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Emergency</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>
Pregnancy Outcomes

Patients referred to clinic (44)

Asymptomatic at referral (27)
- Yet to deliver (1)
  - Discharge home post-partum (26)
- Symptomatic at referral (11)
- Schizophrenia (5)
  - Improvement (2)
  - No change (3)
- Other (3)
- Schizoaffective Disorder (3)
  - Improvement (1)
  - No change (2)
  - Miscarriage (1)
  - Postnatal MBU admission (1)

Symptomatic at referral (11)
- Pre-pregnancy counselling (1)
- Failed to attend (6)
- Impregnancy counselling (1)
- Prevention of miscarriage (1)
- Postnatal MBU admission (1)

Yet to deliver (1)
- Discharge home post-partum (2)
- Postnatal MBU admission (2)
- Termination of pregnancy (1)

Discharge home post-partum (2)
- Discharge home post-partum (1)
- Discharge home post-partum (1)
<table>
<thead>
<tr>
<th>Complication</th>
<th>SCZ (12)</th>
<th>SCZA (3)</th>
<th>BPAD I (6)</th>
<th>BPAD II (3)</th>
<th>Other (13)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gestational Diabetes</td>
<td>3</td>
<td></td>
<td>2</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Pre-eclampsia</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Polyhydramnios</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oligohydramnios</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prematurity</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Macrosomia</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Miscarriage</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foetal death</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Nil</td>
<td>5</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>10</td>
</tr>
</tbody>
</table>
# Neonatal Outcomes

<table>
<thead>
<tr>
<th></th>
<th>Major Mental Illness</th>
<th>Other Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Live births</td>
<td>21 (one twin pregnancy)</td>
<td>12</td>
</tr>
<tr>
<td>Mean weight (g)</td>
<td>3115.6 (1870 – 4040)</td>
<td>3157.2 (2675 – 3620)</td>
</tr>
<tr>
<td>Resuscitation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>More than tactile stim</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Intubation</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Postnatal care</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCN</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>NICU</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Malformation</td>
<td>1 (Dandy Walker)</td>
<td>1 (trisomy 18)</td>
</tr>
<tr>
<td>Medication effects</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Withdrawal</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Sedation</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Other</td>
<td>EPSE (1)</td>
<td>Hypothyroidism (1)</td>
</tr>
<tr>
<td>Neonatal Death</td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>
Postpartum Relapse

This sample: 2 with postpartum psychotic symptoms

- Both were exacerbation of symptoms present in pregnancy
- Both had primary diagnosis of schizophrenia
- No women with a diagnosis of BPAD I or II developed postpartum psychosis during the review period

3 additional women admitted directly to inpatient unit

- 1 SZA
- 2 BPAD I
Conclusions

Women with mental illnesses such as Schizophrenia and Bipolar Disorder carry risks for their offspring of their illness in pregnancy and risks from exposure to medications.

These illnesses have a high risk of relapse particularly in the early postpartum and this is increased significantly if medication is ceased in pregnancy.

Ensuring women are well as they enter the postpartum improves chances of better mother-infant outcomes.