CHILD BIRTH AND MENTAL ILLNESS (CAMI) CLINIC

AIM

Improve obstetric and neonatal outcomes for women with a diagnosed severe mental illness by:
- utilising a multidisciplinary team approach
- small identified team providing individualised comprehensive continuity of care
- management of psychotropic medications and potential effects in pregnancy and postpartum
- increasing the rate of attendance to antenatal services
- monitor closely for obstetric complications
- liaison with psychiatric, obstetric and primary care providers
- planning for birth and postnatal support

KEY POINTS

1. Women attending the CAMI clinic require routine antenatal care. Additionally specific vigilance for obstetric and psychosocial complications is required, entailing detailed information about medical, physical, psychiatric, social, history of drug and alcohol use, and current and recent medication history.

2. Women attending the CAMI clinic should be provided with additional information regarding:
   - Psychotropic medications in pregnancy
   - relative risks of relapse of their disorder in pregnancy and postpartum
   - nutrition and dietary requirements
   - psychosocial supports

3. Discharge planning and documentation commences at the first visit.
4. A referral to the Maternal Child Health Nurse (MCHN) is sent at 28 weeks gestation.
5. Women are informed the proposed postnatal stay is 5 days to allow monitoring of the mental state and assist parenting.
6. Women attending the CAMI clinic should not be discharged from hospital prior to being seen by the psychiatrist and the social worker.

CRITERIA FOR CAMI REFERRAL

- Chronic psychotic disorders such as schizophrenia
- Severe mood disorders e.g. Bipolar Affective Disorders or recurrent major depression with a history of psychiatric hospitalisation
- Past history of postpartum psychosis
- Severe non-psychotic disorders with significant impairment to functioning and/or complex care (discussed with the CAMI team)
# WOMEN AND NEWBORN HEALTH SERVICE

## King Edward Memorial Hospital

### REFERRAL PROCESS

Antenatal referrals are received by:

- Clinical Referral Co-ordinator for the antenatal clinic at KEMH
- Department of psychological medicine, and then forwarded to the CAMI clinic.

All referrals are triaged in the CAMI clinic. Women triaged to the CAMI clinic will be given appointments and registered with the Department of Psychological Medicine under the CAMI clinic program.

Referrals for women who do not meet the criteria to attend the CAMI clinic are sent to the Clinical Referral Co-ordinator who arrange appointments at other obstetric clinics.

### PROCEDURE

<table>
<thead>
<tr>
<th>1</th>
<th>Initial Assessment and triage</th>
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<tbody>
<tr>
<td>Conduct the booking visit and follow up antenatal visits as for all pregnant women attending KEMH. See Clinical Guidelines: Obstetric and Midwifery</td>
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<tr>
<td></td>
<td><strong>Initial visit</strong></td>
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<tr>
<td></td>
<td><strong>Subsequent visits</strong></td>
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<tr>
<td>The timing of the booking visit will be determined following CAMI review. The first visit may be as early as 12 weeks gestation depending on individual clinical circumstances.</td>
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<table>
<thead>
<tr>
<th>2</th>
<th>Medical history and physical assessment</th>
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<tbody>
<tr>
<td>2.1</td>
<td>General medical health</td>
</tr>
<tr>
<td>Women who have a SMI may be at greater risk of metabolic complications in pregnancy e.g. diabetes, obesity and hypertension.</td>
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<tr>
<td>Psychotropic medication may have an impact on general medical disorders e.g. lithium is associated with thyroid dysfunction, and antipsychotics and cardiac effects.</td>
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</tbody>
</table>

| 2.2 | Sexually transmitted infections (STIs) / Pap smear screening |
| Women with SMI may be at greater risk of STIs and may be less likely to receive regular pap smears and should therefore be fully investigated. |

| 2.3 | Drug and alcohol screening |
| Refer to Women and Newborn Drug and Alcohol Service (WANDAS) for consultation if substance misuse is an issue |
| Women with SMI are at increased risk of smoking, alcohol and substance abuse.  |
| Counselling should be offered in regard to smoking and alcohol use. |

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*All guidelines should be read in conjunction with the Disclaimer at the beginning of this manual*
### PROCEDURE

<table>
<thead>
<tr>
<th></th>
<th>Past Obstetric history</th>
<th>Mental Health history</th>
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</thead>
<tbody>
<tr>
<td>3</td>
<td>Women with SMI have increased rates of pregnancy and birth complications.(^3,7)</td>
<td>A history of diagnosis, hospitalisations, and medication use, including during the first trimester exposure is documented.</td>
</tr>
<tr>
<td>4</td>
<td>All CAMI women on initial assessment will be reviewed by the psychiatric team.</td>
<td>Information should be provided about the National Register of Antipsychotic Medication in Pregnancy (NRAMP) and study data to date.(^8)</td>
</tr>
<tr>
<td>4.1</td>
<td>Liaise with the Community treating team / case manager / Private Psychiatrist.</td>
<td>Assess information about the use of mood stabilisers in pregnancy and fetal effects.(^9,10)</td>
</tr>
<tr>
<td>4.2</td>
<td>Conduct an individualised risk / benefit analysis e.g. information regarding the safety data for medication in both pregnancy and breastfeeding. Discuss the relative risks of relapse of their disorder and the possible consequences of a relapse of their disorder in pregnancy and postpartum.</td>
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<tr>
<td>4.3</td>
<td></td>
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<tr>
<td>4.4</td>
<td>Women with SMI are at increased risk of psychiatric relapse postpartum.(^11,12)</td>
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<tr>
<td>4.5</td>
<td>Provide information to woman about antenatal support groups.</td>
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<tr>
<td>5</td>
<td>Women with SMI have increased rates of pregnancy and birth complications.(^3,7)</td>
<td></td>
</tr>
<tr>
<td>5.1</td>
<td>Refer women to Social Work according to their criteria. See Clinical Guideline Social Work for psychosocial assessment. In addition refer:</td>
<td>All women attending CAMI clinic will have their case discussed with the social worker.</td>
</tr>
<tr>
<td></td>
<td>• women with schizophrenia</td>
<td>Women will be offered an assessment by the social worker at the booking visit if she meets the criteria.</td>
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<tr>
<td></td>
<td>• primigravid women</td>
<td>Follow up visits with the social worker in on an individual basis.</td>
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<tr>
<td></td>
<td>• women with no support network</td>
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</tbody>
</table>
PROCEDURE

5.2 Child Protection:
- any woman who is assessed may require involvement with the Department for Child Protection (DCP). The social worker will discuss this with the CAMI team as well as the Head of the Social Work Department.
- should the case already be open or opened as a result of a referral made by KEMH to DCP the pre birth planning process needs to commence as soon as possible
- Complex care planning will be documented regarding the antenatal and postnatal management of women with complex psycho-social circumstances.

ADDITIONAL INFORMATION

Women with SMI have significantly higher rates of DCP involvement, and women with schizophrenia are less likely to have care of their children.²


Housing situation – SMI women are at risk for homelessness.

Partner and supports – women with schizophrenia may have higher rates of being single and less likely to be supported in their pregnancy.² Data collaborated from the CAMI clinic has shown women with SMI are more likely to have a partner who is suffering a SMI.

Women with SMI are at increased risk of FDV.²

5.3 At the earliest opportunity complete screening for Family and Domestic Violence (FDV).

6 Current pregnancy

6.1 Ultrasounds

Ultrasounds are individualised according to risk factors, such as medication exposure in the first trimester and fetal wellbeing.

Consider:
- First trimester screen
- Anatomy scan
- Fetal growth and wellbeing

Women with SMI should be referred to the KEMH CAMI clinic for early pregnancy care.

Women with SMI may have been exposed to medication in the first trimester. This has been associated with increased fetal abnormalities e.g. mood stabiliser, lithium¹⁰, ¹³, ¹⁴. As such a tertiary level quality ultrasound should be arranged.

Antipsychotic medication exposure during pregnancy may be associated with abnormalities in fetal growth.¹⁵

6.2 Blood Investigations

Routine antenatal screening tests include consideration for:
- B12, folate
- Ferritin

Alcohol, drug and medication use may lead to the deficiency of essential vitamins¹⁶ which can be exacerbated by poor nutrition.

Nutritional deficiency may increase risk of depression.¹⁷

Anorexia or eating disorders in pregnancy can lead to nutritional deficiency.
PROCEDURE

<table>
<thead>
<tr>
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<th>ADDITIONAL INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vitamin D</td>
<td>Vitamin D is reduced in women with SMI(^1) and the risk can be exacerbated by women with increased BMI(^1)(^9).</td>
</tr>
<tr>
<td>Thyroid Function Test</td>
<td>Thyroid dysfunction may be an aggravating factor to mental illness in pregnancy.(^2)</td>
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<tr>
<td></td>
<td>Antipsychotic medication e.g. lithium may precipitate abnormal thyroid function.(^3)</td>
</tr>
<tr>
<td>Glucose Tolerance Test</td>
<td>Women with SMI may be more at risk of metabolic disorders(^2)(^1). Antipsychotic medication has the potential to increase the risk of abnormal glucose metabolism(^2)(^2) and has been linked with an increased risk of gestational diabetes mellitus (GDM).</td>
</tr>
<tr>
<td>Fasting Blood Sugar Level (BSL) at booking.</td>
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<tr>
<td>Lithium levels each trimester, then weekly if possible from 36 weeks gestation.</td>
<td>Lithium levels should be monitored frequently in pregnancy and the level maintained around 0.5mmol/L. Aim for tapering of lithium levels prior to birth.(^2)(^1) Refer to the KEMH Bipolar management protocol. This will be placed in the front of the patient's medical record notes where appropriate.</td>
</tr>
</tbody>
</table>

7 Nutritional advice

7.1 Assess the BMI at the booking visit. Document the woman’s weight each visit, and monitor throughout the pregnancy. Women with SMI are at risk of increased BMI\(^3\)\(^,\)\(^2\)\(^5\). Medication used in the treatment of mental disorders can increase appetite and sugar cravings leading to excessive weight gain.\(^2\)\(^1\)

7.2 Arrange dietician review for women with:

- increased BMI
- low BMI
- increased weight gain due to medication
- positive GTT

Consider dietician review in all women taking antipsychotic medication.
8 Parent Education

Additional information is given about:

- medications and breastfeeding
- blood borne viruses
- effects of drug, alcohol misuse and smoking
- risk behaviours, consequences and increased surveillance as deemed necessary
- extended hospital stay of 5 days

Women with SMI are at increased risk of postpartum relapse and as such require close monitoring in the immediate postpartum period.

Neonates are at risk of Neonatal Discontinuation Syndrome and may have increased need for Special Care Nursery.

- management and frequency of ongoing antenatal care
- postnatal support services

9 Provision of written information

At the booking visit, women will be provided with the leaflet "Childbirth and Mental Illness Antenatal Clinic (CAMI)."

10 Referrals

Consider referrals to:

- Social Work
- Department of Psychological Medicine
- Dietician
- Physiotherapy
- Antenatal support groups for perinatal mental health
- NRAMP
- Special Maternal Child Health Nurse (MCHN) Referral
- Paediatrician

A referral is automatically generated to the Department of Psychological Medicine.

Women who are on antipsychotic medication should be offered recruitment in the NRAMP.

A referral is done at 28 weeks with the woman's consent to allow their MCHN to be introduced to them antenatally.

Due to the use of medication in pregnancy there may be a need for paediatric involvement. High risk cases should be discussed with the paediatrician antenatally.
PROCEDURE

- Contraception

ADDITIONAL INFORMATION

Contraception is discussed with all women at the 36 week antenatal visit. Some medications may interfere with the use of contraception. Certain contraception may aggravate the woman’s mental state.

For women requiring an Intrauterine Contraceptive Device (IUD) insertion postpartum, the referral to the Family Planning Clinic should be completed at the 38 week visit.

11 Management Plan

11.1 A psychiatric management plan and checklist MR248 is completed antenatally for all women.

11.2 Refer women on an individual basis for ‘Complex Care Management Planning’

11.3 Women with Bipolar will have a ‘Bipolar Management Plan’ filed in their Medical Record notes.

11.4 See Clinical Guideline Planning for a Complex Care Needs Patient at KEMH.

Some women may also need a sensitive birth plan due to a history of childhood sexual abuse (CSA).

Women with Bipolar may be on medication such as Lithium, which will require special management around time of birth. Patients with Bipolar are at increased risk of relapse postnatally and that risk can be exacerbated by sleep deprivation postpartum.

REFERENCES


