Healthy Babies for Mothers with Serious Mental Illness: A Case Management Framework for Mental Health Clinicians
Healthy Babies for Mothers with Serious Mental Illness: A Case Management Framework for Mental Health Clinicians

This project, sponsored by North Metropolitan Area Health Service (NMAHS) Mental Health was developed in collaboration with the Centre for Clinical Research in Neuropsychiatry (CCRN), Telethon Institute for Child Health Research (TICHR) and Curtin University of Technology.

As an entity, CCRN incorporates the University of Western Australia (UWA) School of Psychiatry and Clinical Neurosciences, World Health Organisation, Executive of Graylands Hospital and Department of Health Western Australia. It is a specialised research facility funded and jointly operated by the UWA School of Psychiatry and NMAHS Mental Health.

_Healthy Babies for Mothers with Serious Mental Illness: A Case Management Framework for Mental Health Clinicians_ was developed by Associate Professor Yvonne Hauck (Curtin University of Technology), Associate Professor Daniel Rock (NMAHS Mental Health & CCRN), Tanyana Jackiewicz (TICHR) and Professor Assen Jablensky (CCRN, UWA).

Online Resource for Consumers and Clinicians


This web page also provides access to a range of consumer support services and information about women’s reproductive and pregnancy needs.

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Message from the Minister

It is with great pleasure that I present to you Healthy Babies for Mothers with Serious Mental Illness: A Case Management Framework for Mental Health Clinicians.

WA Health aims to develop and deliver maternal and newborn services that provide safe, integrated and effective care, and respond to the individual needs of women, their babies and their families in a variety of settings. In this regard, Healthy Babies for Mothers with Serious Mental Illness: A Case Management Framework for Mental Health Clinicians addresses the specific needs of women with serious mental illness.

The project commenced in 2006 in consultation with a number of participating organisations and individuals from the WA Health system and the community. Input was sought from psychiatrists, general practitioners, obstetricians, midwives, mental health nurses, occupational therapists, social workers and mental health consumers. In 2007 this project was the winning finalist at WA Mental Health Good Outcomes Awards, Mental Health Research and Education category.

Focusing on primary prevention, the framework provides an antenatal intervention resource as a strategy to reduce risks and improve reproductive health outcomes for women with serious mental illness. It focuses upon factors amenable to intervention such as early and ongoing compliance with attendance at antenatal care agencies and linking clients to appropriate support services at the earliest opportunity.

Piloted in three North Metropolitan Area Health Service, Mental Health, community clinics and three public maternity hospitals in 2007, this initiative was the impetus behind the formation of a specialist Childbirth and Mental Illness (CAMI) antenatal clinic at King Edward Memorial Hospital. The CAMI clinic now provides state-wide support for these at risk women.

Healthy Babies for Mothers with Serious Mental Illness: A Case Management Framework for Mental Health Clinicians facilitates a holistic approach towards strengthening services and outcomes for female mental health clients in relation to their reproductive and pregnancy needs.

WA Health aims to deliver quality obstetric and neonatal outcomes for all women. Integrating this framework into clinical practice further enhances our capacity to improve outcomes for women with serious mental illness and their children.

Hon Jim McGinty
Minister for Health
Healthy Babies for Mothers with Serious Mental Illness: A Case Management Framework for Mental Health Clinicians

Message from the Acting Director General

Healthy Babies for Mothers with Serious Mental Illness: A Case Management Framework for Mental Health Clinicians has been developed in collaboration with service deliverers, mental health consumers, community nursing representatives and hospital and research based representatives who have provided expert comment and advice on issues relating to the reproductive and pregnancy needs of mental health clients.

Women with serious mental illness are at high risk for pregnancy and birth complications that increase neurological developmental risks for their children. Lifestyle factors such as smoking, use of illicit drugs and poor nutrition as well as failure to access antenatal care are implicated in this increased risk. The provision of specific support by mental health clinicians/case managers - to pregnant women with serious mental illness - is an important primary prevention strategy with the goal of improving obstetric and neonatal outcomes for these women and their children.

Three key elements form the basis of the framework: providing consumer reproductive choices; early detection and monitoring of pregnancy; and implementing a small known team approach in the management of pregnant women with serious mental illness.

The framework is designed to assist health care professionals in managing the target group. It recognises that mental health clinicians/case managers are well placed to be advocates for mental health clients. This is because they are likely to have regular and consistent contact with the client; a therapeutic relationship with the client which facilitates client compliance with care; are best placed to identify changes in the client’s mental status; know the client’s current circumstances and have the ability to link and refer clients to appropriate agencies/services. Healthy Babies for Mothers with Serious Mental Illness: A Case Management Framework for Mental Health Clinicians provides a pathway to ensure that women with serious mental illness and their babies get the safest, most effective, efficient and appropriate care available.

WA Health recognises that good maternal and fetal outcomes depend upon the health of the mother prior to conception as well as excellence of care in the antenatal, birthing and postnatal period. Planning for pregnancy with an emphasis on good general health and consistent continuing support from a small known team can significantly improve outcomes for these at risk women, their unborn babies and their families.

Dr. Peter Flett
Acting Director General WA Health
Acknowledgements

In addition to the eighteen women with serious mental illness who participated in its development, this framework is the result of contributions from a number of organisations and individuals from the WA Health system and the community. We would like to thank them for their time and input.

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Executive summary

Women with serious mental illness (SMI), notably schizophrenia, bipolar disorder and severe personality disorders, are considered high risk for adverse pregnancy and birth outcomes, which in turn, are associated with poor neurodevelopment in the child.

Factors such as smoking, use of illicit drugs, poor compliance with folate supplementation, poor nutrition as well as failure to access antenatal care have been implicated in this increased risk. During pregnancy, many women with SMI continue their contact with mental health services. The provision of specific support by mental health clinicians/case managers to women with a SMI is an important primary prevention strategy aiming to improve obstetric and neonatal outcomes for these women and their children.

The framework assists mental health clinicians to manage the reproductive and pregnancy needs of this high risk group of women. It targets factors amenable to intervention such as early and ongoing compliance with antenatal care attendance, smoking moderation or cessation, nutritional advice and links to appropriate support services at the earliest opportunity. Mental health clinicians are encouraged to be client advocates by initiating referrals to appropriate antenatal and/or family planning services. This support will assist clients to make more informed choices and will provide linkage to early and ongoing antenatal care for the best possible outcomes for the client and her baby.

Three key concepts are accentuated within Healthy Babies for Mothers with Serious Mental Illness: A Case Management Framework for Mental Health Clinicians:

- Providing consumer reproductive choices
- Early detection and monitoring of pregnancy
- Implementing a "Small Known Team Approach" in the management of the pregnant client with SMI

The small known team approach includes the woman’s community mental health clinician, a named midwife at the antenatal clinic and a general practitioner if the client chooses a shared care option of antenatal care. If the client attends the Childbirth and Mental Illness (CAMI) antenatal clinic at King Edward Memorial Hospital, she will be cared for by the clinic’s ‘named’ midwife and general practitioner. This small team operates amongst a potentially larger team that includes the psychiatrist, obstetrician and hospital social worker.

Specific modules within the framework focus upon:

- Establishing a Professional Support Network
- Assessment of Pregnancy Risk
- Early Detection of Pregnancy
- Monitoring During Pregnancy
- Preparation for Birth
- Preparation for Postnatal Period

Healthy Babies for Mothers with Serious Mental Illness: A Case Management Framework for Mental Health Clinicians provides the potential to enhance health outcomes for these vulnerable women and their children.
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Introduction

The impetus of the Healthy Babies for Mothers with Serious Mental Illness: A Case Management Framework for Mental Health Clinicians project arose from the findings of Jablensky, Morgan, Zubrick, Bower and Yellachich’s (2005) study which ascertained the incidence of complications during pregnancy, labour and birth as well as the neonatal characteristics of infants born to women with schizophrenia, bipolar disorder, or major depression in a population-based cohort. The study found that women with serious mental illness (schizophrenia or major affective disorders) had increased risks of pregnancy, birth and neonatal complications. Given that fertility rates for women with serious mental illness (SMI) are no different from the general population of women (Nicholson & Biebel 2002), Healthy Babies for Mothers with Serious Mental Illness: A Case Management Framework for Mental Health Clinicians was developed as an antenatal risk reduction intervention for women of child bearing age with SMI.

The high risk of pregnancy and birth complications for women with SMI has significant consequences for increased childhood neurodevelopmental risks (Jablensky et al 2005). Complications that have been specifically associated with women with schizophrenia during pregnancy include maternal bleeding, gestational diabetes, rhesus incompatibility and pre-eclampsia (Cannon et al 2002). Uterine atony, asphyxia, and emergency caesarean section have also been noted as significant outcomes for this group (Cannon et al 2002). The incidence for pre-term births, low birth weight and consequently small-for-gestational age newborns and postneonatal deaths is higher for women with schizophrenia than the normal childbearing population (Bennedsen et al 1999, 2001). Foetuses carrying genes predisposing to schizophrenia, as is the case with children born to women with SMI, may be particularly vulnerable to hypoxic brain damage resulting in neurocognitive deficits (Mednick et al 1987). Lifestyle factors such as smoking, use of illicit drugs, alcohol, poor nutrition and failure to access antenatal care further implicate perinatal risks for these vulnerable women and their unborn babies.

Women with SMI are also more likely to have had more than one sexual partner, a negative early sexual experience, been a victim of sexual assault and therefore are more likely to have an unplanned or unwanted pregnancy (Miller & Finnerty 1996). Not only are these women less likely to receive antenatal care, but they are more likely to be without partner support, be separated or divorced (Rudolph et al 1990), at risk of suicide and using illicit drugs (Miller 1990).

The side effects of currently used psychotropic medications can include nausea, breast tenderness and menstrual cycle disruption such as amenorrhoea, which mimic the signs of early pregnancy (Fitzgerald & Seeman 2000). As a result, the diagnosis of pregnancy may be delayed - limiting the reproductive choice of women with SMI or allowing them to make appropriate lifestyle changes to reduce the risk of insults during embryonic development. The opportunity for early modifications to existing psychotropic medication regimes to accommodate the developing embryo during pregnancy may also be compromised. Furthermore, first trimester counselling regarding nutrition, smoking cessation or moderation, folate supplementation and avoidance of other teratogens (agents that cause a structural abnormality following fetal exposure during pregnancy) may be delayed until the second trimester.

Recent qualitative evidence has revealed that mothers with SMI strive for meaningful relationships with their children by using strategies that focus on protecting their children and their mothering role (Montgomery et al 2006). Although challenging, motherhood was noted as rewarding and central to their lives (Diaz-Caneja & Johnson 2004). Mothers perceived support services as focusing on crisis intervention with little support for parenting (Diaz-Caneja & Johnson 2004). Recommendations for health professionals include increased sensitivity and understanding of the social and cultural environment of these mothers to facilitate opportunities for positive parenting.
Healthy Babies for Mothers with Serious Mental Illness: A Case Management Framework for Mental Health Clinicians

Women with SMI are able to form therapeutic relationships with health professionals; however, they are sensitive to frequent changes of care providers (Fitzgerald & Seeman 2000). During pregnancy, many women with SMI remain in contact with mental health services. This ongoing professional relationship has the potential to enhance treatment compliance as mental health clinicians/case managers can influence clients to make changes and also monitor those changes over time (Dearing 2004). Community mental health clinicians have demonstrated the capacity to deliver health care packages to at-risk groups (Brooker et al 1994) and therefore have the potential to be a highly-valued resource for pregnant clients with SMI. Healthy Babies for Mothers with Serious Mental Illness: A Case Management Framework for Mental Health Clinicians is designed to be used by health professionals to improve reproductive health outcomes for women with SMI.

Background

Healthy Babies for Mothers with Serious Mental Illness: A Case Management Framework for Mental Health Clinicians is the product of consultation with the community and health professionals; an environmental scan to determine current service delivery issues; and a literature review.

Academic Detailing (a process involving face-to-face education of clinicians by clinicians) aims to identify strategies that are effective in promoting changes in clinical behaviour. As an implementation strategy, academic detailing intervention has had some encouraging effects (Chaillet et al 2006). The Healthy Babies for Mothers with Serious Mental Illness: A Case Management Framework for Mental Health Clinicians project adopted this approach by engaging a knowledgeable person to liaise with clinicians to explore a problem and possible local solutions. Throughout the developmental and pilot phases it was important to have a consistent, accessible and committed person to drive the project - therefore a project manager was appointed. The importance of health professionals working collaboratively to address issues pertaining to women with SMI was vital to the project.

Another strategy involved seeking champions who strongly supported the project objectives and maintained their contribution during the development process. Furthermore, the audit and feedback process was an effective strategy that reinforced the assumption that change occurs through participation of clinicians who reflect upon their own practice (Chaillet et al 2006).

Employing two or more strategies or tailored interventions was found to be most effective in implementing guidelines in obstetrics by targeting different barriers to change (Chaillet et al 2006). In this regard, Healthy Babies for Mothers with Serious Mental Illness: A Case Management Framework for Mental Health Clinicians provides an example of how a variety of strategies were utilised during the consultation and development process of this framework.
Consultation Process

Consultation was the first stage of a two-phase process in developing the framework. The second phase involves the framework’s implementation and ongoing evaluation.

Phase 1: Consultation

The consultation process was based upon the recommendations of the NHMRC guidelines for consultation (NHMRC 2007). The assumption that clinicians are most likely to change behaviour if they are involved in the change process was pivotal to the consultation process (Lavis 1998, NHMRC 2007). The consultation process was flexible and adaptable to varying local conditions (NHMRC 2007, Rock et al 2001) and involved clinician participation throughout. A framework draft was referred for consultation to a wide range of practicing clinicians (NHMRC 2007). However this strategy did pose a challenge in accessing specific clinicians such as general practitioners for review of the framework. In addition to global email circulars, the project was promoted in professional journals and newsletters of local Divisions of General Practice to increase awareness of the project and invite response. The involvement of clinicians throughout the consultation process ensured that the framework would be presented in an appropriate format and style for clinical use (NHMRC 2007). This approach facilitated communication with target audiences and provided an avenue for feedback to be used to fine-tune the framework to suit the clinical environment (Lavis, 1998).

The credibility of the messenger is critically important in research transfer efforts (Lavis, 1998). The project manager had considerable midwifery expertise in antenatal care to display professional credibility - but minimal experience in the field of mental health. These characteristics ensured an open minded, flexible non-threatening approach; therefore mental health clinicians regarded the process as an inclusive team effort, where their contributions were vital.

The consultation process was conducted between July and November 2006. Individual and group interviews were undertaken with key stakeholders, such as consumers, community mental health clinicians, general practitioners and midwives, as a basis for developing the content and format of the framework. Contact was made with nursing directors and clinical managers to seek support towards accessing community mental health clinicians. Consequently, presentations introducing the project were attended by mental health nurses, occupational therapists and social workers. At the presentations, clinicians were invited to share experiences and strategies they had effectively used or knew of based on interactions with other clinicians. Approximately 55 mental health clinicians from North Metropolitan Area Health Service Mental Health community clinics participated in these discussions. Notes were taken during each meeting and key points were subsequently raised to stimulate discussion with other clinicians at future meetings. Following these sessions, contact details were collected from clinicians who expressed an interest in contributing to the project.
Individual interviews were also undertaken. Upon introducing the project, discussions took place with:

- Eleven midwives involved in parent education and/or antenatal clinics in four public maternity hospitals
- Four senior midwifery managers
- Five psychiatrists
- Two general practitioners
- An obstetrician
- Local community agencies that offer women and children’s services (such as refuge, domestic violence support or family services for accommodation)
- Two women (who are mothers) with serious mental illness who shared their experiences to provide a consumer perspective

Key aspects of the project and an invitation to provide input was also communicated to North Metropolitan Area Health Service Mental Health clinicians through a global email circular. Eight clinicians responded, some commenting via email or arranging to attend an individual interview.

Consultation Response

The resulting framework *Healthy Babies for Mothers with Serious Mental Illness: A Case Management Framework for Mental Health Clinicians* incorporates recommendations and corresponding rationale built upon key concepts identified during the consultation process. These key concepts are:

- A Holistic Approach
- Continuity of Care
- Consumer Reproductive Choice

A Holistic Approach

Ideally, a holistic approach encompasses physical and psychological aspects of care and in the case of pregnant women with SMI; it also addresses the wellbeing of both mother and infant.

In general, people with SMI are noted to have poor physical health, resulting in increased morbidity and mortality, in comparison to the overall population (Mirza & Phelan 2002). For example, individuals with a mental illness are more than twice as likely to smoke cigarettes; and more than half are likely to be overweight or obese (Compton et al 2006). Smoking prevalence among Western Australian women with schizophrenia has been noted as being as high as 60.5% (Jablensky et al 2005).

A systematic assessment of both physical and emotional health is needed for childbearing women with SMI. Prompt diagnosis of pregnancy can foster choice with pregnancy outcomes and early interventions around lifestyle changes including psychotropic medication review, counselling regarding nutrition and cessation or moderation of smoking and illicit drug use. Care delivery models to monitor and improve the physical health in people with SMI have been recommended. Preventative approaches used by medical professions for general populations can potentially be adapted for clients with SMI (Ohlsen et al 2005). Although mental health clinicians may lack the training or expertise to provide these services (Compton et al 2006), collaboration beyond mental health services to include obstetric services are preferable in addressing the needs of childbearing women.
Continuity of Care

The term ‘continuity of care’ refers to the provision of care by the same caregiver or small group of caregivers. Ideally, this one-to-one model referred to in the midwifery literature involves a consistent relationship over the childbearing continuum of pregnancy, labour, birth and the postnatal period (Page 2003).

A Cochrane review of continuity of caregivers during pregnancy and childbirth found women who had continuity of care by a team of midwives were more likely to discuss antenatal and postnatal concerns; attend prenatal classes; give birth without painkillers; feel well prepared and supported during labour; and feel prepared for child care (Hodnett 2007). Team midwifery - a model that aims to increase continuity of care - has been associated with increased satisfaction with antenatal, labour and some aspects of postpartum care, however, the differences in maternal satisfaction were most obvious during antenatal care (Biro et al 2003). Women who thought that caregivers got to know and remember them were much more likely to rate their care highly (Davey et al 2005). Australian women who knew their midwife during antenatal care reported that they received information tailored to their needs and were told as much as they wanted to know compared to women who received standard hospital antenatal care (Johnson et al 2003).

Increasing women’s chances of seeing the same caregiver at each visit is not by itself likely to improve the overall experience of care. Time spent personalising each encounter in antenatal care is important in reinforcing client compliance with care strategies. Continuity of care helps clients to develop trusting relationships with caregivers, which leads to the clinicians knowing the woman and being in a better position to identify behavioural changes and facilitate referrals to support services (Douglas & Arias 2001). Trust, choice and empowerment of patients are emerging as important issues in mental health care (Laugharne & Priebe 2006), with continuity of care being a key determinant of patients’ trust in their clinician (Mainous et al 2001). Continuity of care is seen as an essential element for the development of improved case coordination, the major goal of the National Action Plan on Mental Health 2006-2011 (COAG 2006).

Consumer Reproductive Choice

Most women want and expect to have reproductive choice. To ignore sexual health and sexual behaviour in mental health care increases the vulnerability of women with SMI, already at risk of sexual exploitation (McCandless & Sladen, 2003). The availability of options such as termination of an unwanted pregnancy or the opportunity to adjust lifestyle habits early in pregnancy may be compromised if sexual health, sexual behaviour and reproductive choice are not considered a priority in the management of female mental health clients.

Having to proceed with an unwanted pregnancy for any women is undesirable and this may be more concerning in vulnerable groups. Adapting to pregnancy and motherhood is a challenge as mother-child relationships (where the mother has a mental illness) has the potential to adversely affect the child’s development (Craig 2003).

The role of mental health clinicians is to work with clients helping them to identify and manage health care issues. The inclusion of clients in care decisions is advocated to enhance client satisfaction, understanding and confidence in decisions made (Edwards & Elwyn 2006). Ensuring client involvement and choice can also advance treatment outcomes by improving patient attitude to their chosen treatment, increasing their sense of control and matching needs to appropriate treatment (Laugharne & Priebe 2006).
Consultation Critique

Upon incorporating the three key concepts (A Holistic Approach, Continuity of Care and Consumer Reproductive Choice) in the framework modules, a draft was posted to 50 reviewers inviting critique on the content, format, presentation style, feasibility of use and clinical application of the framework.

The reviewers included mental health clinicians, general practitioners and midwives who had indicated interest in providing ongoing feedback.

Sixteen (32%) reviewers responded with comments. Minimal changes were recommended and those made were primarily concerned with choice of wording and expanding on issues to include prompt questions to screen for family and domestic violence.

Phase 2: Implementation and Evaluation

Phase 2 of the project is in progress.

A pilot study of the framework began in 2007 with a small cohort of case managers from North Metropolitan Area Health Service Mental Health. Within the West Australian context, a case manager is most likely to be a mental health nurse, social worker or occupational therapist collectively labeled as mental health clinicians.

Community mental health clinicians/case managers, have an ongoing client relationship which permits greater understanding of their unique circumstances. These case managers were seen to be ideally placed to counsel and refer clients to available services across all phases of the childbirth continuum.

The pilot took into account the implications of the framework in respect to clinicians’ practice and what they considered to be most relevant in developing and implementing the resource.

North Metropolitan Area Health Service Mental Health plans to implement the framework in 2008 and has invited South Metropolitan Area Health Service Mental Health and other Health Services to also consider its use.

Clinical monitoring of maternal and child health outcomes will be conducted on an ongoing basis to assess the effectiveness of the framework and its impact upon women with SMI.
Framework Design

The development of the framework assumed an exploratory approach involving relevant health care professionals working with these women as well as the women themselves, as mental health consumers.

The overriding concepts of A Holistic Approach, Continuity of Care and Consumer Reproductive Choice are incorporated within the framework which also recognises the significance of early detection and monitoring of pregnancy and implementing a Small Known Team Approach.

The Small Known Team Approach includes the woman’s community mental health clinician, a named midwife at the antenatal clinic and a general practitioner if the client chooses a shared care option of antenatal care. If the client attends the Childbirth and Mental Illness (CAMI) antenatal clinic at KEMH she will be cared for by the clinic’s ‘named’ midwife and GP. This small team operates amongst a potentially larger team that includes the psychiatrist, obstetrician and hospital social worker.

The framework is presented in six modules:

- Establishing a Professional Support Network
- Assessment of Pregnancy Risk
- Early Detection of Pregnancy
- Monitoring During Pregnancy
- Preparation for Birth
- Preparation for Postnatal Period

Each module contains a set of recommendations and substantiating rationale as well as a flowchart highlighting key processes. Where appropriate, relevant tips/screening questions/prompts and checklists are provided.
Module 1: Establishing a Professional Support Network

This module focuses on informing clients of the capacity of community mental health clinicians to provide holistic care by referring to service agencies such as local general practitioners or a family planning service. Clients may perceive that their mental health clinician only focuses on mental health issues and subsequently may not see the clinician’s potential to be able to respond holistically to their needs.

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<td>Holistic Care Approach</td>
<td>Client may think mental health clinicians view their clients in relation to mental health only and may not share physical health issues.</td>
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<td>Ensure that clients are aware of the reasons why mental health clinicians are now collecting assessment data relevant to pregnancy, sexual and general health.</td>
<td>In the past, mental health clinicians have not collected information on physical and sexual health and this could be a new and unexpected practice to the client. Being informed of the rationale behind this change in practice can enhance trust and rapport with the mental health clinician and promote compliance with care.</td>
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<td>General Practitioner (GP) Linkage</td>
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<td>Recommend that your client has a GP if they don’t currently have one.</td>
<td>A GP can address physical needs (i.e. pap smear and contraception advice) beyond the scope of mental health clinicians - which facilitates the linking between mental and physical health needs.</td>
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<td>If client does not have a GP, provide names and contact details of local GP’s.</td>
<td>Clients may not have the capacity to seek a GP. Your clinic may have a list of recommended GP’s considered to be supportive of mental health clients.</td>
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<td>Provide contact details of Women’s Health Services or Family Planning WA (FPWA) Sexual Health Services.</td>
<td>Client preference for GP services may include financial issues (Medicare rebate), access to public transportation, gender preferences, convenience and flexibility in availability (days and/or evening availability).</td>
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<td>Offer to make appointment and provide client with a letter to take to appointment (Client Referral Proforma available).</td>
<td>Clients may need encouragement to follow through with this recommendation and bringing a proforma letter to the GP from the mental health clinician can contribute to an accurate and concise medical history.</td>
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Role of mental health clinician

Mental health clinicians can be a client advocate (support person).

The mental health clinician:

1. Has regular and consistent contact with client
2. Has a therapeutic relationship with client which facilitates compliance with care
3. Is best placed to identify changes in client’s mental status
4. Knows the client’s current circumstances
5. Has the ability to link/refer client to appropriate agencies/services (i.e. providing names of local general practitioners if client doesn’t have one)
Module 2: Assessment of Pregnancy Risk

In this module the mental health clinician identifies and documents risk factors for pregnancy as part of their usual client assessment. Examples of risk factors would be whether the client is using contraception; is sexually active and/or whether their current mental state predisposes to risk-taking behaviours. If the client is deemed to be high risk then monitoring for pregnancy would be accelerated, whereas low risk status would guide the mental health clinician to continue monitoring for changes in risk factors.

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Rationale</th>
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</thead>
<tbody>
<tr>
<td><strong>Assessment of Pregnancy Risk</strong></td>
<td></td>
</tr>
<tr>
<td>Include the following assessment data relevant to women’s health and the date on standard assessment documentation.</td>
<td>Up to date relevant information is necessary to enable mental health clinicians to be effective decision-makers in their advocacy role. This may involve appropriate referral(s) to other health care professional(s) or support agencies.</td>
</tr>
<tr>
<td>Name and contact details of current psychiatrist.</td>
<td>If client demonstrates relapse behaviour or is concerned about psychotropic medication during pregnancy, prompt referral can be made.</td>
</tr>
<tr>
<td>Client’s current psychotropic, antidepressant and mood stabiliser medication (names, dose, route, date commenced).</td>
<td>Clinicians need to know if the client has recently changed medication and how long they have been on current medication in order to provide correct information in referral letters to other health care professionals as needed.</td>
</tr>
<tr>
<td><strong>Side effects</strong> of the current psychotropic medication experienced by client and its impact on client’s menstrual cycle.</td>
<td>Side effects may change depending upon the psychotropic medication and dosage. Side effects may mask the symptoms of early pregnancy (i.e. missed period, nausea and breast tenderness).</td>
</tr>
<tr>
<td>Date of client’s last normal menstrual period (LNMP).</td>
<td>Awareness of client’s last menstrual period provides more data for the clinician to assess pregnancy risk given that psychotropic medication can mask the symptoms of pregnancy.</td>
</tr>
<tr>
<td>Client’s current use of contraception and client perception of its suitability.</td>
<td>To determine if client is at risk of sexually transmitted infections (STI) and/or unplanned pregnancy and for the appropriate referral to other health care professional(s) to address this need. This information is also an indicator of sexual activity and if the client is effectively using the contraceptive choice or if another method might be more suitable.</td>
</tr>
<tr>
<td>Plans for pregnancy.</td>
<td>If client has plans to become pregnant they need to be referred to a general practitioner and/or Family Planning WA (FPWA) Sexual Health Services for pre-conception advice (i.e. commencing folate supplementation before pregnancy, nutrition, medication, smoking and lifestyle advice) and psychiatrist for adjustment of psychotropic medication.</td>
</tr>
<tr>
<td>Brief history of past pregnancies.</td>
<td>A woman who becomes pregnant for the first time may have more information and support needs. A client who has previously had a normal pregnancy with no complications and whose child is well may not require the same amount of support from their mental health clinician as a first time mother. However, a woman with a past history of complications may require additional support.</td>
</tr>
<tr>
<td>Recommendation</td>
<td>Rationale</td>
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</tr>
<tr>
<td><strong>Assessment of Pregnancy Risk (Continued)</strong></td>
<td></td>
</tr>
<tr>
<td>Name and contact details of current <strong>general practitioner (GP).</strong></td>
<td>For appropriate referral for physical concerns and for preventative women’s health care (i.e. pap smear and contraception).</td>
</tr>
<tr>
<td>Name and contact details of current <strong>social support</strong> (i.e. family and/or friend).</td>
<td>To enlist support of significant people in client’s life in case of emergency or to reinforce clinical care decisions and assist in contacting clients who may have moved.</td>
</tr>
<tr>
<td>Current and past <strong>smoking status</strong> (non-smoker, ex/smoker, smoker) including number of cigarettes smoked per day, quit date and if anyone at home smokes (Refer to Tips/Questions/Prompts).</td>
<td>Identifies current smokers and ex-smokers. If client is interested and receptive to quitting smoking then offer support and resources. If the client is already a parent or planning a pregnancy then positively reinforce efforts towards quitting for the benefit of their child(ren). Children with a smoking parent have an increased risk of disease, hospitalisation, Sudden Infant Death Syndrome and taking up smoking themselves in adolescence.</td>
</tr>
<tr>
<td>Other drugs client may be taking such as short or long-term prescription <strong>medications</strong> or over-the-counter medications (i.e. antibiotics, antihypertensives, cold and flu or decongestants).</td>
<td>Combination of medications may impact on the effectiveness of a drug and drugs may be contraindicated in certain combinations. With any suspicion of pregnancy, medication use must be reconsidered as soon as possible due to potential damage to the developing embryo.</td>
</tr>
<tr>
<td>Current and past use of any other drugs (illicit or authorised) such as cannabis, amphetamine, benzodiazepine, marijuana, opiates, cocaine, and barbiturates (amount, route, age began). If client has ceased using, include the date.</td>
<td>Should the client become pregnant it is crucial that she cease using during the important first trimester of pregnancy, when major damage can occur to the developing embryo, and ideally throughout the remainder of the pregnancy.</td>
</tr>
<tr>
<td>Current and past <strong>alcohol intake</strong> (how often, how much, age began). If client has ceased drinking, include the date.</td>
<td>Alcohol has a negative impact on pregnancy and the growing foetus. The newborn can be born with foetal alcohol syndrome, which contributes to abnormal development. If a client does become pregnant - stopping or decreasing alcohol consumption is strongly advised.</td>
</tr>
<tr>
<td>Screen for current and past history for family <strong>domestic violence</strong> when client is alone (Refer to Tips/Questions/Prompts).</td>
<td>Client may be at risk of domestic violence. Pregnancy may be a stimulus for the first episode of domestic violence and client may be reluctant to bring up the issue. Women may be more inclined to discuss this issue when asked with simple, direct questions in a non-judgemental manner in a safe setting. The woman can be offered a Domestic Violence Advocacy Support Central (CVAS Central) card, which provides written information including a safety plan and contact phone number. Women who disclose abuse will need to be referred to a social worker.</td>
</tr>
<tr>
<td><strong>Current accommodation needs.</strong></td>
<td>Client may be of no fixed address and require stable accommodation or supported housing.</td>
</tr>
</tbody>
</table>
Assessment of Pregnancy Risk

TIPS / QUESTIONS / PROMPTS / CHECKLISTS

Possible Contraception Questions
- Are you currently using any contraception?
- Are you currently sexually active?
- Do you require contraception?
- Do you have a current partner?
- Do you think you might be at risk of becoming pregnant?
- Are you happy with the contraception you are currently using?
- Are you planning to become pregnant in the near future?

Checklist for signs of pregnancy
PLEASE NOTE that some psychotropic medications can have the same side effects which could ‘mask’ pregnancy.
- Missed period
- Breast tenderness
- Nausea and/or vomiting
- Increased tiredness

Tobacco Smoking assessment
- Have you ever smoked?
- Are you currently smoking?
- If not smoking, when did you quit?
- Does anyone at home smoke?
- How many cigarettes do you smoke per day?
- Are you interested in quitting?
- Are you interested in cutting down the number of cigarettes you smoke in a day?
- Would you like assistance to quit? Quitline Number 131 848 (or toll free for country callers on 1800 198 024) to order a quit kit or to talk to a counsellor (24 hours a day).

Screening for Family and Domestic Violence
Ask the woman when she is alone.

Questions:
- Have you ever been afraid of someone close to you (i.e. friend, partner, family member)?
- Has anyone close to you ever hit, kicked, punched or otherwise hurt you?
- Has anyone close to you ever put you down, humiliated or embarrassed you or tried to control what you can do?
- Has anyone close to you ever threatened you?
- Would you like help with any of this now?
- Ask the woman if it is safe to give her written information?

A Domestic Violence Advocacy Support Central (DVAS Central) card provides written information including a safety plan and contact phone numbers. If a woman discloses abuse, she will need to be referred to a social worker.
Flowchart: Assessment of Pregnancy Risk

Identification of Risk Factors for pregnancy

Continue to monitor assessment data

Sexually active
Planning to become pregnant
Mental state suggests risk-taking behaviour
Drug / alcohol intake contributes to risk-taking behaviour
Currently using effective contraception
Not sexually active
Infertile

Assess factors for HIGH RISK
Assess factors for LOW RISK

Pregnancy Risk Assessment by mental health clinician

HIGH RISK
LOW RISK

Monitor changes in key assessment data for possible pregnancy during client contact
- Last normal menstrual period (LNMP)
- Signs of possible pregnancy

Is judgement of low risk stable over time?

YES
NO

No further action required
Module 3: Early Detection of Pregnancy

The goal of this module is prompt referral to verify pregnancy. If pregnancy can be confirmed early, the client is in a better position to consider options and apply consumer reproductive choice. Termination could be arranged with appropriate follow up or continuation of the pregnancy can proceed with the woman receiving early advice regarding folate supplementation; appropriate dietary choices; tobacco, alcohol and illicit drug moderation and review of prescription medication. The woman is then able to determine her choice of antenatal care options and continuity of care can be implemented sooner.

<table>
<thead>
<tr>
<th>Recommendation</th>
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<tbody>
<tr>
<td>Monitoring for Risk of Pregnancy</td>
<td></td>
</tr>
<tr>
<td>Ask client if she is concerned that she may be pregnant.</td>
<td>Client should be referred to general practitioner (GP) as early as possible to confirm possible pregnancy and have choice in follow up options.</td>
</tr>
<tr>
<td>Offer to make an appointment with local GP, Family Planning (FPWA) Sexual Health Services or any health service in your area that focuses on women’s health.</td>
<td>Client may need support in making an appointment and following through with attendance.</td>
</tr>
<tr>
<td>Ask client to sign the completed referral letter (Proforma available) which outlines a brief history (i.e. diagnosis, pregnancy symptoms, current medications) for client to take to appointment.</td>
<td>Providing a proforma letter with a brief current history can assist the GP with relevant up to date data on client’s current concerns and decreases potential stress for the client in providing that information, especially if the doctor is not familiar with the client.</td>
</tr>
<tr>
<td>Contact the client or GP (if client consents) to determine if pregnancy was confirmed and decision made by client regarding options (i.e. termination or continuation of the pregnancy).</td>
<td>Mental health clinician needs to be informed of pregnancy and client’s decision regarding options available. Client may need time to consider options with partner/family and a second appointment may be necessary with the GP or an independent counselling agency.</td>
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Pregnancy Has Been Confirmed

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<tr>
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<tr>
<td>If client has decided upon a termination, assess the implications for follow-up assessment and support.</td>
<td>The client may require assistance with transportation to and from the clinic. They may need more intensive follow-up following a termination due to the potential of emotional trauma.</td>
</tr>
<tr>
<td>If the client has decided to continue with the pregnancy, find out from client and/or GP the antenatal care option chosen: 1. Attendance at Childbirth and Mental Illness (CAMI) antenatal clinic at King Edward Memorial Hospital (KEMH) 2. Attendance at public hospital antenatal clinic with named midwife 3. Shared-care with GP and hospital antenatal clinic with a named midwife 4. Specialist clinic options may be more appropriate for some women such as the Chemical Dependency Clinic or Adolescent Clinic at KEMH</td>
<td>The mental health clinician continues contact with the woman during her pregnancy to ensure continuity of carers with a &quot;Small Known Team&quot; (i.e. mental health clinician, named midwife and GP if shared-care was chosen). Pregnant women with serious mental illness are considered ‘high risk’ and having access to a small known team throughout the pregnancy is a ‘safety net’ to avoid the woman getting lost in a large team with multiple health care professionals (i.e. psychiatrist, obstetrician, registrars, social worker, occupational therapist and mental health nurse). Should the woman not attend antenatal visits or require reinforcement of health information, the small known team are best placed to follow up with the woman. The client will then have the opportunity to become familiar and comfortable with one named midwife. Having this consistency of care should decrease the client’s stress and hopefully decrease the possibility of non-attendance at ongoing appointments.</td>
</tr>
<tr>
<td>Make follow-up appointment for client to see psychiatrist.</td>
<td>The psychiatrist may need to assess the current psychotropic medication choice and dosage based upon pregnancy.</td>
</tr>
</tbody>
</table>
Flowchart: Early Detection of Pregnancy

Does your client have any symptoms of pregnancy?

YES

Link client with general practitioner (GP) to confirm pregnancy

Client pregnant

Decision to continue with pregnancy

Antenatal care commenced with mental health clinician being central to *Continuity of Carers with Small Known Team Approach* within larger multidisciplinary team

NO

Maintain collection of assessment data to monitor changing risk

Client not pregnant

Decision to terminate pregnancy

GP for referral to clinic

Assess for follow-up support following termination
Module 4: Monitoring During Pregnancy

This module involves monitoring during pregnancy utilising the Small Known Team approach. The client provides consent by signing a Client Profile form providing the obstetric caregiver access to information such as mental health clinician contact details, psychiatrist contact details, client diagnosis, medications and relapse indicators specific to the client. Small Known Team members are encouraged to maintain regular contact to facilitate information sharing as the pregnancy progresses.

<table>
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<tbody>
<tr>
<td>Monitoring During Pregnancy</td>
<td></td>
</tr>
<tr>
<td>Confirm with general practitioner (GP) that initial booking to antenatal clinic has been made.</td>
<td>Mental health clinician remains involved and informed of client booking with antenatal clinic and/or attendance at GP clinic if shared-care has been chosen.</td>
</tr>
<tr>
<td>Contact the antenatal clinic to ensure that a named midwife has been chosen for this client and during first appointment, client will meet named midwife.</td>
<td>If client has chosen to attend a local antenatal clinic affiliated with a hospital, the clinic must be made aware that this client with a serious mental illness requires a consistent named midwife to be present for each visit. The clinic will then nominate a midwife who will ensure that all follow-up appointments are scheduled when (s)he is available.</td>
</tr>
<tr>
<td>Assess whether to attend the first antenatal clinic appointment with the client based on client’s preference and the assessment of the client’s current mental status.</td>
<td>Based on the mental health clinician’s assessment of the client’s current mental status, appropriate arrangements can be made for the first antenatal visit. This could involve the mental health clinician negotiating the possibility of a home visit should it be warranted. Having the mental health clinician attend the first appointment may set a positive introduction to the antenatal clinic and promote compliance with ongoing attendance throughout the pregnancy.</td>
</tr>
<tr>
<td>Develop a Client Profile (Proforma available), with client consent, that includes contact details of mental health clinician, client diagnosis, medications, psychiatrist contact details, and relapse indicators. The client takes the Profile to the first antenatal appointment where it is kept on the client’s antenatal records.</td>
<td>The Client Profile will provide valuable assessment data that is relevant and current for this pregnant woman. This information benefits the named midwife, medical staff at the antenatal clinic and the GP if shared-care was chosen.</td>
</tr>
<tr>
<td>Contact named midwife and GP if shared-care, (via email, phone or in person), monthly during early pregnancy and more frequently during late pregnancy. This may assist in ensuring ongoing appointments are made when named midwife is available and enables discussions to take place about client attendance, information to be reinforced with client and any concerns regarding the ongoing pregnancy.</td>
<td>Exchange of information between the mental health clinician, named midwife and/or GP ensures that care is tailored appropriately to the individual to engender increased compliance with care and/or educational advice. The client is more likely to attend appointments if their considerations are taken into account at the time of making the appointment. This ensures that appointments scheduled are most suitable for the client, (i.e. not during busiest times as noise and congestion may make client uncomfortable), with preference given to late morning appointments to allow for travel on public transport or to accommodate child care arrangements.</td>
</tr>
</tbody>
</table>
Healthy Babies for Mothers with Serious Mental Illness: A Case Management Framework for Mental Health Clinicians

Flowchart: Monitoring During Pregnancy

Client is pregnant and continuing with pregnancy

Mental health clinician aware of antenatal care option

YES

Hospital antenatal clinic chosen option

Shared-care with GP chosen option

Contact made with Antenatal Clinic to ensure named midwife is appointed to client

Contact general practitioner (GP) and/or client

NO

Hospital antenatal clinic chosen option

Shared-care with GP chosen option

Client Profile developed to share with named midwife and GP (if shared-care)

Regular contact to exchange information maintained between Small Known Team (mental health clinician, named midwife and/or GP (if shared-care))

How often should the Small Known Team be in contact?

Pregnancy progressing with problems

Negotiate contact within Small Known Team required for contact based upon individual client

Pregnancy progressing without problems

Monthly contact between Small Known Team in early pregnancy

More frequent contact between Small Known Team in late pregnancy

Module 4: Monitoring During Pregnancy
Module 5: Preparation for Birth

Pregnant clients with SMI may be reluctant to attend traditional antenatal classes provided by the hospital due to their personal circumstances, current mental state and comfort level with receiving information in a group setting. It is important that these clients receive essential information such as possible signs of labour, pain relief options for labour, what to bring into hospital, when to phone the hospital and infant feeding options. Due to their relationship with the client, the Small Known Team can best determine a suitable strategy for ensuring the client receives this vital information. This could involve the named midwife systematically covering the information in a one-on-one scenario over the final trimester or making arrangements for a midwife involved in parent education to meet with the client.

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Preparation for Birth and Postnatal Period</td>
<td>The client may be reluctant to attend ‘traditional’ antenatal classes provided by the hospital due to their personal circumstances, current mental status and comfort level with receiving information in a group setting.</td>
</tr>
<tr>
<td>In collaboration with the named midwife, establish if the client will be attending any hospital parent education classes.</td>
<td>The named midwife may chose to cover the essential information presented in parent education classes in a one-on-one session with the client during an antenatal clinic visit or over several antenatal clinic visits. The named midwife informs the mental health clinician about what information was covered so this can be reinforced during contacts in late pregnancy.</td>
</tr>
</tbody>
</table>

**TIPS / QUESTIONS / PROMPTS / CHECKLISTS**

**Checklist for Essential Information Covered in Parent Education Classes**

- Possible signs of labour have been discussed with client
- Pain relief options for labour have been discussed with client
- Client and support person offered a hospital tour of birth suite if interested
- Infant feeding options have been discussed with client. Client is prepared to initiate breastfeeding or is prepared to formula feed upon discharge from hospital

**Possible Signs of Labour**

- Regular contractions coming 5 to 10 minutes apart and lasting 30 to 40 seconds
- Membranes have ruptured (i.e. gush or leaking amniotic fluid from vagina)
- Mucous plug is being expelled (i.e. pink or reddish mucous discharge from vagina)
Checklist for Preparing for Birth

- Client is aware that she must bring her Pregnancy Health Record with her for each antenatal visit and whenever she goes to hospital (i.e. for special tests such as an ultrasound or when she thinks she is in labour)
- Client has contact details to phone hospital if she has questions or concerns
- Client has list of what to bring to hospital for herself and her baby
- Client has made arrangements for a support person to accompany her in labour (i.e. partner, family member and/or friend)

When to Phone the Hospital

- Client to phone hospital if she experiences any of these danger signs:
  1. Vaginal bleeding
  2. Baby isn’t moving as much as it normally does
  3. Persistent headache
  4. Blurred vision
  5. Upper abdominal pain
  6. Significant and sudden swelling of face and hands
  7. Persistent abdominal pain

- Client encouraged to phone hospital if she has any questions or concerns.

Flowchart: Preparation for Birth
Module 6: Preparation for Postnatal Period

In this module, the mental health clinician in discussion with the named midwife initiates a Client Management Plan for the postnatal period. The management plan serves to ensure that referrals or liaisons with community support agencies are in place prior to the client giving birth. The transition to parenting can be greatly facilitated if services are in place and the client is aware and open to this assistance in advance.

The first month after the birth can be stressful for all mothers and particularly so for mothers with SMI. The interaction between motherhood and mental illness is complex and many clients require services such as legal, family, health (physical and mental), housing and financial services (Hearle & McGrath 2000). Knowing that services have been arranged prior to the birth can relieve some of this stress for the mother, who may be adapting to physical changes post birth, breastfeeding issues and varying symptoms of her mental illness.

<table>
<thead>
<tr>
<th>Recommendation</th>
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</thead>
<tbody>
<tr>
<td>Preparation for Postnatal Period</td>
<td></td>
</tr>
<tr>
<td>Attend one of the antenatal appointments (or liaise via email) to initiate the development of a Client Management Plan (Proforma available) in preparation for the postnatal period. Ideally this could be planned during late pregnancy (28+ Weeks).</td>
<td>The Client Management Plan in preparation for the postnatal period needs to be initiated early enough to ensure referrals/ liaisons with postnatal resources are in place prior to labour. The client may experience an early labour, which occurs before the expected/anticipated due date - which is only an estimate.</td>
</tr>
<tr>
<td>The Client Management Plan in preparation for the postnatal period appointment/meeting should ideally involve the mental health clinician, client, named midwife and GP if shared-care.</td>
<td>The Small Known Team who have provided the continuity of care throughout the pregnancy are in the best position to know the client’s personal circumstances for support after the birth and are more likely to gain cooperation from the client and their informal support network.</td>
</tr>
<tr>
<td>The Client Management Plan in preparation for the postnatal period is documented and shared between the mental health clinician, named midwife and GP.</td>
<td>Documentation must be shared to be clinically effective. Ensure all of the team are informed (i.e. electronically or hard copied) with current records of objectives, decisions and referrals made in preparation for the postnatal period.</td>
</tr>
<tr>
<td>A copy of the Client Management Plan in preparation for the postnatal period is kept by the mental health clinician, the GP (if appropriate) and in the antenatal client notes for access by a potentially larger health care team.</td>
<td>The Client Management Plan in preparation for the postnatal period must be available to all health care professionals (HCP) involved in caring for the client. If all HCP are informed of referrals and support services put in place, this will reduce the possibility of duplication or strategies being overlooked.</td>
</tr>
<tr>
<td>A copy of the Client Management Plan in preparation for the postnatal period is sent to the client’s psychiatrist.</td>
<td>The psychiatrist will need to be informed of referrals and support services put in place for the client during the postnatal period.</td>
</tr>
</tbody>
</table>
Checklist for Client Management Plan in preparation for the postnatal period

Liaisons made with:

- Child health nurse
- Social worker
- Department of Community Development support
- Appropriate community support services (i.e. RU AH, ISHAR)
- Best Beginnings contact at Department for Communities
- General Practitioner
- Mother and Baby Unit at King Edward Memorial Hospital (KEMH) for Women


Flowchart: Preparation for Postnatal Period

Initiate the development of a Management Plan to support client in the early postnatal period

Management Plan to be developed in consultation with client, mental health clinician, named midwife, and General Practitioner (GP)

Management Plan to be documented and distributed between Small Known Team (mental health clinician, antenatal client notes, GP and psychiatrist)
Conclusion

The framework has the potential to significantly improve obstetric and neonatal outcomes for women with SMI. Ongoing monitoring of obstetric outcomes of clients with SMI is warranted to determine the impact of the framework upon maternal and child health outcomes.

Although, the focus of this project was on the pregnancy or antenatal period, there is potential for ongoing development of intervention resources to cover the entire childbearing continuum for women with SMI to include pre-conception planning and postnatal support into the early childhood years.

*Healthy Babies for Mothers with Serious Mental Illness: A Case Management Framework for Mental Health Clinicians* has paved the way for investigation into two other projects.

1) The ‘Attachment Project’ will focus upon:
   - The prospective identification of families under the care of area mental health services that are at increased risk for poor maternal bonding and attachment
   - The development of a specific package of care that promotes bonding and attachment between vulnerable mothers (i.e. mothers with a SMI) and their children that can be provided by community mental health clinicians as part of routine care provision
   - Ensuring mental health clinicians have the skills and resources necessary to provide attachment promoting interventions to all high risk families under their care
   - The establishment of attachment specific professional support networks for community mental health clinicians (Child Health Nurses)

2) The purpose of the ‘Vulnerable Families Project’ is to develop a care coordination package between Mental Health and Child and Adolescent Community Health (CACH) for the effective postnatal support of women with serious mental illness. In consultation between Mental Health and CACH, the specific objectives of the project are to:
   - Examine possible options for Community Child Health Nursing (CCHN) postnatal follow up which includes early home visits with mothers with SMI
   - Explore strategies to facilitate ongoing collaboration between child health nurses and community mental health clinicians caring for postnatal women with SMI
   - To implement and then evaluate the chosen option in relation to its effectiveness in impacting upon the quality of maternal-infant attachment; maternal mental health status; child health parameters and family and maternal satisfaction with community child health services

*Healthy Babies for Mothers with Serious Mental Illness: A Case Management Framework for Mental Health Clinicians* examined the potential to extend the role of community mental health clinicians to include aspects of obstetric and child health among pregnant women with SMI. Integrating this framework into clinical practice further enhances the capacity to improve health outcomes for women with SMI and their children.
References


National Health and Medical Research Council (2007). NHMRC standards and procedures for externally developed guidelines. Canberra, ACT: Commonwealth of Australia.


Appendix 1: Overview of Special Issues in High Risk Pregnancy

**Preconception**
- Preconception counselling including partner regarding risks of relapse & specific medications
- Folate supplementation commenced
- Smoking review
- Diet and nutrition education
- Medication use rationalised
- Review of other illicit substances

**First trimester (1 to 12 weeks)**
- Confirmation of pregnancy
- Unplanned, unwanted pregnancy termination option
- Decision to continue with pregnancy
- Antenatal Care Option determined
- Folate supplementation commenced
- Smoking review
- Diet and nutrition education
- Alcohol review
- Medication use rationalised

**Second trimester (13 to 27 weeks)**
- Management, plan in preparation for birth and postnatal period
- Ongoing issues throughout pregnancy
- Competency assessment
- Psychotropic review
- Metabolic review
- Small known team approach
- Ongoing issues throughout pregnancy
- Competency assessment
- Psychotropic review
- Metabolic review

**Third trimester (28 to 40 weeks)**
- Folate supplementation commencement not essential
- Ongoing issues throughout pregnancy
- Smoking review
- Diet and nutrition education
- Alcohol review
- Medication use rationalised

**Termination of pregnancy**
- Cutoff 20 weeks

**Healthy Babies for Mothers with Serious Mental Illness: A Case Management Framework for Mental Health Clinicians**
Appendix 2: Literature Review — Key Points for Consideration

Childbearing Issues for Women with Serious Mental Illness such as Schizophrenia and Major Affective Disorders

Women with a serious mental illness (SMI) are just as likely to be mothers and their fertility rates are no different from the general population of women (Nicholson & Biebel, 2002).

**Obstetric and Neonatal Risks and Complications**

- There is a need to improve antenatal services for women with schizophrenia in light of the growing evidence that the offspring of these women are at increased risk of complications (Barkla & McGrath, 2000).
- Genetically predisposed foetuses apparently have a special vulnerability that amplifies the damage which perinatal complications inflict on their brains (Mednick et al., 1987).
- These women have an increased relative risk for pre-term births, low birth weight, small-for-gestation babies and postneonatal deaths (Bennedsen et al., 1999; 2001a & 2001b).
- Complications associated with schizophrenia include: 1) complications of pregnancy (bleeding, diabetes, Rh incompatibility, preeclampsia); 2) abnormal foetal growth and development (low birth weight, congenital malformations, reduced head circumference) and 3) birth complications (uterine atony, asphyxia, emergency caesarean section) (Cannon et al., 2002).
- Intensive intervention during the pregnancy with a high-risk foetus may reduce the likelihood of obstetric complications, thus reducing a potential risk factor for schizophrenia in the offspring (Barkla & McGrath, 2000).

**Contraception and Pre-Conception Issues**

Women with serious mental illness are:

- More likely to have had more than one sexual partner; have a negative sexual experience, to have been raped or been in receipt of payment for sex and have a higher incidence of unplanned and unwanted pregnancies (Miller & Finnerty, 1996).
- More likely to be without the support of a spouse or significant other and have higher rates of separation and divorce (Rudolph et al., 1990).
- At high risk with suicide attempts, substance abuse, more likely to have been victims of violence whilst pregnant and less likely to have received antenatal care (Miller, 1990).
- In need for appropriate contraception based upon individual client assessment as there have been reports of non-reliable use with barrier methods and oral contraceptives for certain clients (McCullough et al., 1992).
- In need of family planning with emphasis on a thorough sexual history encompassing a holistic approach (i.e. eliciting information that will reveal whether she may be pregnant, at risk of denying a pregnancy, at risk of unwanted pregnancy, and at risk of sexually transmitted infections (STI) (Coverdale et al., 1997).

**Pregnancy Issues**

- Pregnancy at a younger age is associated with poorer education, a diagnosis of schizophrenia and early age of illness onset (Zemencuk et al., 1995).
- Weight gain is more common with more recent psychotropic medications (personal communication Prof A. Jablensky, July, 2006), which may contribute to risk of gestational diabetes in pregnancy or later Type 2 diabetes.
Amenorrhoea and menstrual cycle disruption are commonly a side effect of psychotropic medications and therefore pregnancy can occur and pass unnoticed for several months (Fitzgerald & Seeman, 2000).

Some early pregnancy symptoms (i.e. nausea or breast swelling) may be discounted and attributed to the effects of psychotropic medications (Fitzgerald & Seeman, 2000).

A diagnosis of pregnancy may be delayed due to psychotic denial, poor self-observation, or fear/suspicion of health professions (Barkla & McGrath, 2000).

A denial in pregnancy can occur whereby women experience psychotic denial if they have schizophrenia, have lost custody of children and have ambivalent feelings toward the father (Miller, 1990).

Women with SMI may have difficulty cooperating with antenatal procedures (Barkla & McGrath, 2000).

There is a risk associated with unplanned pregnancy and need for education about family planning, especially considering how important the first trimester is for risks to embryonic development (Barkla & McGrath, 2000).

**WA Study of Birth Complications in Schizophrenic Women (Jablensky et al., 2005)**

- Mothers with schizophrenia are more likely to be <19 years or >35 years.
- They have more obstetric complications (placental abnormalities, antepartum haemorrhages and drug toxic side effects because of alcohol, tobacco & illicit substances).
- They are more likely to experience foetal distress during labour with their neonate requiring naloxone with a resulting suboptimal 5 minute Apgar score.
- An increase in incidence of cardiovascular system defects among children of mothers with schizophrenia has been noted.
- There is a 60.5% prevalence of smoking amongst women with schizophrenia.
- Aboriginal women experienced a marked excess of pregnancy, labour/delivery and neonatal obstetric complications.
- Mothers whose psychiatric illness commenced before the birth of the infant were more likely to experience obstetric complications.

**Potential of Community Mental Health Nurse**

- Nurse/patient relationships enhance treatment compliance. Through the relationship nurses influence patients to make changes, which leads to recovery. In addition, nurses can visualise the results of treatment compliance over time (Dearing, 2004).
- The importance of continuity of carer and the relationship with health care professionals must be recognised. Women clients are often better able to form therapeutic relationships but may be sensitive to frequent changes in health care professionals (Fitzgerald & Seeman, 2000).
- Factors amenable to intervention involve enhancing compliance with antenatal attendance, stop-smoking programs and nutritional advice plus facilitating existing social support (Barkla & McGrath, 2000).
- The goal is to link the pregnant woman with serious mental illness to appropriate services at earliest opportunity (Barkla & McGrath, 2000).
- Education and early referral to appropriate services is facilitated due to the advantage of mental health service staff having a better understanding of individual client situations (Barkla & McGrath, 2000).
References


Appendix 3: Proforma 1. Client Profile


<table>
<thead>
<tr>
<th>NORTH METROPOLITAN AREA HEALTH SERVICE MENTAL HEALTH</th>
<th>Surname</th>
<th>Sex</th>
<th>U.R. No.</th>
</tr>
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<tbody>
<tr>
<td>Hospital</td>
<td>Forenames</td>
<td>D.O.B.</td>
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</tr>
<tr>
<td></td>
<td>Address</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**CLIENT PROFILE**

**Purpose** - This form is to be completed when your client is pregnant and they have been referred to antenatal services (i.e. Antenatal clinic and/or GP for shared care).

**Date:**

**Mental Health Clinician Preparing Client Profile**

**Contact Details:**

**Client Diagnosis**

**Medications**

**Psychiatrist and Contact Details**

**Support Person**

**Relationship to client**

**Relapse Indicators** (management of challenging behaviour or behaviour changes that may indicate the need for referral for mental health re-assessment)

**Additional Relevant Information**

Gravity: Parity: EDD:

Significant Obstetric Hx:

Significant Medical Hx:

**Other services and care** that the client may need or already has:

**Client Consent (In Client's Own Handwriting):**

Client’s Full Printed Name: ____________________________________________

Client’s Full Signature: ______________________________________________

Dated: ___________________________________________________________________

Sample only
<table>
<thead>
<tr>
<th>NORTH METROPOLITAN AREA HEALTH SERVICE MENTAL HEALTH</th>
<th>Surname</th>
<th>Sex</th>
<th>U.R. No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**CLIENT REFERRAL**

**Purpose** - This form is to be completed when referring your client to another health service provider / agency (i.e. General Practitioner, Women’s Health Services, Family Planning WA Sexual Health Services or other)

**Date:**

**Referral Agency:**

**Mental Health Clinician Preparing Client Referral**

**Contact Details:**

**Client Diagnosis**

**Medications**

**Psychiatrist and Contact Details**

**Reason for Referral**

**Additional Relevant Information**

**Client Consent (In Client’s Own Handwriting):**

Client’s Full Printed Name: ____________________________

Client’s Full Signature: ____________________________

Dated: ____________________________

Sample only
### MANAGEMENT PLAN - PREPARATION FOR POSTNATAL PERIOD

**Purpose** - This form is to be completed by the ‘Small Known Team’ to ensure liaison has occurred with relevant service and/or agencies in preparation for the client's postnatal period.

**Management Plan Team Members**

<table>
<thead>
<tr>
<th>Mental Health Clinician Name:</th>
<th>Named Midwife:</th>
</tr>
</thead>
</table>

**General Practitioner’s Name (if shared care):**

**Patient Assessment** (considering current and future health care needs)

**Arrangements / referrals made:**

**By Whom**

**Date:**

**Actions / follow up**

**By Whom**

**Date:**

**Next Review date**

**Copy sent to all team involved in management’s plan?**

Yes [ ] No [ ]

**Client Consent/Acknowledgment of involvement in the Management Plan (In Client’s Own Handwriting):**

**Client’s Full Printed Name:**

__________________________________________________________________________

**Client’s Full Signature:**

__________________________________________________________________________

**Dated:**

__________________________________________________________________________