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MINIREVIEWS

Mental health of perinatal women

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Abstract

Pregnancy and childbirth are major stressors for some women. They can be followed by deterioration in mental health status and cause mental illnesses during perinatal period. Undetected and untreated perinatal mental illnesses can have negative unexpected impacts on parenting skills of the women and children's development. Mentally ill mothers may not effectively attend their children's needs in a timely manner and may experience an unfavourable mother-child attachment affecting the child's language, social, emotional and cognitive development. The rate of pregnancy and postnatal health complications and interventions is higher among mentally ill women with some certain risk factors. The mentally ill mothers along with their partners need comprehensive support and counselling to be able to care for their infants and establish strong parent-child bond and attachment. Mental health campaigns across the world have endeavoured to increase the knowledge and awareness of the public towards perinatal mental health illnesses. To this aim, a routine screening is recommended in order to identify the women who are at risk of mood or anxiety disorder during perinatal period. The development of knowledge on perinatal mental illnesses among public and the health professionals has resulted in timely recognition and treatment of perinatal mental illnesses. Although great volumes of research show high prevalence of perinatal mental illnesses and their impacts on parenting confidence and competence as well as child's developmental process, there is still lack of research on various aspects of perinatal mental illnesses. To enable early prevention, diagnosis and intervention, it is crucial to identify families who are at an increased risk of perinatal mental illnesses and provide support and intervention to minimise the adverse outcomes. The children's needs may not be met by providing treatment to parental mental illnesses alone. It is also important to understand the impact of specific parenting behaviours on child outcomes which is modified by the quality of parenting.

Key words: Perinatal mental illness; Depression; Anxiety; Pregnancy; Childbirth

Core tip: Pregnancy and childbirth are major stressors for some women. Undetected and untreated perinatal mental illnesses can have negative unexpected impacts on parenting skills of the women and children's development. Mentally ill mothers may experience an unfavourable mother-child attachment. Perinatal mental illness affects the child's language, social, emotional and cognitive development.

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INTRODUCTION

Pregnancy and childbirth are expected to be blessing times in women's life, when physiological and psychological changes prepare the women for motherhood tasks. Pregnancy and childbirth are, however, perceived as major stressors for some women as they struggle with self-depreciation and undermining of self-esteem followed by feeling incapable of caring for the newborn. These negative feelings are followed by deterioration in mental health status and can cause mental illnesses during perinatal period[1].

Perinatal mental illnesses are described as "psychiatric disorders that are prevalent during pregnancy and as long as 1 year after delivery"[2]. Various types of perinatal mental illnesses have been reported in the literature including postpartum blues, perinatal depression, post-partum anxiety disorders and postpartum psychosis (bipolar disorders)[2].

Perinatal mental illness has been identified as one of the most important issues in women's health. Perinatal mental illnesses negatively affect women's interpersonal relationship and quality of life and have direct and indirect negative impacts on short-term and long-term physical and mental health of their children. The greater concern is for those women who abstain to disclose their mental health problems due to fears of stigma, losing parental rights and being judged as incompetent and unqualified parents. Some women also discontinue their psychiatric medications during pregnancy and lactation due to concerns regarding the baby's well-being[3], which can result in an increased risk of suicidal thoughts or attempts at self harm[4-6].

PREVALENCE AND RISK FACTORS OF PERINATAL MENTAL ILLNESSES

A review of the literature shows that although any woman can experience perinatal mental illness, this problem is not randomly distributed among the population of perinatal women. A combination of biological, socio-environmental and psychological factors can affect mental health of women across their life span and predict their mental illnesses[7] (Table 1). A previous history of mental health problem, such as depression or anxiety, has been reported to be a strong predictor of perinatal mental illnesses. Half the women with prenatal depression will continue to feel depressed throughout pregnancy and during postnatal period. Major depressive disorder and bipolar episodes may also occur before pregnancy and relapse during pregnancy and after chidlbirth[1]. Nevertheless, somatic complaints and sleep difficulties may be attributed to the changes happening during pregnancy and postnatal, obscuring the diagnosis of the mental illnesses and leaving the women with no appropriate treatment[8].

According to the report by the World Health Organisation, the mean prevalence of non-psychotic common mental disorders in low- and lower-middle-income countries was 15.6% during antenatal period and 19.8% postnatal. Factors such as a higher education, a permanent job, the ethnic majority and having a supportive intimate partner were shown to be protective against mental health problems[9].

Research has shown that women who carry the following risk factors are more likely to develop mental illnesses during pregnancy and after childbirth: socioeconomic disadvantage, a history of trauma, sexual abuse, unplanned pregnancy, high risk pregnancy, young age, being unmarried, lack of support from the intimate partner, intimate partner violence, inter-personal issues with in-laws, insufficient emotional and practical support, giving birth to a female baby, low level of education, cigarette smoking, career insecurity and ethnic minority[2,9-11].

The reports from the Beyondblue postnatal depression screening program show that 5%-10% of Australian women experienced symptoms of depression after childbirth[12]. A population-based survey by Eastwood *et al*[13] demonstrated that the prevalence of postnatal depression after 2 wk postpartum was 6.2%. It was also reported that the risk of postnatal depression was significantly associated with maternal country of birth, financial difficulties, unplanned pregnancy, not breastfeeding and poor maternal health.

The study by Melville *et al*[14] in the United States showed that the prevalence of antenatal depressive disorders was 9.9% and panic disorder was 3.2%. In addition, 2.6% of the participants reported current suicidal thoughts. The odds of probable antepartum major depressive disorder increased in the women who reported psychosocial stress, domestic violence, chronic medical conditions and Asian and African-American ethnic group.

PERINATAL MENTAL ILLNESS AND CHILD'S WELL-BEING

Women with mental illnesses are less likely to care for themselves during pregnancy and after childbirth. Research has shown that maternal anxiety during pregnancy is associated with higher level of cortisol in the fetus which continues to be higher than normal levels throughout the child's life span and may be a marker for the children's anxiety, mood and behavioural disorders. The risk is even higher in women who continue to suffer mental illness from pregnancy to postnatal period[15].

Table 1 Risk factors of perinatal mental illnesses

Socioeconomic disadvantage	High risk pregnancy
Young age	Giving birth to a female baby
Maternal country of birth	Being unmarried
Ethnic minority	Lack of support from the intimate partner
Low level of education	Intimate partner violence
Financial difficulties	Inter-personal issues with in-laws
Career insecurity	Insufficient emotional and practical support
Cigarette smoking	Not breastfeeding
History of trauma	Previous history of mental health problem
Sexual abuse	
Unplanned pregnancy	

The association between antenatal depression and fetal and neonatal outcomes have been investigated in two meta-analyses[16,17]. Reports of the studies indicate a significant association between antenatal depression and an increased risk of premature delivery (less than 37 wk of gestation) and infant's low birth weight (especially when mother lives in a low-income country). It was, also, suggested that the level of risk depends on the severity of the symptoms of depression.

The rate of pregnancy and postnatal health complications and interventions is higher among women with perinatal mental illness and their infants require higher rate of intensive care[18,19]. It has been shown that children of these mothers are at higher risk of child neglect, maltreatment, attachment difficulties, delayed growth and motor development, emotional problems and a range of negative cognitive outcomes in early childhood. Nutritional neglect, severe starving and malnutrition are also other enormous problems in these children most of whom are females and below five years of age[20-22]. In addition these children are at heightened risk of clinical depression in late adolescence while suffering the consequences of stress associated with caring for their mentally ill parent/s. These issues have resulted in increased concerns regarding the child's wellbeing in the family and have brought a great numbers of families into the attention of child protection agencies[23-26].

PREVENTION AND DIAGNOSIS

Early detection of any mental health problems can help prevent future serious psychological disorders. Not only women with symptoms of depression need assessment and evaluation of psychological problems, but also all well women need to be screened as part of their perinatal health check. The American College of Obstetricians and Gynecologists (ACOG) states that "screening for depression has the potential to benefit a woman and her family and should be strongly considered. Women with a positive assessment require follow-up evaluation and treatment if indicated"[27].

Child and Family Health nurses, general practitioners and obstetricians, as the primary care providers, are the first and most often point of contact for perinatal women. This provides them with a great opportunity to effectively detect perinatal psychological problems and identify those who need care and support. There are, however, some barriers to timely screening and identification of the perinatal mental illnesses by the obstetricians. Research has shown that some obstetricians feel unconfident in their own level of knowledge and believe that they have had inadequate training to provide mental health support and assistance. Time constraint during each visit has also been reported as another barrier to effective screening[28].

Pediatricians can also play a significant role in screening for postnatal depression. They can provide support to the mothers and facilitate their access to appropriate professional resources. This can in turn help optimise the healthy development of the children followed by the healthy functioning of the entire family. Similar to other screening initiatives, there are barriers to implementation of this practice such as lack of time, inadequate training, lack of sufficient mental health referral resources and reimbursement insecurity[29,30].

Research by Kim *et al*[31] reported barriers to mental health diagnosis and treatment at four levels as follows: Patient level (including lack of time, using other support and spontaneous improvement of symptoms); Provider level (including provider unavailability and unresponsive provider); Patient-provider interaction level (including poor match to need, poor patient-provider fit and use of phone tag); System level (including cost-insurance mismatch, geographic mismatch and inconvenient location).

TREATMENT

The mentally ill mothers need comprehensive support and counselling to be able to care for their infants and establish strong mother-child bond and attachment[32,33]. Not only mothers but also fathers need psychological interventions during perinatal period as they may be well affected by the changes during pregnancy and after childbirth and are prone to mental illnesses. Even when the fathers become involved in the assessment and treatment, the majority of the therapeutic options focus on the treatment of maternal or paternal mental illnesses in isolation. Since the wellbeing of both parents is important in achieving normal development of the child, there is a need for inclusive perinatal mental health care. The wellbeing of both parents should be taken into account simultaneously and the fathers need to be routinely involved in the mental health assessment and care plan, which in turn improves the health outcomes for the whole family[34,35].

MENTAL HEALTH INITIATIVES

Mental health campaigns across the world have

endeavoured to increase the knowledge and awareness of the public towards perinatal mental health illnesses. The development of knowledge on perinatal mental illnesses among public and the health professionals has resulted in timely recognition and treatment of perinatal mental illnesses. During the perinatal period, GPs and Child and Family Health nurses are key primary care providers engaged with women. They can identify women at risk, offer them an effective pathway and help alleviate postnatal mental health problems for the majority of women[36,37].

Research on mental health problems in the United States and other countries have demonstrated that despite high prevalence rates of mental illnesses in these countries, many people do not seek professional advice and support or delay seeking help for as long as they can. For instance, the World Health Initiative by the World Health Organization[38] investigated data from 28 countries and showed that both in developed and developing countries only a small proportion of the population received treatment for their mental illnesses such as mood or anxiety disorders. It was also shown that the median delays to receive treatment for severe psychotic disorders was a few months, for mood disorders ranged from one to 14 years and for anxiety disorders ranged from three to 30 years.

In a telephone survey, Highet *et al*[39] recruited 1201 adults from each State and Territory of Australia in 2009. Results of the study demonstrated that 43.6% of the participants believed that postnatal depression was the most common health problem for women after childbirth. Furthermore, 94% of the participants believed that postnatal depression needs timely and specialised treatment. About two-third of the participants perceived postnatal depression as a biological rather than psychosocial aetiology. It was also revealed that more than 80% of the adult Australians believed that there should be a routine assessment for depression in all new mothers. Nevertheless, 55% of them viewed antenatal depression as a "normal" condition.

Results of a more recent survey in 2012 demonstrated remarkable improvements in mental health literacy in the Australian population over 16 years including improved recognition of depression, better perception about the usefulness of health professionals (General Practitioners, psychiatrists, psychologists and mental health nurses) and increase in beliefs about the helpfulness of antidepressants and antipsychotics[40].

Failure to receive treatment or delay in seeking support and advice can have serious consequences. Therefore, early detection and prevention of mental illnesses is crucial and can be achieved by establishing a routine screening during perinatal period. It has been recommended that a comprehensive primary health care assessment as well as an enquiry of a history of anxiety, depression or other mental health problems are conducted at the following times: (1) Antenatally: At the first appointment with the clinician for antenatal care before 20 wk of pregnancy; (2) Postnatally: At the first postnatal home visit by the clinician; (3) Six to eight week postnatal check: Performed by the child and family health service; and (4) A further assessment at 6-8 mo postpartum. It is also recommended that the Edinburgh Postnatal Depression Scale should be administered at each visit during antenatal and postnatal period[41].

CONCLUSION AND DIRECTION FOR FUTURE RESEARCH

Undetected and untreated perinatal mental illnesses can have many negative unexpected impacts on parenting skills of women and children's development. Mentally ill mothers may not effectively attend their children's needs in a timely manner and may experience an unfavourable mother-child attachment affecting the child's language, social, emotional and cognitive development. It is crucial to identify families who are at an increased risk of perinatal mental illnesses in order to enable early prevention, diagnosis and intervention and prevent the serious adverse outcomes. The children's needs may not, however, be met by providing treatment to parental mental illnesses alone. It is important to understand the impact of specific parenting behaviours on child outcomes which is modified by the quality of parenting[42].

Although great volumes of research show high prevalence of perinatal mental illnesses and their impacts on parenting confidence and competence as well as child's developmental process, there is still lack of research on various aspects of perinatal mental illnesses. There is a need for further research to investigate parenting education interventions for parents with perinatal mental disorders. No clinical trial has investigated the effect of psychological interventions and counselling on parenting skills or child's outcomes to find out whether children benefit from the interventions. Future longitudinal, population-based studies may unearth how environmental factors, such as education and social support, moderate the influence of perinatal mental illnesses on the child outcomes, which may help to find preventive approaches. In addition, the focus of most interventional trials has been on postnatal mental illness, but not the delivery of the intervention prophylactically before or during pregnancy and its long-term impacts on the mental health of the whole family[2]. It is hoped that future studies and their findings will assist families affected by these problems.

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