Review Article

Microbiology & Research

Postpartum Psychosis: Risk factors and Management

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Received: 6-APR-2021; **Published:** 10-APR-2021;

Citation: Kodzo Lalit Dzifa, Ousman Bajinka, Pa Omar Jarju, Postpartum Psychosis: Risk factors and Management

Abstract

Following childbirth, with a psychosis and associated mood disturbance, Postpartum Psychosis (PPP) is studied to be a severe mental health condition. PPP affects 1 to 2 per 1000 women among the psychiatric emergency. To curb this severe disorder, acute clinical intervention is warranted. Maternal mental health problems with a focus on depression as the condition with the biggest public health impact should be the way forward. This review is set to look into the risk factors, prevention and management of PPP. Both the acute onset and recurrence of psychiatric illness are common during the perinatal period as women are more vulnerable during this period. Timely detection and effective management of perinatal psychiatric disorders are critical for managing PPP. Part of the management strategies for women who experience PPP is to seek guidance on further pregnancies and risk of illness. Since PPP is a disturbing complication of childbirth that carries high risks for both mother and child, if one is at high risk of developing puerperal psychosis, there is the need for a specialist care during pregnancy and be seen by a psychiatrist.

Keywords:

Postpartum Psychosis, mental health, psychiatric disorders, puerperal psychosis

Introduction

Postpartum Psychosis (PPP) is a severe mental health condition following childbirth, with a psychosis and associated mood disturbance [1]. Among the psychiatric emergency, PPP affects 1 to 2 per 1000 women [2] and this severe disorder warrants acute clinical intervention [3]. Maternal mental health problems with a focus on depression are the condition with the greatest public health impact [4]. Apparently, pregnancy and childbirth are a period of high risk for women [5]. Pregnancy and obstetrical complications can increase the risk for Post-partum depression (PPD) [4]. PPD is important to detect the soonest possible. This will be timely enough to avoid non negligible consequences for the mother to develop PPP [6]. The identified clinical features include abnormal thoughts or behaviors, confusion and mood fluctuation, psychosis or, excessive anxiety during the perinatal period [6,7]. Bipolar disorder, affective psychosis, and schizophrenia are as well much under study [8].

Maternal mental health is very crucial aspect of public health that needs to be looked at because it impacts both the life of children and mothers [9,10,11]. While mental health has received a lot of attention in recent years, procedures for screening and ensuring a good maternal mental health seem to be lacking.[12] perinatal mental health disorders affect about 10% of pregnant women and 13% of those who have put to bed globally with depression being the most common [11]. These percentages are however higher in low and middle income countries (LMICs) with 15, 6% and

19.8% respectively.[11] Unfortunately, screening for mental disorders or mental health in pregnancy and after delivery is not part of the routine care rendered during antenatal and postnatal care in all settings. Although all women can develop mental health problems during and after pregnancy, women in LMIC stand a greater risk because of prevailing factors such as poverty, low socioeconomic status, and lack of social support among others. This calls for the need to include screening and education on maternal mental health in the routine care during ante and postnatal care.

Perinatal is the period immediately before and after birth, usually from 28th week of gestation to 4 weeks after birth. This period is a critical period when there can be new onset of psychiatric disorders and possible relapse in known patients. Gaynes et al reported that about 1 out of 13 women experience a major depressive episode for the first time during pregnancy [13] while Wisner et al in their study reported 1 out of 7 women experiencing a psychiatric episode puerperium [14]. The study by Viguera et al of 2,252 pregnancies and postpartum periods reported consistent with other studies, overall risks in bipolar and unipolar disorders were 23% and 4.6%, respectively, during pregnancy, and 52% and 30%, respectively, during the postpartum period. First-illness episodes occurred during pregnancy or the postpartum period in 7.6% of women [15]. For those with already existing mood disorders, the rate of relapse postpartum is 30% for unipolar depression and 52% for bipolar depression or the recurrence of a manic episode [15]. Similarly, antenatal and postnatal anxiety disorders are diagnosed in 15.2% of women during pregnancy and 9.6% of women post-birth [16]. During the first year after delivery, women with a psychiatric disorder are at the highest risk for psychiatric hospitalization [17].

Perinatal mental disorders are also associated with maternal complications and an increased risk of adverse neonatal and developmental outcomes for the child [18]. This review will address perinatal psychiatric disorders, risk factors and role of midwives in management with a focus on post-partum psychosis. Postpartum period is a period for the first onset of autoimmune thyroid disorders (AITDs). This is normally associated with psychiatric disorders [19]. Both of AITDs and PPP even though Among the most common medical condition of postpartum, due to misdiagnosed are left inadequate postpartum, due to misdiagnosed are left inadequate treated [19]. The risk of relapse after electroconvulsive therapy (ECT) is substantial in PPP disorder women [20]. Despite the severity in some perinatal episodes that comes with plethora of risk to develop PPP, the number of studies available to guide the management is limited [19]. Identifying the women with severe mental disorders in pregnancy and the post-partum period in addition to occurrences of PPP related risk factors, ways of preventing and if occurred how to treat and managed are the main objective of this review.

Postpartum Psychosis

Postpartum period is a period for the first onset of AITDs. This is normally associated with psychiatric disorders [19]. Both of AITDs and PPP even though among the most common medical conditions of postpartum, due to misdiagnosed are left inadequate treated [19]. Although postpartum psychosis is rare, its consequence to both mother and child such as suicide and infanticide are too grave to ignore [12]. Currently, the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) suggests that if a woman meets criteria for a brief psychotic disorder, “with postpartum onset” be added as a specifier if the onset is during pregnancy or within 4 weeks postpartum [55]. Some clinicians believe that the timeframe for the postpartum specifier should be extended to 6 months after delivery based on clinical experience suggesting that episodes can present beyond the 4 weeks [55].

Risk Factors for development of Postpartum Psychosis

Both the acute onset and recurrence of psychiatric illness are common during the perinatal period as women are more vulnerable during this period [36]. Those with the history bipolar disorder first-time mothers are at heightened risk. Immune dysregulation As biological triggers for PP is an emerging interest in research [35]. Lower per capita income, younger age, perinatal and neonatal complications, and single parenting concept during peripartum phase are among the risk factors [42]. Women who give birth after IVF treatment when compared to those on spontaneous conception showed no differences. However, history of mental illness is a major risk factor

for PPP [43].

Review by Vanderkruik et al reported a prevalence of puerperal psychosis consistent with previous studies to be approximately 1–2 per 1000 childbirths [13-16]. Valdimarsdóttir et al and other studies mentioned risk factors such as primiparity, [17,19] advanced maternal age [17], and occurrence of a mood disorder during the incident pregnancy itself. History of bipolar disorder and postpartum psychosis are strong risk factors [20, 21]. Personal or family history of bipolar disorder substantially increases the risk for postpartum psychosis and those with a first-degree relative with postpartum psychosis have a 70% risk of onset [22-24]. According to The Eighth Report of the Confidential Enquiries into Maternal Deaths in the United Kingdom by Cantwell et al on "Saving Mothers' Lives: Reviewing maternal deaths to make motherhood safer: 2006-2008, most cases of postpartum psychosis present in those without a history of any psychiatric symptoms[25]. It is likely that between 50-80% of patients who develop postpartum psychosis might develop manic or hypomanic episodes [26].

The study by Di Florio A et al. (2014) mentioned primiparity as another risk factor [19, 27]. Some of this risk may be due to the increased psychosocial stress of a first child, but some may also be due to unknown biological factors. In clinical management and treatment of psychiatric disorders in women, perinatal period may pose a great challenge [41]. Peripartum depression affects up to one in seven women and should be considered as risk factor for PPD. Peripartum depression is associated with significant maternal and neonatal morbidity if untreated, and this put women to risk of developing PPD [37]. Adverse childhood experiences (ACE) in girls increases risk of later postpartum psychiatric episodes and parental psychopathology and disability contributes to this [53]. Although PPP disorders are studied to be heritable however, little is known about how genetic liability varies from other significant risk factors [39].

Clinical Presentations of Postpartum Psychosis

Onset of postpartum psychosis is characteristically sudden [13] between 3 and 10 days after birth [18] or 14days [28]. To meet diagnostic criteria, symptoms must occur within the first 4 weeks post-birth per the Diagnostic and Statistical Manual of Mental Disorders Fifth Edition [29]. Clinical features of postpartum psychosis include gross disorganization, bizarre behavior, and visual, olfactory, or tactile hallucinations [11]. Patients have little to no insight into their symptoms. Some patients develop paranoid, grandiose, and bizarre delusions and, as a result, they are at risk for suicide and infanticide. There might also be altruistic delusions of committing suicide or killing their infant to save themselves and their infant from a "fate worse than death."[30].

Clinical Features of Postpartum Psychosis as stated by Lauren M. Osborne in "Recognizing and Managing Postpartum Psychosis: A Clinical Guide for Obstetric Providers" include: disorganization, confusion, depersonalization, insomnia, irritability, and abnormal thought content (delusions and/or hallucinations), Abnormal mood (mania or agitation; depression; mixed) [31]. Although onset is sudden and features seem dramatic, early warning symptoms like insomnia, anxiety, irritability, or mood fluctuation may be present. Drug use (intoxication or withdrawal) like barbiturates, benzodiazepines, alcohol, cocaine and cannabis can present with similar symptoms of postpartum psychosis. It is therefore necessary to do a blood or urine toxicology screen to rule out drug induced psychosis [32].

Prevention of Postpartum Psychosis

Evaluation for bipolar disorder, suicidal risk and postpartum psychosis for young mothers, first-time mothers and mothers who have experienced a traumatic delivery is a right intervention to curb PP. In addition, telemedicine including home telephone-based peer support, health visits, and psychotherapy will as well help in preventing PP [37].There is a knowledge gap as to partners' experiences of PPP. This is partly due to the inadequate awareness on the account of the both parents to involve in monitoring

PPP [47].When partners are more vigilant to signs of relapse and inculcate positive attitudes and relationships, it will help in alleviating the stressful conditions that leads to depression [47] Maternity and mental health services should address domestic violence to improve health outcomes for women [55].

Treatment of Postpartum Psychosis

The treatment options depend on the severity of PP.

While treated with psychotherapy or selective serotonin reuptake inhibitors is the option for mild to moderate depression, moderate to severe is proven efficacy with combination psychotherapy and medication. The safest selective serotonin reuptake inhibitors during pregnancy appear to be escitalopram, sertraline and citalopram. Furthermore, for breastfeeding women to the lowest serum medication levels in breastfed infants, sertraline, paroxetine and fluvoxamine are the preferred [40]. Immediate day psychiatric consultation and referral for possible inpatient treatment is recommended for patients' thoughts of harming their newborns or thoughts of harming their newborns [40].

The treatment options for women with PPP disorders require inpatient hospitalization. Treatment with lithium, antipsychotics, and benzodiazepines are recommended options [2]. From a clinical trial, it was found that lithium maintenance may be most beneficial for relapse prevention. From this structured treatment algorithm where sequential addition of benzodiazepines, antipsychotics, and lithium, high rates of remission in patients with first-onset PPP may follow [3].

Management of Postpartum Psychosis

For the better management of risk factors associated with PP, thorough understanding is required [49]. Early detection and effective management of perinatal psychiatric disorders are critical for managing PPP [50]. Part of the management strategies for women who experience PPP is to seek guidance on further pregnancies and risk of illness [51]. Reproductive and mental health outcomes in women should consider diagnosing PPP as a part of women health. In a bid to obtain informed decisions regarding future pregnancies, the risks of further illness needs to be conveyed.

Pharmacological Management

Postpartum psychosis is a psychiatric emergency that requires inpatient hospitalization this is because it is associated with high rates of both suicide and infanticide [52] and treatment can occur most safely and rapidly in the context of inpatient hospitalization. Some evidence of efficacy has been found for approaches including antipsychotics, mood stabilizers, propranolol, and electroconvulsive therapy (ECT). The strongest evidence was found for ECT [53].

Treatment Recommendations for Acute Postpartum Psychosis

- Benzodiazepine (lorazepam 0.5-1.5 mg TID).
- Antipsychotic (high potency preferred, haloperidol 2-6 mg or olanzapine 10-15 mg)
- Lithium (to achieve serum level of 0.8-1.2 mmol/L)
- Taper benzodiazepine and antipsychotic once symptom remission achieved
- Continue Lithium monotherapy for 9 months (can lower to achieve serum level of 0.6-0.8 after symptom remission if severe side effects)
- For future pregnancies, begin prophylactic Lithium monotherapy during pregnancy or immediately postpartum [31].

Psychosocial support

Although postpartum psychosis needs medication, psychosocial support also plays an important role in management. Family support for the patient, baby and spouse are crucial to ensure adequate and timely recovery of the patient and good health of the baby. Postpartum consultation, postpartum physiology and psychiatric conditions are evidence-based practical approach to treatment [54]. The clinical situations including depression, adverse birth events, and psychosis as well as risk factors need to be accurately followed. The role of psychological stressors and underlying biology on the development of PPP is an area that requires careful study [23]. If obstetrician/gynecologists cannot treat the patient, the patient will have to be referred as clinically appropriate [7]. We recommend screening pregnant and postpartum women for depression and this should be based on two-step and one-step screening strategies. This method of screening is proven effective in identifying peripartum depression [40]. Correct assessment and repair of these risk factors is therefore essential to help reduce long term complications [41]. Genetic risk scores (GRS) of lifetime psychiatric illness is hoped to provide clues about distinct environmental or genetic elements of PP disorders and

when this is proven effective, will help to identify vulnerable groups [42]. The physiology and the etiologies of childbirth trigger the onset of depressive conditions that might lead to PPP requires extensive study [19].

Recommendations

Although this condition is rare, the practicing obstetrician can and should be aware of the following certain key clinical features and risk factors:

- Remember that women with known bipolar disorder are at greatest risk however, only 1/3 of women who present with PPP will have a prior psychiatric history.
- Remember to ask all patients about personal and family history of bipolar disorder.
- Remember that primiparous women are at highest risk. Always ask about sleep disturbance: although all new mothers will have disrupted sleep, those who are not able to sleep when they have the opportunity should raise a red flag.
- Always ask, in a neutral and non-judgmental way, about the woman's thoughts of harming herself or the child and remember that the important distinction is whether a woman is disturbed or
- horrified by these thoughts (indicating that they may be obsessions). Remember that PPP is a psychiatric emergency; if it is suspected, the patient must have a psychiatric evaluation as soon as possible (in the emergency room if necessary).

Conclusion

Postpartum psychosis is a disturbing complication of childbirth that carries high risks for both mother and child. If one is at high risk of developing puerperal psychosis, there is the need for a specialist care during pregnancy and be seen by a psychiatrist. It is necessary to have a pre-birth planning meeting at around 32 weeks of pregnancy with everyone involved in her care. This includes the partner, family or friends, mental health professionals, midwife, obstetrician and health visitor. Any suspected case requires a thorough psychiatric evaluation as soon as possible.

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