

Psychiatric Disorders during Pregnancy and Postpartum

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Abstract

Pregnancy is the most beautiful and memorable time in a woman's life. Apart from medical and obstetrical challenges it involves a lot of emotional, psychological and social aspects too. Although women having medical and obstetrical disorders commonly seek treatment, psychological problems are often not addressed. A female may continue to live in a state of emotional turmoil and may attribute these changes to the hormonal changes in the body due to pregnancy. Psychiatric disorders which remain untreated can disrupt the social life and can have undesirable effects on fetal and neonatal development, so it becomes important to identify women at risk for developing psychiatric disorders during pregnancy and postpartum and initiate timely management. Although the American College of Obstetrics and Gynaecology recommended strongly considering screening pregnant women for depression in 2006, it is not done as a routine.

Recently we came across two interesting cases of ante partum and post-partum mental disorders. Which led us to write a review article on Psychiatric disorders in pregnancy? Let's review the two cases in brief.

Introduction

Case 1: Antepartum catatonia

28 years old G2P1L1 with 34 weeks pregnancy presented in the casualty department of our hospital with the history of not speaking since 2 days, staring, rigidity and refusal to eat and drink since two days. She was asymptomatic before that [1,2]. Her obstetric history was uneventful with previous caesarean section for breech presentation five years back. Present pregnancy was a supervised one. She was normotensive with no medical disorder. On examination the patient was gazing in one direction and not at all responding to verbal commands. There were tears drops in both the eyes most of the times. Relatives denied any history of physical or mental assault. Husband revealed that she had a similar episode three years back when she suddenly stopped talking and became agitated on a few occasions. Psychiatry referral was sought and diagnosis of catatonia was made. Patient was given some treatment for three months and then she stopped it on her own. However this history was communicated verbally by the attendant and previous records were not available.

Patients haematological and biochemical profile were normal. Psychiatric consultation was sought and they did a detailed evaluation. She was started on Tab lorazepam to which she responded well and became responsive and started talking within two days

She improved symptomatically with time. She remained asymptomatic in antepartum, intrapartum and postpartum period. She was continued on lorazepam for 4 weeks postpartum after that she was lost to follow up.

Case 2: Post-partum psychosis

A 23 year old P1L1, presented at day 10 of an uneventful normal vaginal delivery to a tertiary care center. She was brought by her husband, who gave the history, that within two days of delivery; she told him that she had no desire to live. She also mentioned that she dislikes the baby and often, had thoughts of harming the baby. She also felt that someone is secretly observing her day and night because of which she developed a very poor sleep. She stopped bathing and caring about herself. She developed the guilt of being a horrible mother and felt she did not deserve to have her baby. She told her husband that she heard voices commanding her to go with her infant to the subway and jump in front of the train; these hallucinations terrified her and became stronger after she returned home from the hospital. The husband immediately brought her to the casualty. This is a typical case of post-partum psychosis. Patient was managed in association with psychiatry team. She received sessions of psychotherapy along with drug therapy and improved with time. Her husband and one other relative throughout this period observed her baby, so that she does not cause any harm to it.

With these two cases reporting to us in quick succession of time, we thought that psychiatric disorders need more attention of obstetricians for timely diagnosis and management.

Risk Factors

Uncared pregnancy, previous history of any psychiatric disorder, lack of antenatal care, poor nutrition, stressful life events, gender-based violence, multiple sexual partners, complications of previous pregnancy, like abortions, still births, prolonged labor, operative or instrumental delivery are risk factors for developing psychological disorders in pregnancy. Others can be age, marital status, parity, unwanted pregnancy, lack of social support, etc. [3-10]. Obese woman

are more likely to experience elevated antenatal and postpartum depression [11].

Some common health issues during pregnancy have been linked to a child's future mental health. Women with such exposures are at high risk of suffering from psychological ailments during pregnancy. For example, studies suggest that the risk for developing schizophrenia is three times greater in children whose mothers' had the flu during pregnancy [12]. Other studies show children born to mothers with iron deficiencies are four times as likely to develop schizophrenia [13].

Discussion

There are no specific signs or symptoms that can be directly associated with depressive disorders specifically to pregnancy. However negative feelings, changes in sleep pattern and appetite, lack of energy, irritability without any obvious reason can be a suspect. Since pregnancy is supposed to be a stressful condition, serious mood changes often go unnoticed by patients and untreated by the obstetricians. The timing of onset of mental disorders has been stated by a few studies to be more during the first and third trimester of pregnancy [14]. It has also been reported that pregnancy during puberty, premenopausal time also witnesses a high incidence of mental instability. Common negative outcomes of untreated depression or anxiety in pregnant women include inadequate weight gain, preeclampsia, and difficulty bonding with their unborn baby, premature labor and lack of follow through with prenatal care [15].

Brief Overview of Various Mental Disorders during Pregnancy and Post-Partum

Obsessive compulsive disorder

Epidemiological studies suggest that OCD is observed more frequently in females compared to males [16-20]. Moreover, the mean age of onset of OCD in women is in the reproductive age group [20]. These findings imply that reproductive events such as pregnancy and childbirth may be related to OCD in females. These women tend to report obsessions pertaining to cleaning and washing. In contrast, females with postpartum OCD have shown obsession thoughts of causing any kind of harm to the baby. The onset of such thoughts and behavior can very much affect the maternal and child bonding and the ability of the mother to take care of her baby [21]. In some women it can be transitory whereas in others it can be repetitive [1].

A meta-analysis of 19 retrospective studies compared the prevalence of obsessive-compulsive disorder among pregnant or postpartum women with the prevalence of OCD in women from the general population [22]. The results showed that the prevalence of OCD in pregnant and postpartum women was found to be greater than that in the general population (2.07 and 2.43 versus 1.08 percent). Further research is needed to support the difference in rates observed in pregnancy and postpartum, and if there is any difference trimester wise, however some studies have shown that OCD mostly occurs during the second or the third trimester of the gestation [23-26]. A research has shown that there were no significant differences between pregnant women with and without OCD with regard to demographic characteristics, gravidity and parity, gestational age, history of abortion, and pregnancy related complications. A positive family history was significantly higher in pregnant women having OCD [25].

Treatment of OCD during pregnancy includes cognitive behavioral therapy (treatment of choice) and SSRIs. Selective serotonin reuptake inhibitors (SSRIs) are the most commonly prescribed treatment of OCD or OCD with co morbid disorders such as major depression [27]. Atypical antipsychotic medication is added for refractory cases. With the exception of fluoxetine, all SSRIs were found at low levels in breast milk and are not expected to cause adverse effects in breastfeeding infants.

Panic disorder

The course of panic disorder during pregnancy still remains unclear. Whereas some studies have shown a decrease in the symptoms in women of pre-existing panic disorders others have reported that there is no such decrease [28,29]. It has been reported that pregnancy can cause an acute exacerbation in women with previous severe symptoms whereas women with milder panic symptoms may experience asymptomatic improve during pregnancy [29]. Current evidence suggests that pregnancy does not offer any protection for panic symptoms and anxiety, and the risk increases further in the postpartum period.

Cognitive behavioral therapy remains the treatment of choice for panic disorder during pregnancy. The most commonly used medications for panic disorder are the benzodiazepines (lorazepam, clonazepam) and the antidepressants, including the SSRIs (Selective Serotonin Reuptake Inhibitors) and the SNRIs (Serotonin and Norepinephrine Reuptake Inhibitors) that also have a positive effect on anxiety [30].

Depression

The overall prevalence of depression during pregnancy has been reported to be around 10 and 16%. [31-33]. An Indian study done in Navi Mumbai has reported the prevalence of antepartum depression to be around 9.2% [34]. In a study from the United States the incidence of antenatal depressive disorders were present in 9.9% with 5.1% meeting criteria for probable major depression and 4.8% meeting criteria for probable minor depression. The study reports that intimate partner violence emerged as one of the strongest independent predictors of antenatal major depression [35]. One third of pregnant women report major depression first time during pregnancy [36]. Factors associated with depression during pregnancy include marital problems, lack of psychological and social support, unplanned pregnancy, traumatic life events and lower socio-economic status [37,38]. It has also been reported that multigravidas, women with current and past obstetric complications and history of previous abortions can also attribute to depression. Many studies support these facts [3,4,6,7,9].

Treatment

Clinicians should be aware of the risks associated with the antidepressants and also the importance of continuation of the treatment. Of the SSRI medications; both fluoxetine and sertraline have more data regarding safety than the newer SSRI's such as escitalopram. First trimester exposure to paroxetine has been associated with cardiac defects and should therefore only be used if there are no other choices for that particular patient (REF) [39].

Schizophrenia

Some of the factors thought to be modestly associated with this disorder include antenatal exposure to influenza, rubella, mostly during second trimester, respiratory infections, hypoxia-related obstetric complications, low birth weight and intrauterine growth retardation (in males only). Factors remotely associated include antenatal stress and poor nutrition [40]. Adverse events are reported to be more common in women with schizophrenia compared with normal women. The risk of using antipsychotic medications during antenatal period and on breast feeding remains uncertain. There is not clear if antipsychotic drugs are associated with major malformations [41].

Treatment

It should not be discontinued in a woman already on treatment since there is high risk of relapse in pregnancy. Atypical antipsychotics, especially haloperidol, remain the drug of choice; possibly low doses should be given to avoid anti cholinergic side effects [42].

Eating disorders

Eating disorders like binge eating are reported to be approximately 4.9% [43]. A study reported that women with eating disorders have a higher risk of caesarean section and are also at risk of postpartum depression [44]. Women having binge eating during pregnancy should undergo a diagnostic assessment for eating disorders.

Bipolar mood disorder

The incidence of bipolar disorders has been seen more in women during 12 to 30 years of age [45-47] and are more witnessed during the period of pregnancy and post-partum (reproductive age group). There are conflicting studies of bipolar disorders during pregnancy. Whereas most studies show high recurrence rates during pregnancy, others support remarkable stability during pregnancy [48,49]. Some report fewer or shorter recurrences during pregnancy compared with antenatal period [50]. So the controversy still remains whether or not pregnancy is a vulnerable period for the recurrence of mood episodes [51].

Treating bipolar disorder during pregnancy is clinically challenging. Many primary mood stabilizers are associated with increased risk of congenital malformations; however, stopping treatment during pregnancy may increase the risk of relapse. The drugs used for bipolar disorders include valproic acid, lithium, carbamazepine and lamotrigine. The use of these drugs may be associated with congenital malformations, neural tube defects and other adverse fetal outcomes.

Psychiatric Disorders Specific to Post-Partum Period

Post-partum depression

Postpartum non psychotic depression affects approximately 10-15% of women and represents a considerable health problem. It is observed in 1-2/1000 women in the post-partum period mostly seen 2-4 weeks following delivery [52-56].

The factors having a significant contribution to postpartum depression are past history of mental disorders and psychological disturbance during pregnancy, marital problems and lack of social support and stressful life events. Low socioeconomic status had a small

but significant predictive relation to postpartum depression [57]. Cognitive behavioral therapy, antidepressants and electroconvulsive therapy may be prescribed in a few cases.

Post-partum blues

Post-partum or maternity blues are characterized by irritability, frequent crying episodes and anxiety related to the wellness of the baby. It is generally self-limited and needs counselling and care, mostly seen in the western population because of lack of strong familial support and bonding. Giving reassurance and care to the mother can help her overcome this.

Post-partum psychosis

Often witnessed within first two weeks to three months following delivery. Past history of psychosis in earlier pregnancies or family history of such disorder increases the risk further. It has an acute and sudden onset and should be regarded as a psychiatric and obstetrical emergency [58].

Mood stabilizers – work to stabilize mood and help reduce the likelihood of the symptoms of relapse. The most common mood stabilizer is lithium. However it has to be monitored for the blood levels. Others that can be used are sodium valproate, carbamazepine and lamotrigine. These drugs should be prescribed only in consultation with a psychiatrist. Antidepressants and antipsychotics assist with both manic and psychotic symptoms such as delusions or hallucinations.

Post-partum posttraumatic stress disorder

Post traumatic PTSD was first described by Bydlowski and Raoul-Duval [59]. The incidence of postpartum PTSD is around 5.6% [60]. Symptoms of postpartum PTSD include intrusive re-experiencing of a past traumatic event, avoidance of stimuli associated with the event, including thoughts, places, people, severe anxiety and flashbacks or nightmares and panic attacks.

Cognitive behavioral therapy is an easy and effective way of dealing with this. It can be combined with SSRIS.

Role of antipsychotic medications in pregnancy

An extensive research has been done on effects of psychiatric medicines during pregnancy and lactation. Some of these medications are absolute contraindications in pregnancy. Many pregnancies are unplanned and may occur when women are already on psychiatric medications. The risks increase when women stop taking treatment on their own and ignore the need for these medications in the antepartum period. Studies have shown that women who discontinued medication were 5 times more likely to relapse as compared to women who maintained treatment [61]. Of major concern is the continuation of medication around the time of organogenesis. While in some women, with symptoms controlled on a particular drug, it may be continued; some medicines like sodium valproate can have adverse effects during organogenesis [62].

The probable risks associated with the use of antipsychotic medications during pregnancy are risks of teratogenesis, neonatal toxicity and perinatal syndromes, risk of cognitive and behavioral symptoms in later life.

On February 22, 2011, the U.S. Food and Drug Administration (FDA) notified the change in the drug labelling system for the

antipsychotic medications during pregnancy and declared that the entire class of antipsychotic drugs have been updated to include warnings regarding the use of antipsychotic drugs during pregnancy. FDA also warns that Healthcare professionals should be aware of the potential for adverse effects related to exposure to antipsychotic medications in new-borns and patients should be informed about these. Addition of antipsychotic medication is required for stabilization of psychotic problems during pregnancy. Patients should not stop taking these medications if they become pregnant before consulting their doctor. Discontinuation of antipsychotic medications suddenly can significantly increase the risk of relapse (Table 1) [63].

Benzodiazepines	Alprax	D	Not much reports of teratogenicity are there. A few cases of cleft palate have been reported [64].
	Chlordiazepoxide	D	
	Clonazepam	D	
	Lorazepam	D	
	Bupirone	D	
Antiepileptics and mood stabilizers	Valproic acid	D	Use of lithium in the first trimester has been associated with increased risk of Ebsteins anomaly whereas the use of Valproic acid and carbamazepine especially during the first trimester have been associated with almost 10 fold increase in neural tube defects. Oral clefts have also been reported [65].
	Lamotrigine	C	
	Lithium	D	
	Carbmazepine	D	
Antipsychotic agents	Haloperidol	C	A very low association of non-structural teratogenicity has been associated with haloperidol. There are no reports of any major teratogenic potential of other antipsychotics [66].
	Chlorpromazine	C	
	Olanzipine	C	
	Clozapine	B	
	Risperidone	C	
Antidepressants	Tricyclic antidepressants	C	No reports of any teratogenicity. Some cardiac disorders and persistent pulmonary artery hypertension have been reported [67].
	Amitryptine	C	
	Desipramine	C	
	Clomipramine	C	

SSRIS	C	No serious side effects of SSRIS during pregnancies have been reported. There were reports of some cardiac diseases with Paroxetine but a large study reported that there was no increased risk [68].
Citalopram	D	
Paroxetine	B	
Sertraline	C	
Flooxetine	C	

Table 1: The congenital anomalies associated with various anti-psychotic medications.

Prevention

Women with mental instability can feel insecure at various levels. Right from planning a baby to carrying a pregnancy and the post-partum period, a woman needs security and support from the partner and the family. Emotional support can be a great help in reducing the recurrence of any mental disorder during this time. Pre-conceptional counselling plays a crucial role. The importance of mutual love, positive relationships, dietary importance, and continuation of drugs during pregnancy and post-partum should be emphasized. Chances of relapse and worsening of symptoms during pregnancy should be explained.

The importance of healthy, balanced diet should be explained. Need to reduce alcohol intake, smoking ,tobacco and other addictive substance should be explained The possible consequences of substance abuse such as preterm births leading to delivery of preterm and low birth weight babies further adds to the impairment of maternal and child health.

Women should be encouraged to do the things which make them feel good and relaxed; counsel them to take help of family and friends for housework, shopping and other routine work. Engaging in a hobby and recreational classes is one good suggestion. Exercise under supervision and a sound and regular sleep is immensely helpful. Practice the concept that each mother is special and healthy women produce healthy babies. Timely booking at a specialized centre and supervised pregnancy should be encouraged.

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