



POSTPARTUM DEPRESSION-A NEGLECTED SPARK

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ABSTRACT

Postpartum psychiatric disorder is known to exist since ancient time. There have been many studies on its existence, risk factors and management by Psychiatrist. But on exploring further there are very few studies encompassing the adequate screening protocol, diagnosis and management from obstetrician's point of view. It is not a commonly taught topic in curriculum of obstetric teaching. Hence, a lot many young obstetricians are not aware of the depth of morbidities associated with it and how to screen and manage such women. This article is an attempt to provide the insight of this topic and throw some light on its current scenario in modern obstetrics.

KEYWORDS : postpartum blues, Edinburgh postpartum depression scale, postpartum posttraumatic stress disorder, postpartum obsessive compulsive disorder

INTRODUCTION-

Motherhood is considered to be the most joyous and happiest moment of woman's life. But, only few know that motherhood has a lot of grey areas in it. Many emotional, psychological and physiological changes associated with post partum hormone withdrawal, changes in social responsibilities and post delivery physical ailments may form a complex net of emotional turmoil in mother.

As we enter the 21st century, the focus of maternal health is now shifting towards reducing the maternal morbidities. Reduced maternal mortality especially in developed countries have now allowed them to form a more directive approach towards maternal psychiatric disorders whereas in developing countries like India, where we still struggle to provide for the basic health facilities like anaemia correction, 100% institutional deliveries, infection prevention and safe mother and baby, we as a treating obstetrician tends to forget & ignore the importance of maternal mental health.

But, what is important is that the abnormal maternal emotional state has a long term effect on child's development. It not only causes the altered mother child bonding, it also damages the well being of family as a unit. Post partum depression (ppd) affects women within child bearing years on exposure to bio-psychosocial stressor during pregnancy and child birth.(1) Studies have found that children whose mother had ppd when followed up till 10 years of age, had 2 times more significant psychological issues as compared to children whose mother did not have ppd.(2) Also it was found that the symptoms of anxiety and depression were significantly associated with maternal ppd among children of 8 years age.(3) Despite the potentially profound effects on the mother and child, ppd is often under diagnosed, less frequently studied, with low emphasis to its importance and inadequately treated condition.(4) Burden of maternal health issues is higher in lower socioeconomic group in India and as this group constitute a large percentage of Indian population hence it is crucial for health care providing authorities to address this issue with utmost sensitivity.(5)

HISTORY-

Maternal peri-partum psychiatric disorder is known since the time of *Hippocrates*. He, in 4th century mentioned about ppd in writing for the very first time. Another early mention came from *Trotula*, a 13th century female physician. It came to lime light again in mid of 19th century when, *Jean Etienne Esquirol* became the first physician to give a detailed account of case reports on maternal psychiatric illness. He suggested that there are two categories of post partum illness- puerperal (within 6 weeks) and lactational (beyond 6 weeks). Later, *Louise Victor Marce* in 1858 was the first physician to have published a formal paper on it, in his treatise on *Insanity in Pregnant, Post partum and lactating women*, where he described 310 cases and reported that 9% women had antenatal depression, 58% had depression in puerperal period and 33 % in lactation period. And he

provided a landmark ground for opening the gates for researchers to study about post partum psychiatric disorders.(6)

Later, in 1968, Brice Pitt, described "atypical depression" to represent milder form of depression, which was not reported by most of the women. Pitt's large cohort study was the first community based study of depression in post partum. He found that about 10.8% women suffered from this atypical depression, which is now believed to be milder form of disorder.(7)

Post partum psychiatric disorder is fairly common in all cultures. In Uganda, a well recognised mental illness known as "**Amakiro**" is known. Similarly, in Nigeria "**Abisiwin**" is well known maternal illness in post partum period.(8)

Ultimately, in 1994, post partum psychiatric disorder was incorporated in Diagnostic and Statistical Manual of Mental Disorders Fourth edition (DSM-IV) after four revisions. (9)

INCIDENCE-

Post partum psychosis have a global prevalence of about 0.89-2.6 per 1000 live births is a serious condition which requires hospitalization and begins within 4 weeks post partum.(10)

In a meta-analysis, conducted by Upadhyay et al, pooled prevalence of ppd in Indian mothers was found to be 22% (19-25%). They also reported a higher prevalence in urban population and in hospital setting when compared with rural population and community setting.(11) Similarly, a study conducted by Zaidi et al, at Delhi, reported an incidence of 12.75% of ppd at a tertiary hospital. (12)

It has been seen that the incidence of ppd also depend on the time of assessment post partum. There is a gradual increase in prevalence of depression uptill 1 year post partum. Hence, to exactly know the burden of problem studies should be ideally be done till 1 year post delivery.(13)

CLASSIFICATION-

Post partum psychiatric disorder can be broadly divided into five categories- post partum blues (ppb), post partum depression (ppd), post partum psychosis (ppp), postpartum post traumatic stress disorder (PTSD) and postpartum anxiety and obsessive compulsive disorder (OCD). (14)

1) Post partum blues (ppb)- Also known as "baby blues" or "maternity blues" is the most common amongst the psychiatric disorder. Symptoms may begin within first 2-3 days. It is usually mild and self limiting. It mostly do not require any treatment except reassurance. It often subsides within 2 weeks.

2) Post partum depression (ppd)- It usually begins between first couple of days till 2-3 months post partum. Symptoms are similar to

depression caused by any other reason. There may be spells of crying, irritability, changes in mood, sleep & eating patterns. This may be associated with negative thoughts towards child and suicidal thoughts. Women with ppd are more prone to develop major depression later in their life and there is a high tendency of recurrence of this condition. This usually requires treatment apart from good family support and reassurance.

3) Postpartum psychosis (ppp)- It is most common and most severe form of psychiatric disorder in mother. It has an abrupt onset and hospitalisation is required. It can present as a severely elated or depressed mood. This is usually associated with delusions (delusion of reference, persecutory, grandiose), hallucinations, disorganisation and emotional lability. It is strongly associated with presence of underlying bipolar disorder.

4) Postpartum post traumatic stress disorder (PTSD) - It is characterized by tension, nightmares, flashbacks and autonomic hyperarousal that may continue for days or even weeks. It has a tendency to recur in next pregnancy. The prevalence rate varies from 0-21% in community settings and upto 43% in high risk populations.(15)

5) Post partum obsessive compulsive disorder (OCD)- It is a combination of intrusive thoughts and ritualistic behaviour done in an attempt to allay the anxiety associated with these thoughts. Study conducted by Miller et. al. have shown an incidence of about 11 % in new mothers (within 2 weeks post delivery). They reported concern about germs or dirt, mistake made by mother and Abnormal sounds or voices as the top three causes of OCD in mother. (16). Fear of cot death of infant sometimes results in mother lying awake whole night and frequently checking infant's breathing. This results in sleep deprivation and resulting irritability.

IS PPD SAME AS MAJOR DEPRESSIVE DISORDERS (MDD) ?

Traditionally and even today ppd is considered as a form of depression which has an onset in peri partum period. However, recent studies on genetic profiles of women suffering from ppd was found to be different from those who have major depression. A study conducted by Alexander Viktorin et al. has shown that the heritability of peri-partum depression is 44-54% whereas it is 32% in non perinatal depression. At the genetic levels about one third of genetic profile in ppd was unique to it and was not shared with non perinatal depression. Some other authors believe that the ppd may be considered as a subset of MMD. They also found that the heritability of antenatal depression was 37% and that of ppd was around 40%. And they concluded that about one third of the genetic pattern in ppd was unique to ppd as opposed to other two third which was similar to that of MMD. They hypothesize ppd to be a form of "unipolar mood disorder".(17)

RISK FACTORS-

One of the largest systemic studies to identify the risk factors for ppd was done by Norhayati. He identified 203 studies from 42 countries.(13)

Following risk factors were identified-

1) Psycho-Social factors

- Childhood sexual abuse
- History of maternal depression
- Family history of depression
- Antenatal depression
- Marital disharmony
- Lack of support system
- Previous psychiatric conditions.
- Availability of husband at the time of delivery (18)
- Availability of any other help at the time of delivery (18)
- Stressor/life event (18)

2) Social and demographic factors-

- Extremes of maternal age
- Low socio economic class

- Low education status
- Birth of female child
- Maternal and husband addictions
- Second marriage
- Pregnancy caused due to sexual abuse

3) Obstetric factors-

- Unplanned pregnancy
- High parity
- Complications in new born
- Caesarean delivery
- Medical conditions in mother (diabetes, hypertension, PIH)
- Intra uterine fetal demise
- Gender of newborn (18) Hospitalization of baby (18)
- Bonding (18)
- breastfeeding (18)
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Many psychological and cultural variations can contribute to the variation in prevalence of ppd. A study conducted by Takegata et al, compared this difference between India and Japan. Poor socio economic conditions, lack of supporting family and conflicts with mother in law were the factors in India, conflicts in work-life balance and infertility treatment were the major factors in Japan.(19)

Antepartum depression is one of the darker areas in obstetrics as there still is not much focus of health care providers. It is associated with many adverse health related behaviours like- poor nutrition, drug abuse, less self care, low birth weight babies, pre term deliveries, post partum depression and increased tendency of suicides.

DIAGNOSIS-

At present, ppd is not classified as a separate illness in either The American Psychiatric association's Diagnostic and statistical Manual of Mental disorders (DSM-V 2013) nor in International classification of diseases-10. Ppd is diagnosed under mood disorder in DSM-V.

Any depression with peri partum onset can be grouped under ppd. Also, onset should be within 4 weeks post delivery. According to ICD-10, the onset should be within 6 weeks.

It is important to rule out any organic cause of these symptoms. Sometimes rare medical condition like fronto-temporal dementia, frontal lobe tuberculoma and Sheehan syndrome may present with similar symptoms as those of post partum psychiatric disorders. A thorough neurological evaluation is must along with CT scan to rule out stroke, infarction or haemorrhage. Investigations like blood sugar, blood urea nitrogen, urea, creatinine, vitamin B 12 levels, folate levels complete blood count, thyroid profile, serum electrolyte may help in reaching towards organic pathology.

There are various self reported scales available for screening the women with ppd.

1) Edinburgh postnatal depression scale- (EPDS) It is the most commonly used scale. It is a self reported scale, which contain 10 items and a score of more than 12 is suggestive of ppd. It can be influenced by the educational status of woman. Its translations in local languages are available.

2) Post partum depression screening scale- (PDSS) It is also a self reported screening test. A score of more than 60 indicate minor depression and a score of more than 80 indicate major depression.

3) The Centre for epidemiologic studies of depression instrument (CES-D)- A score of more than 16 is taken as a cut off. It contains 20 items and each is scored from 0 to 3.

4) Patient health questionnaire (PHQ-9)- It assess how the woman have felt in past 2 weeks. It contains 9 questions of DSM-IV criteria. American College of Obstetricians & Gynaecologists have recommended seven validated tool to screen ppd. However, there is

no consensus on which should be the most ideal method for screening. These include- EPDS, PDSS, CED-S, PHQ-9, the Beck Depression Inventory (BDI), the Beck Depression Inventory II (BDI-II), and the Zung self-Rating Depression Scale (Zung SDS).(20). Time required performing screening test and sensitivity & specificity of each has been shown in table-1 (21)

TABLE-1:Depression screening tool

Serial No.	Screening tool	Number of items	Time to complete (minute)	Sensitivity (%)	Specificity (%)
1.	Edinburg postnatal depression score	10	<5	59-100	49-100
2.	Postpartum depression screening scale	35	5-10	91-94	72-98
3.	Patient health Questionnaire-9	09	<5	75	90
4.	Beck depression inventory	21	5-10	47.6-82	85.9-89
5.	Beck depression inventory-II	21	5-10	56-57	97-100
6.	Centre for epidemiological study depression scale	20	5-10	60	92
7.	Zung self-rating depression scale	20	5-10	45-89	77-88

The benefits of using scales like EPDS and PDSS is that they do not include somatic symptoms which may be common in any women during her post partum period like fatigue, weight & appetite changes and problems in sleeping.They avoid over- identification of ppd. EPDS has been recommended for identification of not only ppd but also depression in antenatal period.

EDPS is the most commonly used scale by physicians to diagnose ppd.(22)

SCREENING

Ideally all women should be screened by health care provider for signs of antenatal and postpartum depression. Those who are suspected high risk may need detailed evaluation and counselling sessions from experts. There have been direct and indirect evidences that suggest that, screening pregnant and post partum women for depression may reduce depressive symptoms in women. It also reduces the overall prevalence of depression in given population.(23)

It is important to recognise the complexities of process to changing both clinician behaviour and establishing effective office systems to report and treat. Also it is important to have clear cut end points in care of women suffering from post partum psychiatric disorders in term of- screening rates, therapy initiation, intent to treat, level of depressive symptoms, rates & duration of remission, follow up, propensity of future depressive episodes. Without above results it is difficult to recommend a“routine screening for all” strategy.

CONCLUSION

Postpartum period is a demanding period as it requires significant personal and inter-personal adaptations. We are still lacking in effective policies directed towards maternal mental health. Ppd needs to given a considerable importance as it is associated with significant morbidities. Currently, no guidelines exist about best screening tool to diagnose ppd and no recommendations have been made about the appropriate time to screen mothers. However, with education and support, primary care is likely to be able to provide adequate care to mothers with ppd.

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