

Post Partum Depression Incidence & Commonly Perceived Predictors in Suburbs of Lahore

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ABSTRACT

Objective: To determine the frequency of post partum depression (PPD) among recently delivered women in suburbs of Lahore in the background of commonly perceived risk factors.

Setting: Post natal ward & postpartum office visits in outpatient's clinic of OB-GYN dept. of Arif Memorial Teaching Hospital Lahore from December 1, 2012 to April 10, 2013.

Study design: Cross sectional study.

Methodology: In this study 100 women were interviewed Day 2-28 days of delivery in post natal and outpatient postnatal follow up clinic, to screen for any possibility of postpartum depression. Urdu/English version of Edinburgh Postpartum Depression Scale was used. Responses were scored as 0, 1, 2 or 3 according to increasing severity of the symptoms.

Results: Among 100 women, 9% were detected having postpartum depression. 6 of them were referred for psychiatric assistance while 3 were manageable by counseling sessions. Analysis of the results was done using SPSS version 17. Depression was seen more in younger age ($p=0.237$), multiparous women ($p=0.17$), uneducated ($p=0.31$) and unemployed patients ($p=0.33$). Personal or family history of depressive illness was found to increase risk. Fetal and neonatal complications ($p=0.35$), twins ($p=0.46$) and not being able to breast feed also increase likelihood of postnatal depression.

Conclusion: In our study, the frequency of depression is reported to be 9%. The variability in the frequency might be attributed to the social support, its perception and biological vulnerability factors.

Keywords: postpartum depression, predictors.

INTRODUCTION

Depression may pre-exist the pregnancy or begin at any time during pregnancy or the post partum period¹. It is a devastating disorder that robs women of their joy and energy and creates impairment in self care and parenting. It begins in the first 4 weeks after delivery. In clinical practice, however, the diagnosis is applied to a major depressive episode within the first year of childbirth^{2,3}.

The widely cited prevalence is 10-15% which we believe is not representative of the actual global prevalence and magnitude of the problem due to the wide range of reports. The variability in reported PPD might be due to cross cultural variables, reporting style, differences in perception of mental health and its stigma, differences in socioeconomic environments (e.g., poverty, levels of social support or its perception, nutrition, stress) and biological vulnerability factors⁴.

Most cited studies are conducted in Western economically developed countries. Overall the literature shows a wide range of prevalence from

almost 0% to almost 60%. In some countries like Singapore, Malta, Malaysia, Austria and Denmark, there are very few reports of PPD, whereas in other countries (e.g., Brazil, Guyana, Costa Rica, Italy, Chile, South Africa, Taiwan and Korea) reported post partum depressive symptoms are very prevalent.

Parents need to be reassured that PPD in absolutely no way means that the person does not love one's baby- it is a clinical illness. The patient may experience fatigue, sadness, reduced libido, episodes of crying, irritability, anxiety and irregular sleeping pattern. It is important that women with signs and symptoms seek help immediately. Even though doctors and the general public are much more aware of PPD today, but a considerable number of women suffer in silence. A recent study carried out by 4children⁶, a UK charity; found that half of all women across the UK don't see a health care professional about their problem.

Although it is tempting to attribute PPD to hormonal decline, several other factors may predispose women to this condition. Stressful life events, past episodes of depression (not necessarily related to childbirth), and a family history of mood disorders, all recognized predictors of major depression in women, are also predictors of PPD⁵.

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Generally the likelihood of PPD does not appear to be related to a woman's educational level, the sex of her infant, whether or not she breast-feeds, the mode of delivery, or whether or not the pregnancy was planned⁷.

The prevalence of PPD among Pakistani women of rural area has never been a subject of extensive research. The infants of depressed mothers are at 4 times higher risk of being malnourished and stunted at 6 months of age as compare to psychologically well mothers. So our aim was to explore the facts in this regard.

METHODOLOGY

This cross sectional study was under taken in post natal ward, postpartum office visits in outpatient's clinic from 1st December 2012 to 10th April 2013 in the Department of Obstetrics & Gynaecology, Arif Memorial Teaching Hospital Lahore. During the study period, recently delivered women (Day 2-28 postpartum) were randomly interviewed in post natal and outpatient postnatal follow up clinic using a specially designed questionnaire. The Edinburgh Postnatal Depression Scale (EPDS) in English/Urdu versions was used for the evaluation of PPD.

The EPDS consists of 10 questions. Mothers had the opportunity to complete the EPDS in a confidential manner. It was not recommended that a third party, such as the mother in law, was present or aware of the mother's responses in the EPDS. Also the Urdu version of EPDS was used.

Responses were scored as 0, 1, 2 or 3 according to the increasing severity of the symptoms. Questions 3 to 10 were reverse scored (i.e., 3, 2, 1 and 0) and the total score was determined by adding together the score for each of the 10 items. A score of 10 or higher indicated that depressive symptoms had been reported and that a reliable clinical assessment interview was required.

RESULT

In our study, 100 women were interviewed on Day 2-28 of delivery. They were screened for any possibility of postpartum depression. Urdu version of EPDS was used mostly. 84% were from rural areas and 16% were from urban centers. Their age ranged from 18 to 38 years and parity from para 1 to 9. No patient was a single parent. 39 women were primiparous and 61 were multiparous. 17% had SVDs, 21% had SVDs with episiotomy, 31% had instrumental delivery and 59% had abdominal delivery.

Among 100 women, 9% were detected having postpartum depression. 6 of them were referred for psychiatric assistance while 3 were managed by

counseling sessions. Analysis of the result was done using SPSS version 17. As shown in table 1, depression was seen more in younger age ($p=0.237$), multiparous women ($p=0.17$), uneducated ($p=0.31$) and unemployed patients ($p=0.33$). Personal or family history of depressive illness was found to increase risk.

Table 1

Variable	EPDS \geq 10	EPDS<10	P-value
Sample size	9	91	0.237
Mean \pm S.D (Age)	24.67 \pm 3.8	26.52 \pm 4.5	
Primipara	33%	40%	0.17
Multipara	67%	60%	
Education			
Yes	28%	27%	0.26
No	78%	73%	0.31
Employment			
House Wife	100%	98%	0.33
Working women	0	2%	0.16
History of Depressive Illness			
Yes	22%	14%	0.37
NO	78%	86%	0.13

Table 2:

Variable	EPDS \geq 10	EPDS<10	P-value
Sample size	9	91	
Average gestational age	38 \pm 6.4	38.8 \pm 3.5	0.535
Mode of Delivery			
Abdominal	67%	58%	0.35
SVD	-	19%	
SVD e epi	33%	20%	0.41
Forceps delivery	-	1%	
Vacuum delivery	-	2%	
Complications			
Maternal	-	10%	0.08
Fetal	23%	16%	0.35
No	77%	74%	0.29
Infant Gender			
Female	33%	45%	0.12
Male	44%	47%	0.22
Twin	23%	8%	0.46
NICU Admission			
Yes	44%	85%	0.000
No	56%	15%	0.5
Breast Feeding			
Yes	33%	75%	0%
No	67%	25%	49%

Table 2 shows that abdominal delivery ($p=0.35$) and having had SVD with episiotomy as compared to just SVD increase risk of PPD. Fetal and neonatal complications ($p=0.35$), twins ($p=0.46$) and not being able to breast feed also increase likelihood of postnatal depression. Whereas gestational age at

delivery, infant gender, and NICU admission didn't seem to affect prevalence of PPD.

DISCUSSION

Post partum depression occurs in 10 to 20% of women who have recently given birth, but fewer than half of cases are recognized^{8,9}. A review of literature was conducted by searching MEDLINE¹⁰, the purpose of this review was to discuss the potential benefit of mass screening for improving PPD recognition and outcome. The study concluded that screening improves recognition of disorder, but improvement in clinical outcomes requires enhanced care that ensures adequate treatment and follow up.

Another study conducted by school of nursing Connecticut USA¹¹, analysed PPD predictors in ameta analysis. The study revealed four new predictors of PPD; self-esteem, marital status, socio economics status and unplanned/ unwanted pregnancy. They studied risk factors because early recognition is one of the most difficult challenges with this mood disorder because how covertly it is suffered.

In a study by Halbreich et al¹² reviewed the literature on prevalence of PPD. 140 studies were identified reporting prevalence in 40 different countries. Interestingly they highlighted the variability of prevalence which ranged between 0 to 60%. So the incidence of 10-15% is not global, which is due to cross-cultural variables, social support, life style and perception of the condition. Likewise our study also suggested the 9% incidence of PPD in our community which is a smaller figure as compare to the usually perceived incidence. This difference can be explained by the social factors operating at the background.

The continuing depressive symptoms are associated with adverse outcomes for a woman. Many studies tried to assess effectiveness of routine screening. Jennifer B. Rousseau et al¹³ enrolled 2343 women and found elevated screening scores. But reviews by several evidence based guideline groups have reported insufficient or inconclusive information regarding improved outcomes with PPD screening, preventing them from recommending universal PPD screening. They failed to assess program design, context, setting or components of the program as potential factors influencing success or failure.

While in a study to assess risk factors for PPD by Sarah J. Breese McCoy et al¹⁴, recommended patient education and intervention strategies in this regard. They found that formula feeding in place of breast feeding, history of depression and cigarette smoking were all significant risk factors for PPD. Though they recommended a larger study to

determine risk factors for PPD. In our study, we could not find increased incidence in correlation to infant gender or NICU admissions or mode of delivery. While the traumatic delivery or twins or inability to breast feed was more directly related to the condition. In a local study at PIMS, Islamabad by Angela et al¹⁵, the frequency of PPD was 29.6%. It was found to be more common in older women, history of depression and intrapartum complications and was least common among breast feeding mothers. Though the overall incidence was in contrast to ours but the factors and their correlation were more or less similar to ours.

CONCLUSION

Clearly PPD is a sensitive health problem that requires attention. The widely cited mean prevalence of PPD is 10-15%. In our study among relatively rural population, the frequency of depression is reported to be 9%. The variability in the frequency might be attributed to social support, its perception and biological vulnerability factors.

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