# FREQUENCY OF POSTNATAL DEPRESSION IN A TERTIARY CARE HOSPITAL: A CROSS SECTIONAL STUDY

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#### **ABSTRACT**

**Background:** Postnatal depression can affect health of among many mothers. **Objective:** To assess the frequency of depression among postnatal women in a tertiary care setting of Pakistan. **Methodology: Study Design:** Cross Sectional Study. Two hundred and fifty Postnatal women were recruited voluntarily through Gynecology and Obstetrics ward Sheikh Zayed Hospital, Rahim Yar Khan, Pakistan. A structured Proforma was prepared and later screened through 10-item Edinburgh Postnatal Depression Scale (EPDS). The results were analyzed through SPSS version 21. Frequency of depression was presented as percentage. **Results:** The mean age of the postnatal recruited women was 27.5 years. It was noted that 75 (30%) of the Postnatal women were depressed; among Primigravida (28%) and Multigravida (30%) have depression. Poverty, lack of social support, female children only and birth of female child were enlisted as common among the risk factors. **Conclusion:** The study showed that one third the mothers have postnatal depression. Hence effective preventive strategy should be opted by the health care professionals for early detection and management. In addition to, awareness, de-stigmatization and vigilant measures should be taken in the community in order to prevent the distress.

**Keyword:** Depression, Postnatal, Frequency, Risk factors.

## INTRODUCTION

Postnatal Depression affects 15% of mothers¹ and usually occurs within six weeks of the delivery,² but on the other hand, the symptoms may appear at any time within one year after the delivery.³ The prevalence of Postnatal Depression varies to a greater extent in Asian countries (3.5%-63.3%),⁴,⁵ with the lowest prevalence reported in Malaysia <4% and the highest rate in Pakistan 28-63%.⁵,⁵

A systematic review elaborated the fact that point prevalence of Postnatal Depression ranged from 6.5% to 12.9% reached at peak between two weeks and six months after delivery.3 The etiological risk factors include past history of Postpartum Depression, previous premenstrual dysphoria, stressful life events.7,8 financial issues, 7,8 illiteracy, five or more children, female youngest child'. The risk of completed suicide among women having Postnatal depression is significantly lower than that of non natal period.<sup>7-11</sup> The role of the team of Obstetrician and Pediatrician is very vital in screening for and planning for the management of Postnatal depression through involving mental health team<sup>1</sup>. The concerns revolved around breastfeeding. exposure of Psychotropic medications to the infant and initial mother-child bonding. 13,14

Treatment include Psychotherapy, antidepressant medications and obstacles revolve around breastfeeding and its impact on infant development.<sup>1</sup> A significant evidence supports a positive relationship between lower prevalence of Postpartum depression and prolonged breastfeeding in west but no such evidence is reported in Pakistan.<sup>10</sup> Among the psychotherapeutic approaches, the most studied and evidence based intervention in Pakistan is Cognitive Behavior Therapy.<sup>11</sup> This study was conducted to assess the postnatal depression among mothers delivered at Gynecology and Obstetric ward of a tertiary care hospital.

## **METHODOLOGY**

The cross sectional study was conducted on two hundred and fifty subjects, in the Department of Gynecology and Obstetrics Unit I, Sheikh Zayed Medical College/Hospital which was a tertiary care setting from the agricultural based city of Southern Punjab, Rahim Yar Khan. The sample was collected through non probability purposive sampling technique in four-month duration from 20<sup>th</sup> July to 20<sup>th</sup> November 2016. These patients were included after taking informed verbal consent from patients as there was no risk involved. The participants were included after delivery of a normal child and the duration varied from first day to the six months from the date of giving birth. Ethical approval was sought from Institutional Review Board.

Participants were interviewed using 10-item Edinburgh Postnatal Depression Scale (EPDS)after administering specially designed questionnaire on a

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structured proforma. The EPDS has overall reliability of 0.79 (Cronbach's alpha)<sup>1</sup> along with, sensitivity of 86% and specificity of 78%.<sup>2</sup> Those who scored 10 and above considered positive for Postnatal Depression.<sup>3</sup>

The data was entered and analyzed using SPSS version 21. Frequency of postnatal depression was presented as percentage.

# **RESULTS**

Two hundred and fifty subjects were included in this study. Mean age was 27.5 years, 72.2% (n=188) women had education below Secondary School (Matriculate) or illiterate. Regarding Socio-economic status, 195(78%) families of the ladies had income below than 11,000 Pakistani Rupees per month.

The prevalence of depression among Postnatal women was found to be 30% (Figure I). Majority of the women 225 (90%) were multigravida, whereas; 25 (10%) were Primigravida. Prevalence of depression was 7(28%) among Primigravida 68 (30%) among Multigravida. Among multigravida, 116 women (46.4%) had three or more than three children.

Figure I: Frequency of postnatal depression.

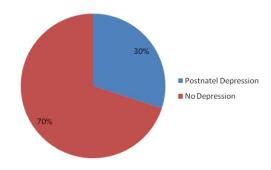


Figure II: Social factors and life events.

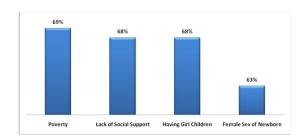


Figure II shows that poverty, lack of social support, having girl children and female gender of newborn were common factors enlisted.

## **DISCUSSION**

Depression and maternal child mental health is a grave area of concern and is affecting about one in four women in South Asia. 15,4 The main findings of this study depicted that 30% women were suffering from depression after child birth. The prevalence of Postnatal depression in developing world ranged from 16% to 35%, 15,16,17,18 whereas; 56% women had depressive disorder in a community based study conducted at Rawalpindi, Pakistan. Rehman et'al concluded that more than half postnatal women found to be depressed for one year approximately and later, their depression started falling with the passage of time.<sup>7</sup> The similar finding >50% Postnatal Depression was reported from the Indian state of Goa, 15 reflecting the same nature of Prevalence across subcontinent. 15,7

The other main findings of the study were financial constraints, having more girl children or more than five children and lack of social support, low body mass index, low education or illiteracy. Although these findings need to be explored in future studies as the risk factors regarding significance of association was beyond the scope of study design. Rehman et al<sup>7</sup> highlighted several areas of Postnatal depression and its slow recovery in Pakistan included poverty, 5 or more children, an uneducated husband and adverse experiences in their livelihood. Yonkers et al<sup>19</sup> and Bernazzani et al<sup>20</sup> pointed out the fact that poverty and economic hazards found to be responsible for the persistent Postnatal Depression of approximately one year and slow rate of recovery in developing world. 19,20

In South Asia, Postnatal depression is significantly associated with giving birth to a female infant<sup>15</sup> especially among women who have more than two children of female gender. This might result in the lack of social support which needs to be investigated in future studies but no such data is available in South Asia. Other studies in Pakistan suggested quite high prevalence of depression among females around 57.5% in the non-natal period. 21,7 So further studies should be done in order to establish the association between depression during non-natal, perinatal and postnatal period. This association will help us to reduce the burden of psychological distress upon mother which might directly affect the health of child. <sup>19</sup> Various meta-analysis studies suggested that Perinatal depression along with past history of depression carried a strong risk factor towards Postnatal depression, and persistence of depression having more severity.<sup>23</sup>

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## **CONCLUSION**

Our study showed that one third of mothers have postnatal depression, and poverty, lack of social support, having girl children and female sex of the newborn are common risk factors enlisted. Based on these findings, effective preventive strategy should be opted by the health care professionals for early detection and management during antenatal and postnatal period. In addition to awareness, de-stigmatization and vigilant measures should be taken in the community in order to prevent the distress.

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