

**PREVALENCE OF POST PARTUM DEPRESSION AMONG THE PATIENTS  
REPORTING COMBINED MILITARY HOSPITAL CMH LAHORE USING EPDS SCALE**Dr. Asfia Bashir<sup>1</sup>, Dr. Tayyeba Rehman\*<sup>2</sup> and Dr. Umar Sultan<sup>3</sup><sup>1,2</sup>Medical Officer, Combined Military Hospital Lahore.<sup>3</sup>Medical Officer, Siddique Sadiq Memorial Trust Hospital Gujranwala.**\*Corresponding Author: Dr. Tayyeba Rehman**

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**ABSTRACT**

**Background:** To find out the prevalence of postpartum depression amongst the patients reporting combined military Hospital Lahore using Edinburg Postpartum Depression scale. **Methods:** This was a cross sectional, non-interventional study with purposive sampling technique type. The study was conducted at Combined Military Hospital Lahore from 1<sup>st</sup> December 2016 to 22<sup>nd</sup> March 2017. Data was collected using pre-tested self-administered questionnaire based upon Edinburg Postpartum Depression Scale. The study population composed of 259 women delivered Combined Military Hospital Lahore. **Results:** The overall prevalence of postpartum depression was 8.1%. Regarding APGAR score, 85.7% children delivered at both hospital was normal which 7 to 10% was. 8.9% women blamed themselves unnecessarily when things went wrong after a while. 13.1% had been worried or anxious for no good reason. **Conclusion:** Prevalence of postpartum depression was noticeably high amongst mother with risk factors. To facilitate patient education and intervention strategies, a large study is recommended to determine risk factors for postpartum depression.

**KEYWORDS:** PPD (Postpartum depression), EPDS (Edinburg Postpartum depression scale), APGAR score, SVD (Spontaneous vaginal delivery).

**INTRODUCTION**

Postpartum depression is not a rare disorder. Study support that it occurs commonly in patients with impaired thyroid hormonal level (hypothyroid) and more pronounced in women of childbearing age within four months after child birth<sup>[1,2]</sup> According to World Health Organization (WHO) recent report about various disease pattern in 2020, also warned about communicable disease included mental health.<sup>[3]</sup> The prevalence of postpartum depression is estimated between 10%-12% which is three times high on developing countries as compared to developed western Counties.<sup>[2,35,10]</sup> Many new mothers feel happy one minute and sad next minute. If she feels better after a week or so, she probably just had the "baby blues" If it takes longer to feel better, she may have postpartum depression. Postpartum depression can make a women feel restless, anxious, fatigued and worthless.<sup>[3]</sup> Postpartum depression is not disabling for mother but also have long term effects on psychological & physical effects on child including family members. Signs and symptoms of postpartum depression includes depressed mood, loss of appetite with significant weight loss, insomnia or hypersomnia, psychomotor problems.<sup>[4,5]</sup> Mothers not breast feeding their child's are more prone to postpartum depression.<sup>[6]</sup> Besides that single mothers and women who had any negative event

in past or current illness in both child and/or mother were found to be responsible as well.<sup>[7]</sup> In Brazil it was found that mothers went into postpartum depression due to preference to child's gender and non acceptance of pregnancy with low socioeconomic level.<sup>[8,9,10]</sup> In area of Lebanon lack of social setup were found to be associated while in other areas chronic health problems, vaginal delivery along with other social issues were the main reason.<sup>[11]</sup> EPDS is commonly used tool for assessment.<sup>[5,11,12,2]</sup> Routine use is simple, economic and easy to administer. Lack of clear information as well as proper training for health professionals result in depressive disorder.<sup>[13]</sup>

**METHODOLOGY**

This was a cross sectional, non-interventional study with purposive sampling technique type. The study was conducted at Combined Military Hospital (CMH) Lahore from 1<sup>st</sup> December 2016 to 22<sup>nd</sup> March 2017. The women were included who fulfilled the following criteria, age between 15 to 40 years, gave birth to child within last 45 days including all modes of delivery, the patient who were in conscious state not suffering from physical illness and psychotic disorder. Our exclusion criterion of the study included those patients who were unconscious or confused and can't fill or give enough

information to fill the proforma with symptoms of depression that were present before parturition.

The study population composed of 259 patients. After taking informed consent, they were interviewed at hospital within 45 days after giving birth. Although women could not read the questionnaire, it was verbally administered to all subjects. The questions were phrased in such a manner that patients can easily answer. Our instrument for data collection was pretested questionnaire. Questionnaire comprising of 13 questions was designed after going through various books and articles. Out the 13 questions, 10 are the questions pertaining to EPDS scale. The study was carried out by asking questions related to postpartum depression & then applying EPDS scale to diagnose ‘postpartum depression’. Apart from questionnaire and EPDS scale no other special technique or instrument was used. Beside that some of the patients coming to the Combined Military hospital CMH, Lahore gynecological clinic were also interviewed & were asked to fill the questionnaire. The aim behind this study was to estimate the prevalence of depression in post-natal population coming to the Combined Military Hospital CMH, Lahore & whether the gynecologist/obstetrician can identify this psychological disorder.

Data was stored and analyzed with the help of statistical software version SPSS 14.0. the test of significance used was chi square. As living in democratic society, the right to withdraw i.e. any patient if not interested or gave his contribution in the project was totally allowed to take his or her name out with no hard feelings from any other group member or even whole group was allowed to withdraw by the teacher and university to withdraw if, for any reason they didn't want to continue with the topic.

## RESULT

A total of 259 patients were interviewed. Out of the total, 21 patients were found positive for depression which was 8.1% in statistical analysis according to EPDS scale. Amongst them 38.1% women are delivered by C-section, 25.5% were still births, and 14.3% had forceps delivery. Mean age of the respondents was 29.3 years $\pm$  SD with highest number 62.5 % in the age group between 20 to 30 years. Amongst them 99.2% were Muslims predominance while other were Hindu and Christian as well in which 91.5% women were house wives. 73.7% patients visited hospital during 1-2 week of pregnancy with 31.3% had two children which is highest concluded value. 83% women had full term delivery, which in between 37 to 42 weeks was. 91.5% deliveries were conducted at hospital & 7.8% were delivered at home. 91.1% had live births. Mode of delivery was SVD which was 52.9%. 84.9% of the presentation at the time of delivery was cephalic. The APGAR score of 85.7% children was in between 7-10 which was normal. Out of 259 respondents, 14.7% patients were not able to laugh or

see the funny side of things at all. 15.4% patients hardly looked things with enjoyment with 8.9% mothers blamed themselves unnecessarily most of the time when things went wrong ( $p<0.001$ ) (Table 2). 13.1% became worried or anxious for no good reason ( $p<0.02$ ) (Table 2). 5% said that they got panicky for no good reason. 7.4% said yes, most of the time they had not been able to copy all things getting to them. 66% patients felt unhappy & also had difficulty in sleeping most of the time which is quite alarming. Only 1.9% were carrying most of the time while 3.9% patients had thought to harm themselves. When they were asked about same illness in their previous delivery only 3.5% gave positive history with 59.8% had no desire about gender, when they were asked specifically about son. Only 4.3% had positive history of depression in family.

**Table: 1 Demographic data of the respondents.**

Variables	N=259	%
Age ( in Years)		
• 15-20	30	11.6
• 20-30	162	62.5
• 30-40	65	25.2
• >40	2	0.8
Mean Age (SD)	29.3years $\pm$	
Religion		
• Islam	257	99.2
• Christianity	1	0.4
• Hinduism	1	0.4
Occupation		
• Housewife	237	91.5
• General labor	12	4.6
• Business	5	1.9
• Professionals	3	1.2
• Skilled labor	1	0.4
• Self employed	1	0.4
Duration of pregnancy		
• <37 weeks	32	12.4
• 37-42 weeks	215	83
• >42 weeks	12	4.6
APGAR Score		
• <3	25	9.7
• 4-7	3	1.2
• 7-10 (Normal)	221	85.7
• Not answered	9	3.5
Outcome of Pregnancy		
• Live birth	236	91.1
• Still birth	12	4.6
• Miscarriage	3	1.2
• Not answered	8	3.1

**Table 2: Cross tabulation of Outcomes of pregnancy with EPDS scale, blamed themselves, anxious or worried for no good reason.**

	Outcomes of the Pregnancy			p-value*
	Live Birth	Still Birth	Miscarriage	
Blamed myself unnecessarily when things went wrong**				0.000
• Yes, most of the times	15	2	0	
• Yes, sometimes	12	1	0	
• Not, very often	17	2	2	
• No, never	192	7	1	
Anxious or worried for no good reason***				0.02
• No, not at all	162	5	1	
• Hardly ever	11	1	0	
• Yes, sometime	33	5	2	
• Yes, very often	30	1	0	

\*Chi square as a test of significance

\*\*Eight participants did not answer

## DISCUSSION

Overall postpartum depression in our study is 8.1%. it is significant using EPDS, which is less than African study where it is 34% in Afro Jamaicans ladies showing that it is more common in Africa<sup>[1]</sup> which shows that it is more prevalent in under developed countries. Many social risk factors well involved which are responsible for postpartum depression. Women who have not completed their high school education and have a previous history of depression specially ante partum depression were found to be more involved.<sup>[2,3,4]</sup> It was found that PPD depression was found to be associated with abortions and infants death which was found to be 27.3% in our study while it is less common in other Asian countries which is 20% in Rasht city of Iran, showing that awareness about such factors is more in our country.<sup>[5]</sup> History of depression in past and caesarian sections are amongst the risk factors of PPD. When we asked about the history of depression in the past only 0.05% women gave affirmative information while women delivered their children by caesarian section developed PPD more as compared to those who went through vaginal delivery which is 47.3% which found to be significant risk factor for PPD.<sup>[6]</sup> This shows that incidence of caesarean section is markedly increasing in Pakistan like in other countries.

Period in other regions of the world while in Pakistan we found that it was more common in 1-2weeks of postpartum period which is 47.6%<sup>[7]</sup> studies shows that high neuroticism, high introversion and substance abuse has a major role in eliciting depression in puerperium on the other hand number of women experience feeling of discomfort with their body after giving birth to child and high level of overload associated to child care leads them towards depression.<sup>[12,13]</sup>

## CONCLUSION

Prevalence of PPD is very high which is quite alarming. It is our hope that researcher will assist clinicians in identifying the conditions and patient's characteristics

of post partum women that are associated with an increased risk of PPD. Researcher may develop reliable screening tests that predate the onset of post partum dysphoria. To facilitate prophylactic patient's education & intervention strategies, a larger study is recommended to determine the risk factors of PPD.

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