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Research Article

**DETERMINANTS OF POST-NATAL DEPRESSION IN
WOMEN AT 3 MONTHS POSTPARTUM, A CROSS
SECTIONAL STUDY IN MIRPURKHAS SINDH**¹Danial Aziz, ²Dr. Nasruddin Ansari, ³Dr. Mahnoor Chaudhry¹Muhammad Medical College²Jalalabad Ragib Rabeya Medical College Hospital³King Edward Medical University Lahore

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Abstract:

Aim: The main purpose of our research was to discover aspects related through postnatal depression (PND) at 3 months postpartum in the population of Mirpurkhas in Pakistan & to determine the frequency of postnatal depression among recently delivered women.

Methodology: Our current research was the cross-sectional research led in July- August 2016 at 3 month postpartum women from different hospital of Mirpurkhas. 125 women are recruited. The study includes women who have given birth to a baby within three months. Data is collected through close ended questionnaire The EPDS is the screening tool for PND. SPSS 22 was used to analyze statistical data, and $p < 0.05$ proved to statistically significant.

Result: Out of 125 women only 21 females screened positive for PND through EPDS (prevalence is 16.8%). PND is more among the age of 24-29 (47%) & Odds of PND decrease with increase in age & number of pregnancies. Family planning, husband & family support reduce the risk of PND twofold. Breast feeding and prenatal & postnatal regular intake of vitamins and nutrition reduce 70% odds of PND. History of violence and complication after delivery increase risk of PND threefold. While gender of child, place of delivery, type of delivery has no relation with PND.

Conclusion: The prevalence of PND among Pakistani women is higher than many other regions in world. 1 out of 6 women report symptoms of PND. The subset of women with significant risk factor for PND should be consider for extra psychological support during postpartum period. There is need to support the women by family & early identification and treatment of women with depressive symptomatology to ensure health of neonate. Further research is needed to replicate these findings in a more diverse sample.

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INTRODUCTION:

Postnatal depression (PND) also called Postpartum depression (PPD) defined as non-psychotic depression occurring throughout first 6 weeks up to the first 6 months postpartum [1]. The most of women has the transient phase of mood dysphoria inside around 3 weeks after giving birth & actually experiences the true procedure of main depressive disorder known as postpartum depression (PPD) [2]. The “Cost of Postnatal Depression in Australia” report displays that postnatal depression will affect nearly 100,000 new women in 2012. It contains 2 in 14 novel mothers. Postpartum depression is one of main sources of death of offspring whose ages are less than one year of age that happens in around 9 per 100,000 births [3]. When screened through EPDS the prevalence of PND was 12.8% in Lebanon, 16.8% in UAE, 43% In Uganda, 49% In Upper Egypt. Maternal health is a neglected issue in Pakistan healthcare while PND is one of the diseases which affect the maternal mental health [4]. Though the sum of danger aspects were recognized, but reasons of PPD are not well silent until. So, the Background

of study is to determine possible risk factor of PND and the frequency of postnatal depression among recently delivered women [5].

METHODOLOGY:

Our current research was the cross-sectional research led in July- August 2016 at 3-month postpartum women from different hospital of Mirpurkhas. 125 women are recruited. The study includes women who have given birth to a baby within three months. Data is collected through close ended questionnaire. We screened participants for PND with the Edinburgh Postnatal Depression Scale (EPDS). The EPDS remains screening tool for PND. We translate EPDS into Urdu. EPDS containing of 10 questions that examine emotional state happening inside earlier 7 days through every question with 4 probable responses rated from 0 to 3 score. The current female is considered ‘Test positive’ for PND if she scores 13 or more out of 32. SPSS 23 was used to analyze statistical data, and $p < 0.05$ proved to statistically significant.

Edinburgh Postnatal Depression Scale:

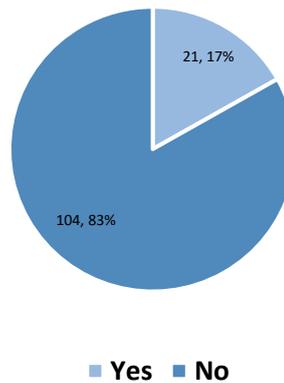
Variable	Most of the time	Sometime	Less of the time	never
Score	0	1	2	3
Able to laugh and see the funny side of things	84 (67.2%)	24 (19.2%)	17 (13.6%)	0
Look forward with enjoyment to things	43 (34.4%)	75 (60.0%)	7 (5.6%)	0
Variable	Most of the time	Sometime	Less of the time	never
Score	3	2	1	0
anxious or worried for no good reason	9 (7.2%)	30 (24.0%)	32 (65.6%)	4 (3.2%)
Blamed yourself unnecessarily when things went wrong?	7 (5.6%)	61 (48.8%)	54 (43.2%)	3 (2.4%)
Felt scared or panicky for no very good reason?	10 (8.0%)	45 (36.0%)	64 (51.2%)	6 (4.3%)
Things getting on top	4 (3.2%)	35 (28.0%)	82 (65.6%)	4 (3.2%)
Felt sad or miserable	17 (13.6%)	44 (35.2%)	64 (51.2%)	0 (0%)
When unhappy crying?	4 (3.2%)	32 (25.6%)	80 (64.0%)	9 (7.2%)
Difficulty sleeping?	4 (4.0%)	42 (33.6%)	74 (59.2%)	4 (3.2%)
Thoughts of harming occurred	0 (0%)	4 (3.2%)	12 (9.6%)	109 (87.2%)

EPDS Value

Value	Result
Total score is 30	
Above or equal to 12 score	Woman is in depression
Below 12 score	Woman is normal having no depression

RESULTS:

Depression positive



PND is determined more in age group of 24-29 while odds of PND decrease with increase in age

Variable	Woman is in depression		Total	X ² (0.99)	P value
	yes	no			
Age					
18-23	07 (33.3%)	41 (39.4%)	48 (38.4%)	1.239	0.01
24-29	10 (47.6%)	31 (29.8%)	41 (32.8%)		
30-35	04 (19.0%)	28 (26.9%)	32 (25.6%)		
36-41	0 (0%)	04 (3.8%)	04 (3.2%)		
Total	21	104	125		

Ratio of PND increase threefold with complication during or after pregnancy

Variable	Woman is in depression		Total	X ² (0.99)	P-value
	yes	no			
Complication during or after pregnancy					
Yes	16 (76.2%)	37 (35.6%)	53	0.554	0.01
No	5 (23.8%)	67 (64.4%)	72		
Total	21	104	125		

History of violence increase the ratio of postnatal 2-3 fold

Variable	Woman is in depression		Total	X ² (0.97)	P-value
	yes	no			
History of violence					
Yes	13 (61.9%)	43 (41.3%)	56	0.484	0.025
No	8 (38.1%)	61 (58.7%)	69		
Total	21	104	125		

PND decrease with Husband and family support after birth 65.7% women have no family support & have depression.

Variable	Woman is in depression		Total	X ² (0.97)	P-value
	yes	no			
Husband and family support after birth					
Yes	07 (33.3%)	79 (76.0%)	86	0.052	0.02
No	14 (65.7%)	25 (24.0%)	39		
Total	21	104	125		

PND is more in female who not feed their child. PND decrease 3-4 time with breastfeeding

Variable	Woman is in depression		Total	X ² (0.95)	P-value
	yes	no			
History of breast feeding					
Yes	06 (28.6%)	92 (88.5%)	98	0.352	0.05
No	15 (71.4%)	12 (11.5%)	27		
Total	21	104	125		

In PND cases most of the pregnancies were unplanned 71.40%. While family planning among couples show decrease in PND:

Variable	Woman is in depression		Total	X ² (0.99)	P-value
	yes	no			
Family planning					
Yes	06 (28.6%)	49 (47.1%)	55	0.243	0.011
No	15 (71.4%)	55 (52.9%)	70		
Total	21	104	125		

Relation of PND with Occupational status:

Variable	Woman is in depression		Total	X ² (0.99)	P-value
	Yes	No			
Occupational status					
Currently employed	06 (28.6%)	04 (3.8%)	10	0.293	0.01
Previously employed	07 (33.3%)	37 (35.6%)	44		
Never employed	08 (38.1%)	63 (60.6%)	71		
Total	21	104	125		

Relation of PND with type of delivery:

Variable	Woman is in depression		Total	X ² (0.99)	P-value
	yes	no			
Type of delivery					
Normal	06 (28.6%)	38 (36.5%)	44	0.832	0.015
Physiotomy	08 (38.1%)	56 (53.8%)	64		
Cesarean	07 (33.3%)	10 (9.6%)	17		
Total	21	104	125		

Relation of PND with gender of child:

Variable	Woman is in depression		Total	χ^2 (0.97)	P-value
	yes	no			
Gender of child					
boy	11 (52.4%)	60 (57.3%)	71	0.216	0.025
girl	10 (47.6%)	44 (42.3%)	54		
Total	21	104	125		

DISCUSSION:

Currently, a number of studies on PND have shown that its prevalence is growing rapidly worldwide. Research Conducted worldwide show an alarming increase in PND is observed in developed and less developed countries [6]. According to research conducted in our country, incidence of PND is 17 to 18 percent. The global prevalence of PND, and Factor Affecting the PND are Different due to the different demographic and socio-cultural different methods used in research [7]. The incidence of PND in this study was 17%. Although the incidence of PND in the population varies, the incidence of PND is generally high in Pakistan. In This Research Out of 125 women only 21 females screened positive for PND through EPDS (prevalence is 16.8%) [8]. PND is more among the age of 24-29 (47%) & Odds of PND decrease with increase in age & number of pregnancies. PND is more common in urban area that is 61.9%. Ratio of PND increase threefold with complication during or after pregnancy and History of violence increase the ratio of postnatal 2-3 fold [9]. PND decrease with Husband and family support after birth 65.7% women have no family support & have depression. PND is more in female who not feed their child. PND decrease 3-4 time with breastfeeding. In PND cases most of the pregnancies were unplanned 71.40%. While family planning among couples show decrease in PND. Prenatal & postnatal regular intake of vitamins and nutrition reduce 70% odds of PND. There is no significant relation of educational level, occupational status, type of delivery, gender of child with PND because ratio is almost same [10].

CONCLUSION:

The prevalence of PND among Pakistani women is higher than many other regions in world. 1 out of 6 women report symptoms of PND. More than half of the case however goes unrecognized. The ratio of PND in postpartum women increase with history of violence and complication during delivery while decrease with breastfeeding, family planning & family support. Type and place of delivery & gender of child has no significant relation with PND. The subset of women with significant risk factor for PND should be considered for extra psychological support during postpartum period.

There is need to support the women by family & early identification and treatment of women with depressive symptomatology to ensure health of neonate. Further research is needed to replicate these findings in a more diverse sample.

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