

A CLINICAL EVALUATION OF POST-PARTUM DEPRESSION IN COASTAL KARNATAKAAnnappa Shetty¹¹Assistant Professor, Department of Obstetrics & Gynaecology, Karwar Institute of Medical Sciences, Karwar, Karnataka.**ABSTRACT****BACKGROUND**

Psychological mood changes, depression is very common in Post-partum period ranging from mild and transient "baby blues" experienced by 50-80% of women to postpartum Psychosis which affects 1% of women.

AIMS AND OBJECTIVE

To evaluate the association of different factors with Post-Partum depression in coastal Karnataka region, (Karwar).

MATERIAL & METHODS

- A Prospective study was conducted in the department of Obstetrics and Gynaecology, KAIMS, Karwar, Karnataka.
- A total one thousand patients 4-7 Post-partum days were selected and interrogated using Edinburgh Postnatal depression scale (EPDS).

Socio-demographic factors (age, Parity, literacy, socio-economic status, marital status and family structure), history of psychiatric disorders and abuse, mode of delivery and the obstetric outcome were recorded. The results were analysed statistically using Chi-square chart.

STATISTICAL ANALYSIS AND RESULTS:

The incidence of PPD was 22%. Significant association of PPD was seen with low socio-economic status group ($P<0.005$), poor literacy ($P<0.001$), nuclear family structure ($P<0.05$), single mother ($P<0.001$), past history of abuse ($P<0.05$) and poor obstetric outcome ($P<0.001$).

CONCLUSION

This study provides useful information about the prevalence of PPD and the association of socio economic, cultural practices prevalent in coastal Karnataka with PPD.

KEYWORDS

Postnatal Depression, Edinburgh Postnatal depression scale (EPDS), Socioeconomic status.

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INTRODUCTION: Depression is very common, yet a neglected problem in new mothers. The debilitating effects of PPD can involve an entire family and women affected with PPD are at high risk for recurrent depression. Majority of them exhibit symptoms by 6 weeks postpartum and if not treated, many women continue to be depressed at the end of first postpartum year^[1]. Symptoms related to PPD can occur during pregnancy also. Major symptoms include:

- Sadness.
- Guilt.
- Low energy.
- Poor sleep.
- Lack of appetite.

- Anxiety.
- Reduced interest in sex.
- Social withdrawal.
- Low self-esteem.
- And not taking care of baby.

The exact cause of PPD is not known. However hormonal changes, genetics and major lifestyle changes have been postulated for the cause of PPD. The hormones implicated for the causation of PPD include oestrogen, progesterone, thyroid hormone, testosterone, cortisol and corticotrophin releasing hormone. The risk factors associated with PPD are many. These factors sometime have additive effects and includes prenatal depression or anxiety, family history of depression, maternal blues, birth related physical trauma, moderate to severe premenstrual symptoms, birth related psychological trauma, cigarette smoking, child care stress, elevated prolactin level, depleted oxytocin level, previous miscarriage and stillbirth and finally violence against women.

Numerous studies were carried out in the developed countries provide compelling evidence that PPD is associated with long term emotional, cognitive and

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intellectual problems in children.^[2] Postpartum depression is important in health planning particularly in relation to maternal and foetal health. Puerperal psychosis and depression is increasing with significant psychological morbidity in developing countries. It is one of the major non-communicable disease among mothers.^[3]

Parent-Infant Relationship with Regard to PPD: It has been observed that PPD can affect the natural maternal and foetal bonding and hence adversely affect the mental development of the children. Hence children of mother's having history of PPD shows higher incidence of emotional problems, behavioural problems and psychiatric disorders.

MATERIALS AND METHODS: A prospective study was conducted in the department of obstetrics and gynaecology, Karwar institute of medical science, Karwar, Karnataka. A total 1000 women in their 4th to 7th Postnatal day were selected and following factors were recorded as per Edinburgh Postnatal depression scale (EPDS).

1. Social and demographic details including age, educational qualification, family structure (nuclear or joint) occupation, environmental health status and socioeconomic status.

2. Obstetric history including number and gender of children, present pregnancy (wanted/unwanted, planned/unplanned), fears regarding the gender of the child, mode of delivery, complication both during pregnancy and delivery and any complication during previous pregnancies.
3. Adverse life events in the last one year.
4. History of Psychological disorder in the family and treatment for the same.
5. Relationship with the partner, parent and in-laws and their support.

The women were classified according to their age, Parity, Literacy, monthly income [(low less than INR 2000), middle INR 2000-5000, high (INR more than 5000)], marital status (Married, Window, Unmarried, Separated). Family structure (nuclear, joint) history of physical, mental or sexual abuse, past history of psychiatric illness, mode of delivery (vaginal delivery, caesarean section) and obstetric outcome (healthy baby, sick baby or dead baby).

Results were analysed applying Chi-square test and evaluated the significance of association of these factors with Post-partum depression.

RESULTS: The results of 1000 postpartum mother studied were tabulated.

Parameter	Subgroup	Score ≤ 13	Score > 13	Total	P Value
Age	<20	151	52	203	>0.05
	20-25	231	78	309	
	26-30	201	66	267	
	31-35	138	46	184	
	>35	28	9	37	
Parity	1	457	152	609	>0.05
	2	166	55	221	
	3	102	35	137	
	>3	25	9	33	
Literacy	Illiterate	84	34	118	<0.001
	Just literate	115	45	160	
	Primary	130	56	185	
	Middle	222	55	277	
	Secondary	182	40	222	
S/E status	Higher	26	12	38	<0.05
	Low	301	99	400	
	Middle	346	124	470	
	High	102	28	130	

Table 1: Shows the distribution of patients with (score >13) and without (score ≤13) postpartum depression, with reference to age, parity, literacy and socioeconomic (S/E) status

N=1000.

Age, parity showed no relationship with the occurrence of PPD. Lower education and lower socio-economic status had significant relationship with PPD (P<0.001).

	Subgroup	Score ≤ 13	Score > 13	Total	P Value
Marital Status	Married	667	327	997	<0.001
	Widow	1	3	4	
	Unmarried	0	1	1	
	Separated	0	1	1	
Family Structure	Nuclear	234	88	324	<0.05
	Joint	535	143	678	
Abuse	Yes	166	85	251	<0.05
	No	485	264	749	
Psychiatric disorder	Yes	50	22	77	<0.001
	No	745	178	923	
Obstetric outcome	Healthy baby	750	80	830	<0.001
	Sick baby	30	113	143	
	Dead baby	1	26	27	
Mode of delivery	Vagina	540	195	735	<0.05
	Cesarean	199	66	265	

Table 2

N=1000.

Distribution of patients with PPD with reference to marital status, family structure, h/o abuse, h/o Psychiatric illness, obstetric outcome & mode of delivery.

Table 2 Shows the distribution of patients with (Score >13) and without (score ≤13) PPD with reference to marital status, family structure, h/o abuse, h/o psychiatric disorder, obstetric outcome, mode of delivery. Single mother, nuclear family structure, past history of psychiatric illness, history of abuse, bad obstetric outcome shows significant relationship with PPD (P < 0.001), mode of delivery had no significant association (>0.05).

DISCUSSION: The Prevalence of PPD in the women attending the postnatal clinic was 16% in the study sample, consistent with the rates found in other studies with little variation in the south Asian regions.^[4-8] During this study none of the mother’s complain of, or sought help for their symptoms although they were psychologically depressed or impaired. Hence this shows the importance of identifying the PPD in the society.

In this study age and parity showed no relationship with PPD. Mayberry et al^[9] have found young age to be a risk factor for PPD however, Bjerke et al^[10] found that age ≥ 30 years to be associated with PPD. Ho-yen et al,^[11] Mayberry et al,^[9] Nelson forman et al^[12] have found an association of multiparity with PPD. However Black more et al^[13] have found an association with primiparity. Josefsson et al^[14] have concluded no association exists between the two.

In the present study, literacy bears a highly significant relationship with PPD. Illiterate and just literate groups outnumber the other group. This findings were consistent with studies of Kosinske Kaczynska et al.^[15] The study found the direct association with low socio-economic status [S/E] and PPD. Mayberry et al^[9] and Bergant et al^[16] drew similar findings. Marital status has a significant association with PPD in the present study Single mothers (window-96%, unmarried -100%, Separated – 100%) showing the

major association with PPD Adewuya et al^[17] also found single motherhood to be a risk factor for PPD.

In the present study patients from nuclear family suffers more frequently from PPD compared to patients from joint family. The result is supported by that of Nielson Forman et al^[12] who have found lower social support to be a risk factor for PPD. The study also shows history of abuse is a significant risk factor. Records et al^[18] also found abused women is prone to develop PPD.

The study shows history of Psychiatric disorders bears a direct relationship with PPD. Wilson et al^[19] also found similar association. Women having a sick baby or dead baby found to have significant relationship with PPD. Kosinska – Kaczynske et al^[15] and Adewuya et al^[17] also found similar association.

In the present study mode of delivery have no association with PPD which is supported by the studies of Josefson et al^[14] and Chaudron et al.^[20] However Bergant et al^[16] have found delivery by caesarean section to be risk factor.

CONCLUSION: To conclude, the present study provides useful information about the prevalence of PPD and the risk factors associated with PPD in the coastal Karnataka region. Postpartum depression is a common problem found in the new mothers so that we can use EPDS routinely to screen for depressed mother. A multidisciplinary approach including Obstetrician and Psychiatrist can be adopted for the care of these depressed mothers. It has been found that social and cultural factors found to be associated with causation of PPD. Hence improvement in the living conditions of the mothers, so as to make them independent both economically and emotionally will go a long way in preventing PPD. Appointment of counsellors at

the primary level of health setting to screen and counseling for PPD will improve the quality of the health care mission. This will reduce the maternal morbidity due to depression and neglect.

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