Contents lists available at www.innovativejournal.in

INNOVATIVE JOURNAL OF MEDICAL AND HEALTH SCIENCE

Journal homepage: http://www.innovativejournal.in/index.php/ijmhs

ASSESSMENT OF POSTNATAL DEPRESSION AMONG MOTHERS FOLLOWING DELIVERY IN RURAL AREA OF WARDHA DISTRICT: A CROSS SECTIONAL STUDY

Nikhil Dhande, Meenakshi Khapre, Smrutiranjan Nayak, Abhay Mudey

Department of Community Medicine, Jawaharlal Nehru Medical College Sawangi Meghe Wardha, India.

ARTICLE INFO

Corresponding Author:

Abhay Mudey
Department of Community Medicine,
Jawaharlal Nehru Medical College
Sawangi Meghe Wardha, India.
abhaymudey@hotmail.com

ABSTRACT

Background: Postnatal depression represents a considerable health problem affecting women and their families. Recent studies, shows postnatal depression have a substantial impact on mother–baby interactions, longer-term emotional and cognitive development of the baby, especially when depression occurs in the first postnatal year of life. It is now considered a major health concern for women from diverse cultures. **Objectives:** To find out prevalence of postnatal depression among mothers following delivery and to study factors responsible among participants. **Methods:** Community based cross-sectional study conducted in Seloo village, which is field practice area of Jawaharlal Nehru medical college, Wardha. Mothers were interviewed using EPDS (Edinburgh Postnatal Depression Scale) and Multidimensional scale questionnaire with cut of score of 12 for EPDS. **Results:** 24% of mothers were found to be chronically depressed at 6 months after childbirth with mean age 24.34 years and 53% have monthly income less than 5000 rupees. Economic deprivation and poor marital relationships were important risk factors for the occurrence and chronicity of depression. **Conclusion:** Analyses show that there is a strong interaction among many risk factors, such as economic deprivation, and the infant's gender.

INTRODUCTION

Depression, the common psychological disorder that presents with depressed mood, loss of interest or pleasure, feelings of guilt or low self-worth, disturbed sleep or appetite, low energy, and poor concentration. These problems can become chronic or recurrent and lead to substantial impairments in an individual's ability to take care of his or her everyday responsibilities.

Postnatal depression is an affective disorder (any mental disorder characterized by a consistent change in mood that affects thoughts and behaviours) that can occur after pregnancies of all duration, from spontaneous (not induced) abortions, also called miscarriages, to full-term deliveries. The postnatal depression can take a mild clinical course or it can range to suicidal ideations (thoughts). The postnatal depression can occur anytime post-delivery to one year after delivery. Symptoms commonly start within four to six weeks after delivery. Warning Signs of PND (Postnatal depression) in women includes: Crying Spells, Mood Swings, Anxiety, loss of Appetite, problems sleeping, thoughts of hurting self or child, lack of interest in the baby. The prevalence of depression was found to be from 13-30%. Most cases develop within the first 3 postnatal months,[1] with a peak incidence at around 4–6 weeks.[2] Although one study[1] showed that most cases last around 3 months and resolve spontaneously without treatment,

another study[3] demonstrated the Presence of depression with over 50% of cases lasting over 6 months and some being still present at 4 years. Onset of PND can occur up to 1 year after delivery.

Various variables found to be predictors of postnatal depression were prenatal depression, marital relationship, self-esteem, child care stress, prenatal anxiety, socioeconomic status, infant temperament, marital status, low social support, unplanned /unwanted pregnancy.

Unfortunately, less than 50% of cases of PND are identified by primary healthcare professionals in routine clinical practice and recent empirical findings are somewhat contradictory regarding previous reports covering the following aspects, which the present study would like to help to identify the prevalence of depression in postnatal women over a period of six weeks to six months following delivery in rural area of Wardha district and risk factors responsible for Postnatal Depression.

METHODOLOGY

Community Based Cross-sectional study conducted in Seloo village, which is field practice area of Jawaharlal Nehru Medical College, Sawangi (Meghe), Wardha. Total 67 postnatal women who visited the Primary Health Centre of Seloo village for the immunisation of their child were interviewed using EPDS questionnaire with cut of score of

12 for EPDS (Edinburgh Postnatal Depression Scale) in the duration from January to March 2013. Mothers with history of delivery in last six months were included in the study. The participant were asked to check the response that comes closest to how she has been feeling for past 7 days and complete the scale itself, unless she has limited English or has difficulty with reading. Care should be taken to avoid the possibility of the participant discussing her answers with others. The women were also classified according to their age, parity, literacy, monthly income, marital status, family structure, mode of delivery and obstetric outcome. After participant is willing to participate in the study, written informed consent was obtained. The data was analyzed using the SPSS version 16.0. The sample was categorized into two groups, one group of women with depression and the other without depression. Women, who were found to be depressed at 6 month, were included in the depressed group. The groups were compared on various socio-demographic and obstetric variables, to determine risk factors associated with postnatal depression. Results were analyzed applying Chi-square test to evaluate the significance of association of these factors with postnatal depression. A p<0.05 was considered statistically significant, with 95%confidence interval (95%CI). The questionnaire (EPDS) were translated in Marathi language by translation retranslation method and validated, to obtain information from participants.

RESULTS

In present study, the age ranged from 18-32 years with mean age 24.34 years. 67 postnatal women were studied through a structured clinical interview which included Edinburgh Postnatal Depression Scale of depression, for their depression status and risk factors, during their visit to Primary Health Centre of Seloo village for immunisation of their child. 24% (16) of mothers were found to be chronically depressed at 6 months after childbirth. Others had clinically substantial psychological morbidity during the antenatal period. All women were married at the time of interview. Majority of the women (85%) were Hindu. 30% women got education till Primary, 25.3% middle school ,14.9% just literate and 7.4% women were illiterate. 60% of women belonged to joint families, 65.5% had urban background. 53.7% of the women had monthly income less than 5000 rupees and majority of them were unemployed (housewives). 25.3% were self employed while 22.3% were doing daily labour work. Table.1 shows the association between lower family income and depression. 27% (18) gave birth through caesarean delivery. None of the depressed mother got any complication in their postnatal period. However 25% mothers of the depressed gave the history of sickness of their baby in first postnatal 6 months duration. The low number of subjects in some of the strata does not allow meaningful interpretation of some of the effect measures. However, Table.1 shows that depressed mothers have significantly higher total number of stressful life events compared to non-depressed mothers.

Table.1.Characteristics of the study sample and comparison between depressed and non-depressed women (Univariate Analysis)

Parameter	Subgroup	Depressed Score>12 (n=16)	Non-depressed Score<12 (n=51)	Total (n=67)	Significance
Age (yrs)	<20 yrs	1(1.4)	3(4.4)	4(5.9)	
	20-25 yrs	7(10.9)	34(50.7)	41(61.1)	X^2 = 5.268
	26-30 yrs	7(10.9)	14(20.8)	21(31.3)	df=3
	>30 yrs	1(1.4)	0(0)	1(1.4)	P = 0.153
Education	Illiterate	3(4.4)	2(2.9)	5(7.4)	
	Just literate	3(4.4)	7(10.9)	10(14.9)	
	Primary School	6(8.9)	14(20.8)	20(29.8)	X^2 = 8.914
	Middle School	4(5.9)	13(19.4)	17(25.3)	df=6
	Secondary School	0(0)	9(13.4)	9(13.4)	P = 0.178
	Graduate/PG	0(0)	5(7.4)	5(7.4)	
	Any Other	0(0)	1(1.4)	1(1.4)	
Occupation	Farmer	1(1.4)	7(10.9)	8(11.9)	
	Daily labour	6(8.9)	9(13.4)	15(22.3)	X^2 =4.294
	Self Employed	2(2.9)	15(22.3)	17(25.3)	df=4
	Service	3(4.4)	7(10.9)	10(14.9)	P = 0.368
	Housewife	4(5.9)	13(19.4)	17(25.3)	
Family Structure	Joint	11(16.4)	26(38.8)	37(55.2)	X^2 =1.555
	Nuclear	5(7.4)	25(37.3)	30(44.7)	df=1 P = 0.212
Family Income (in Rs)	<5000	15(22.3)	21(31.3)	36(53.7)	X^2 =13.553
	5000-10000	1(1.4)	28(41.7)	29(43.2)	df=2
	>15000	0(0)	2(2.9)	2(2.9)	P = 0.001
Marital Status	Married	12(17.9)	49(73.1)	61(91)	
	Unmarried	0(0)	0(0)	0(0)	X^2 =6.637
	Separated	2(2.9)	1(1.4)	3(4.4)	df=2
	Widowed	2(2.9)	1(1.4)	3(4.4)	P = 0.036
Postnatal complications	Yes	0(0)	5(7.4)	5(7.4)	X^2 =1.695
	No	16(23.8)	46(68.6)	62(92.5)	df=1 P = 0.193
No. of Previous children	0	10(14.9)	24(35.8)	34(50.7)	X^2 =1.990
	1	6(8.9)	23(34.3)	29(43.2)	df=2
	>2	0(0)	4(5.9)	4(5.9)	P = 0.370
Gender of infant	Male	3(4.4)	27(40.2)	30(44.7)	X^2 =5.758
	Female	13(19.4)	24(35.8)	37(55.2)	df=1 P = 0.016
Obstetric outcome	Healthy baby	12(17.9)	48(71.6)	60(89.5)	X^2 =4.758
	Sick baby	4(5.9)	3(4.4)	7(10.9)	df=1 P = 0.029
Mode of delivery	Vaginal	12(17.9)	37(55.2)	49(73.1)	X^2 =0.037
	Caesarean	4(5.9)	14(20.8)	18(26.8)	df=1
	No	0(0)	11(16.4)	11(16.4)	P = 0.847

Values in brackets indicate percentages

DISCUSSION

All the women who came for immunization of their child at Primary Health Centre of Seloo village were interviewed for Postnatal Depression by EPDS Scale with some Social characteristics like Age, Sex, Income, Occupation, etc. They were not aware of their mental health status. Only women who are in duration of 6motnths postnatal period were included duration. Depressive disorder was detected in 23.88% (95% CI) by Edinburgh Postnatal Depression Scale of depression similar results were found by Patel V (23%) and Chandran M (11%). So our study confirms high prevalence of PND in developing countries as in many studies. As the sample taken is mainly from community rather than hospital based, it is more likely to be representative of the rural population who were less chances of having medical follow-up and other facilities. As revealed by Posmontier, postnatal period is an important time where mother is provided extra support by family members in many cultures[4]. Hence, Joint family is an important considerable parameter for mother in postnatal in postnatal period and lack of social support contributes for rising PND rates in these societies. Pillsbury states that during the first postnatal month family and friends lavish mothers with attention much more so then the infant.[5] In some of the past decades, communities in developing countries have undergone rapid demographic and socioeconomic restructuring, and the erosion of traditional family structures and related support practices may have become important determinants of stress and psychiatric problems in postnatal women.[7]In present study we found that Female gender (55.2%) (X^2 =5.758, Df=1) and low family income (53.7%) (X^2 =13.553, df=2) were highly significant (p< 0.01) causative risk factors for postnatal depression. Also, finding showed that women having sick baby (25% of total depressed) bear a highly significant relationship with PND. Kosinska-Kaczynska et al. found similar association where 38% of mothers were depressed .[9] In a similar study of adults female gender (47%), low level of education (36%) and poverty (23%) were strongly associated with depression [6]. It had been found that low age at delivery and less education rate were just significant for causation of postnatal depression. Ghosh and Goswami drew similar interferences.[8]

CONCLUSION

The implication of this study, given the high prevalence of postnatal depression and its likely association with lack of social support, is that attention must be paid to developing cost-effective psychosocial interventions. The first year of the child's life is crucial in terms of physical and psychological development, yet this is also a period where many mothers are susceptible to developing a depressive disorder. Many of the risk factors can be screened during routine pregnancy care, so antenatal healthcare providers and women themselves should be educating about these risk factors so that early identification of high risk women for closer follow-up and intervention is possible. Treatments are unlikely to be adopted by professionals and policy makers unless they are shown to be efficacious, cost-effective, integrated in existing community health services. Strengthening social support networks could be one non-pharmacological approach that could meet these criteria.

REFERENCES

1. Cooper PJ, Campbell EA, Day A, Kennerley H,m Bond A. Non-psychotic psychiatric disorder after childbirth. A prospective study of prevalence, incidence, course and nature. British Journal of Psychiatry 1988; 152:799–806.

2. Kumar R, Robson KM. A prospective study of emotional disorders in childbearing women. British Journal of Psychiatry 1984; 144:35–47.

3. Cox JL, Murray D, Chapman G. A controlled study of the onset, duration and prevalence of postnatal depression. British Journal of Psychiatry 1993; 163:27–31.

4. Posmontier B, Horowitz JA. Postpartum practices and depression prevalence's: Technocentric and ethnokinship cultural perspectives. Journal of Transcultural Nursing .2004.15: 34–43.

5. Pillsbury BLK. 'Doing the month': Confinement and convalescence in Chinese 0women after childbirth. Social Science and Medicine Journal .1978.12: 11–22.

6. Husain N, Tomenson B, Creed F .Depression and social stress in Pakistan. Indian Journal of Psychological Medicine .2000.30: 395–402.

7. Husain N, I. Bevc. Prevalence and social correlates of postnatal depression in a low income country. Archieves of Women's Mental Health Journal.2006.0129-9.

8. Ghosh A, Goswami S. Evaluation of Post Partum Depression in a Tertiary Hospital. Journal of Obstetrics and Gynecology of India .2011. 61(5):528–530.

9. Kosin´ska-Kaczyn´ska K, Horosz E, Wielgos´ M, et al. Affective disorders in the first week after the delivery: prevalence and risk factors. Official Journal of the Polish Gynaecological Society.2008;79:182-5.