



Original Research Article

A Study on Postnatal Depression of Women in Rural Bangalore

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ABSTRACT

Introduction: Postnatal depression generally occurs within 6–8 weeks after childbirth but it may appear up to the end of the first year after birth. Risk factors for postnatal depression are past history of psychological disorder, psychological disorder during pregnancy, low socioeconomic status, complicated delivery, and poor marital relationship.

Objectives: To find the proportion of postnatal depression among postnatal mothers and to determine risk factors for postnatal depression.

Methodology: Postnatal mothers between 6- 8 weeks after delivery attending immunization clinic of rural health training centre were interviewed.

Results: It was estimated that 28(11.47%) of them had postnatal depression. Mean age of study subjects was 22.6 ± 2.48 , majority of them were Hindus 208 (85.2%), 112(45.9%) were educated up to grade 7 and below, 100 (40.9%) had education up to grade 10 and below, 32(13.1%) had not attended school. Mean per capita income was found to be 1800 ± 1146 . Partner non participation in baby care was an important risk factor for post natal depression among 20 (71.42%) cases, spousal disappointment with sex of the new born child was seen among 16 (57.14%) cases. Other risk factors were excessive crying of the infant, marital dissatisfaction, breast feeding problems, less sleep for the mother, low social support and not living with the family of origin.

Conclusion: Maternal and infant health policies, a priority in low-income countries, must integrate maternal depression as a disorder of public health significance.

Key words: post natal depression, marital relationship, breast feeding problems

INTRODUCTION

Most people today have heard the term 'baby blues' used to describe a mild short period of depression which many women experience after child birth, this is nothing but postnatal depression. Postnatal depression (PND) is a condition characterized by a persistent experience of sadness or a diminished ability to experience

pleasure, irritability, feelings of low self-esteem and manifest anxiety, a tendency to brood over the infant's health and well-being, fatigue, as well as alterations in sleep patterns and appetite. [1]

Postnatal depression generally occurs within 6–8 weeks after childbirth but it may appear up to the end of the first year after birth. One meta-analysis has shown an

average prevalence of postpartum depression of 13% in general population. Risk factors for postnatal depression are past history of psychological disorder, psychological disorder during pregnancy, low socioeconomic status, complicated delivery, and poor marital relationship. Women in many countries whose populations have low incomes face considerable inequalities, ranging from fewer opportunities in education and employment to less control over personal decisions, such as the use of contraception to plan pregnancies. In India, the cultural view that male children are preferred over female children is an important reason that the sex ratio is unbalanced in favor of men. [2]

Most women suffering from PND do not receive any form of treatment and may remain depressed for up to a year after delivery, a situation which may seriously compromise the development of the mother-infant bond. In addition, this may also affect the relationship with the partner. [1]

Although the incidence in the year following childbirth does not appear to exceed the incidence of depression found in non-child bearing populations, a public health problem exists. Postpartum depression has a long term effect on mental health since it may increase the risk of continuing or recurrent depression. Postpartum depression has also been associated with adverse effects on early infant development, especially among socially disadvantaged children. Serious consequences for the child include increased risk of accidents, sudden infant death syndrome, and an overall higher frequency of hospital admissions. [3]

The identification of PND-affected women and the treatment provided to them are a reality in developed countries. In developing countries, the identification of afflicted populations and groups potentially requiring attention are key factors for the

organization and adequacy of health services and the planning of health programs therefore this study is an attempt to find out the proportion of people suffering from PND.

Aim and objectives:

- To find the proportion of Postnatal depression among postnatal mothers
- To determine risk factors for Postnatal depression

MATERIAL AND METHODS

Study Area: This study was conducted in rural health training centre- Nandagudi of M.V.J medical college and research hospital, Hoskote, Bangalore, located at Karnataka in South India.

Study Design: Cross sectional study

Method of collection of data:

Source of data: Postnatal mothers between 6- 8 weeks after delivery attending immunization clinic of rural health training centre were interviewed from the period January 2012 to June 2012 for data collection.

Inclusion criteria: Postnatal mothers between 6- 8 weeks who were willing to participate in the study

The instrument used for the purpose of the study is a predesigned structured questionnaire. Questionnaire contains general information of the person, marital status, parity and risk factors for post natal depression such as family history of depression, past history of depression, previous miscarriage, previous induced abortion, history of major illness, past infertility, marital violence during pregnancy, marital dissatisfaction, pregnancy related depression, mode of delivery, not living with family of origin, admission to hospital because of pregnancy complications, spousal disappointment with the sex of the new born child, congenital malformation of the new born, neonatal

admissions, breast feeding problems, mother slept too little, infant cried excessively, infant had to be carried all the times, low social support, recent life events: deaths in the family, immigrant population, partner non-participation in baby care. The 10 question Edinburgh postnatal depression scale (EPDS) was used to screen patients with postnatal depression. [4] Each question has 4 answers which is scored as - 0, 1, 2 and 3 at the end all the scores are added if score is more than 10 then the person is said to have post natal depression.

EPDS is administered to postnatal mothers between 6-8 weeks postpartum; this scale is being used in many studies and is proven to be an effective tool. A total of 244 patients were interviewed over a period of 6 months for data collection.

Data Entry and Analysis: Using Micro soft excel and Statistical package for social sciences

Statistical Tests Used: 1) Descriptive statistics

OBSERVATIONS AND RESULTS

A total of 244 subjects were screened for postnatal depression over a period of 6 months duration. It was estimated that 28(11.47%) of them had Postnatal depression. Mean age of study subjects was 22.6 ± 2.48 , age distribution of study subjects is as shown in the table below, majority of them were in the age group 21-23yrs. Majority of them were Hindus 208 (85.2%) and the rest were Muslims 36 (14.7%), 112(45.9%) were educated up to grade 7 and below, 100 (40.9%) had education up to grade 10 and below, 32(13.1%) had not attended school. Mean per capita income expressed in Rupees was found to be 1800 ± 1146 , a per capita income of 1000 and below was seen among 60(24.5%), per capita income of above 1000 up to 2000 was seen among 140(57.3%) and the rest of the study subjects 44 (18%) of

them had income above 2000 up to 6000. All the study subjects were house wives and none of them were employed. Most of the study subjects 132(54.09%) had 2 children details are as shown below. Almost all the subjects (98.3%) had full term normal delivery. Partner non participation in baby care was an important risk factor for Post natal depression among 20 (71.42%) cases, spousal disappointment with sex of the new born child was seen among 16 (57.14%) cases and other risk factors are as shown in the table.

TABLES: Figures in brackets denote percentages
Table no 1: a) Age distribution among study subjects (N=244)
b) No of children among study subjects (N=244)

| a) Age | Frequency |
|-------------------|------------|
| 18-20 yr | 52(21.31) |
| 21-23 yr | 108(44.26) |
| 24-26 yr | 64(26.22) |
| 27-28 yr | 20(8.19) |
| b) No of children | Frequency |
| 1 Child | 32(13.11) |
| 2 Children | 132(54.09) |
| 3 Children | 76(31.14) |
| 4 Children | 4(1.63) |

Table no 2: Risk factors of Postnatal depression (N=28)

| Risk factors | Frequency |
|---|-----------|
| Partner non participation in baby care | 20(71.42) |
| Spousal disappointment with sex of the new born child | 16(57.14) |
| Excessive crying of the infant | 13(46.42) |
| Marital dissatisfaction | 8(28.57) |
| Breast feeding problems | 8(28.57) |
| Less sleep for the mother | 7(25) |
| Low social support | 4(14.28) |
| Not living with family of origin | 3(10.71) |

DISCUSSION

A total of 244 subjects were screened for postnatal depression over a period of 6 months duration. It was estimated that 28(11.47%) of them had PND (Postnatal depression). Different studies conducted in different parts of the world report varied findings about PND, almost all studies have

used EPDS scale for screening PND. A study conducted in Tamil Nadu, [5] reported 19.8% as the prevalence of PND which is not consistent with our findings, a similar study in Goa stated 23% as PND, [2] Thai study reported 16.8% as PND, [6] findings of Brazil study reported 20.7% as the prevalence of PND, [1] a systemic review article by Leahy-Warren in Ireland based on many studies reported 13% as the prevalence of PND which is close to our findings, [7] another study in Ireland showed 11% of the study subjects had PND which is the same as our findings. [8] According to Ballard CG et-al a study conducted at Birmingham of United kingdom “prevalence of postnatal psychiatric morbidity in mothers and fathers” prevalence of PND was reported as 27.5% among postnatal mothers, this was one among very few studies which had addressed even the paternal component, 9% of fathers at 6 weeks postpartum had postnatal depression. [9] Fathers were significantly more likely to be cases if their partners were also cases. Non-consistent findings may be due to different geographical locations and their differences in socioeconomic and socio cultural Milieu.

Mean age of study subjects was 22.6 ± 2.48 , majority of them were in the age group 21-23yrs. Findings of a study done at Tamil Nadu reported mean age of their study subjects as 22.8 years which is consistent with our study findings. [5] According to a study conducted at Goa in India mean age was found to be 26 years which is more than the mean age as compared to our study, [10] another similar study in Goa also reported mean age as 26 years. [2] A study in Brazil showed that most of their study subjects were in the age group 20-29 years; upper age limit is higher than our findings probably because women in Brazil marry and bear children at much

older age as compared to women in our country. [1]

Coming to the religion majority of them were Hindus 208 (85.2%) and the rest were Muslims 36 (14.7%), almost similar findings were seen in a study conducted at Goa in India, Hindu constituted to 89% of the study population which is in support of our study findings.² With regards to the educational background of the study subjects the findings are as follows 112(45.9%) were educated up to grade 7 and below, 100 (40.9%) had education up to grade 10 and below, therefore 86.9% were literates, and 32(13.1%) had not attended school at all and were not literates. Literacy status again depends on the geographical background, study at Goa reported that 78% of their study subjects as literates. [2]

Mean per capita income expressed in Rupees was found to be 1800 ± 1146 , according to a study conducted at Goa average monthly income was found to be 2140 Rs, but data on per capita income was not available. [2] Per capita income of 1000 and below was seen among 60(24.5%), per capita income of above 1000 up to 2000 was seen among 140(57.3%) and the rest of the study subjects 44 (18%) of them had income above 2000 up to 6000. All the study subjects were house wives the reason could be this study was conducted in a rural area where in women are hardly employed in rural areas of our country, most of the study subjects 132 (54.09%) had 2 children. Almost all the subjects (98.3%) had full term normal delivery, two similar studies done in our country at Tamil Nadu and Goa also reported that majority of their study subjects had undergone normal vaginal delivery which is in support of our findings. [5, 10]

To plan any preventive strategies risk factors have to be identified which are as follows, partner non participation in baby care was an important risk factor for Post

natal depression among 20 (71.42%) cases of PND, spousal disappointment with sex of the new born child was seen among 16 (57.14%) cases and other risk factors were excessive crying of the infant in 13(46.42%) cases, marital dissatisfaction which was found in 8 (28.57%) cases, breast feeding problems again contributed to the same number which is 8 (28.57%), less sleep for the mother was as seen in 7(25%) subjects, low social support was reported among 4(14.28%) cases and not living with the family of origin was also a risk factor among very few cases 3(10.71%). According to a study conducted at Tamil Nadu in India the risk factors for postnatal depression were low income, birth of a daughter when son was desired, relationship difficulties with mother in law and parents, adverse life events during pregnancy and lack of physical help. ^[5] Wanting for a male baby and low social support were the risk factors seen as a common finding in our study and as well as Tamil Nadu study. A study in Goa reported the following risk factors psychological morbidity during antenatal period, economic deprivation, poor marital relationships, gender of the infant, breast feeding problems and infant hospital admissions. ^[2] Here again the risk factors differ between geographic locations however the common risk factors found in Goa and our study were breast feeding problems, infant gender, poor marital relationship.

CONCLUSION

Antenatal focus on psychosocial wellbeing may help to identify women at risk of postpartum depression, such cases have to be identified and treated accordingly. Maternal and infant health policies, a priority in low-income countries, must integrate maternal depression as a disorder of public health significance. Interventions should target mothers in the

antenatal period and incorporate a strong gender-based component

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REFERENCES

1. Leila Tannous, Luciana P Gigante, Sandra C Fuchs et-al. Postnatal depression in Southern Brazil: prevalence and its demographic and socioeconomic determinants. *BMC Psychiatry*, 2008; **8**:1
2. Vikram Patel, Merlyn Rodrigues, Nandita Desouza. Gender, Poverty and postnatal depression: A study of mothers in Goa, India. *Am J Psychiatry*, 2002; 159:43-47
3. D. Nielsen Forman, P. Videbech, M. Hedegaard et-al. Postpartum depression: identification of women at risk, *BJOG*, 2000; 107(10): 1210-1217
4. Cox J.L, Holden J.M, Sagovsky R. Detection of postnatal depression: Development of the 10-item Edinburgh Postnatal Depression Scale. *British Journal of Psychiatry*, 1987; 150:782-786
5. Mani Chandran, Prathap Tharyan, Jayaprakash Muliyl et-al. Post partum depression in a cohort of women from a rural area of Tamil Nadu, India. *The British Journal of Psychiatry*, 2002; 181: 499-504
6. Limlomwongse N, Liabsuetrakul T. Cohort study of depressive moods in Thai women during late pregnancy and 6–8 weeks of postpartum using the Edinburgh Postnatal Depression

- Scale. Archives of women's mental health, 2006; 9(3):131-8
7. Leahy-Warren P, McCarthy G. Postnatal depression: prevalence, mothers' perspectives, and treatments. Archives of Psychiatric Nursing, 2007; 21(2):91-100
 8. Lane A, Keville R, Morris M et-al. Postnatal depression and elation among mothers and their partners: prevalence and predictors, The British Journal of Psychiatry, 1997; 171: 550-555
 9. Ballard C G, Davis R, Cullen P C et-al. Prevalence of postnatal psychiatric morbidity in mothers and fathers, The British Journal of Psychiatry, 1994; 164:782-788
 10. Patel V, De Souza N, Rodrigues M. Postnatal depression and infant growth and development in low income countries: a cohort study from Goa, India. Archives of disease in childhood, 2003; 88:34-37

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