

Prevalence and associated risk factors for postpartum depression in women attending a tertiary care centre in Tamil Nadu

Rema v nair^{1*}, Rajapreethi²

¹Professor, ²Junior Resident, Department of Obstetrics and Gynaecology, Sree Mookambika Institute of Medical Sciences, Kulasekharam, Kanyakumari Dist., Tamil Nadu-629161, INDIA.

Email: vishnusastha@gmail.com

Abstract

Background: Depression is the most common psychiatric disorder in general practice and about one in ten patients seen in the primary care settings suffer from some form of depression¹ They constitute a substantial proportion of the global burden of disease, and are projected to form the second most common cause of disability by 2020. Postnatal depression (PND) is one of the most common psychopathology in these phases. PND describes non-psychotic depressive episodes, with loss of interest, insomnia, and loss of energy experienced by mothers within the period of 4 to 6 weeks after delivery. **Aims and Objectives:** To find out the prevalence of Postnatal depression among mothers attending a tertiary care centre and to identify the factors associated with Postnatal depression among mothers **Methods:** A cross-sectional study was conducted among 150 postnatal mothers in the department of obstetrics and gynaecology Sree Mookambika Institute of Medical Sciences during the period from January 2018 to July 2018 was included in the study. Post natal depression was assessed according to the edinburgh postnatal depression scale **Results:** Out of the 150 study participants taken, the mean age was found to be 22.1 ± 2.8 years. Majority of them belongs to nuclear family. Postnatal depression was found in 30.7% of the study subjects. Post natal depression was more among those who are from nuclear family and unemployed class. **Conclusion:** Maternal mental health assessment should be made a part of routine antenatal and postnatal care visits

Key Word: “Postnatal Depression, “Nuclear family”, “Employment”

*Address for Correspondence:

Dr. Rema V Nair, Professor, Sree Mookambika Institute of Medical Sciences, Kulasekharam, Kanyakumari Dst., Tamil Nadu- 629161.

Email: vishnusastha@gmail.com

Received Date: 01/10/2018 Revised Date: 25/10/2018 Accepted Date: 09/11/2018

DOI: <https://doi.org/10.26611/1012825>

Access this article online

Quick Response Code:



Website:

www.medpulse.in

Accessed Date:
12 November 2018

INTRODUCTION

Mental health is an integral and essential component of health. Depression is an important public health problem causing considerable morbidity and disability worldwide. Its burden among women especially in their productive age group in rural area is less known. Depression is the

most common psychiatric disorder in general practice and about one in ten patients seen in the primary care settings suffer from some form of depression¹ They constitute a substantial proportion of the global burden of disease, and are projected to form the second most common cause of disability by 2020². Depression is estimated to affect 340 million people globally³. Earlier Indian studies have reported prevalence rates of depression that vary from 21–83% in general population. Depression is a disorder of major public health importance, in terms of suffering, family dysfunction, morbidity, and economic burden^{4,5,6}. Pregnancy and postpartum are considered as high-risk periods for the emergence of psychiatric disorders. Postpartum psychiatric disorders can be divided into three categories: postpartum blues; postpartum psychosis and postpartum depression. Postnatal depression (PND) is one of the most common psychopathology in these phases. PND describes non-psychotic depressive episodes, with

How to cite this article: Rema v nair, Rajapreethi. Prevalence and associated risk factors for postpartum depression in women attending a tertiary care centre in Tamil Nadu. *MedPulse – International Journal of Gynaecology*. November 2018; 8(2): 61-64. <http://medpulse.in/Gynaecology/index.php>

loss of interest, insomnia, and loss of energy experienced by mothers within the period of 4 to 6 weeks after delivery^{8,9}. Prevalence estimates range from 13 to 19% in western studies¹⁰. Studies in India have found the prevalence of postnatal depression ranging from 11 to 26.3%^{11,12}. It is considered a serious public health issue because of its devastating effects on mothers, families, and infants or children¹³. Accurate estimates of PND prevalence are difficult to obtain as cultural norms may affect women's reporting of their symptoms and methods used to determine prevalence rates impact their accuracy. Many variables to be found associated with postpartum depression from meta-analysis; Prenatal depression, self-esteem, child care stress, prenatal anxiety, marital relationship, infant temperament, marital status, low social support, socioeconomic status and unplanned/unwanted pregnancy¹⁴. PND has been associated with tragic outcomes, such as maternal suicide and infanticide. In spite of so many adverse events associated with postpartum depression almost half of the postnatal depression cases goes unnoticed by the health care providers. The major reason being unrevealing of symptoms by the mother due to fear. Prenatal and postnatal counselling, support to mothers and screening in the early stage giving special attention to vulnerable groups may prevent many future adverse outcomes of both mother and child. Thus, the present study was conducted to study the prevalence and associated risk factors of postnatal depression among postpartum mothers¹⁴.

MATERIALS AND METHODS

- a. **Study design:** Cross sectional Study
- b. **Study setting:** Department of Obstetrics and Gynaecology Sree Mookambika Institute of Medical Sciences, Kulasekharam.
- c. **Approximate total duration of the study:** 6 months (January 2018-July 2018)
- d. **Detailed description of the groups:** Postnatal women who came for follow up during the study period
- e. **Sample Size:** All the women attending the OPD at Department of OBG Sree Mookambika Institute of Medical Sciences who met the inclusion and exclusion criteria during the period from January 2018-July 2018 was enrolled in to the study. Therefore, the total number of study participants (n)=150
- f. **Inclusion criteria/ exclusion criteria:** All the women who came for follow up of postnatal period were included. Women with acute severe illness or cognitive impairment or not willing to

consent for voluntary participation were excluded.

- g. **Parameters to be studied:** Socioeconomic Status, Postpartum depression
- h. **Methods(s)/Technique(s)/Reagent(s)/Kit(s) etc. used to measure the qualitative parameters along with their manufacturing source details:** Pretested questionnaire was applied
- i. **Procedure:** After getting approval from Institutional Human Ethical Committee written informed consent was obtained from the participants before enrolling them into study. Pretested questionnaire was applied by the chief investigator including question related to the demographic characteristics. Postnatal depression was assessed using EPDS ("Edinburgh Postnatal depression Scale"). EPDS¹⁵ scale has ten components in it. Each item is rated from 0 to 3, yielding a total score of 0-30. Seven of its items are reverse-scored. Socioeconomic status of the family was assessed using Modified BG Prasad Classification¹⁶.

Statistical Methods of Analysis

Data entry was done in Microsoft office Excel 2013 spread sheets and data was analyzed using SPSS trial version 20.0.

Descriptive statistics including mean, standard deviation and 95% confidence interval were calculated. Chi-square test and Fisher's exact test were used for finding the association between the factors. **P<0.05 was considered as significant:** For analysis Edinburgh Postnatal depression Scale was classified into Depression and No Depression

RESULTS

Out of the 150 study participants taken, the mean age was found to be 22.1 ± 2.8 years (range: 18–33 years) and mean duration of married life was 2.45 ± 2.3 years (range: 1–12 years). All of the postnatal women were living with their partner. Most of them were Hindus 83(55.3%) by religion. Most of them belong to Nuclear family 105(70%). Literacy rate was 132(88%) and 64 (42.6%) of them belong to lower middle class according to BG Prasad class of socio-economic status. About 27(18%) of study participants are employed. Primiparas 102 (68%) formed the majority among the study participants. Almost all of the primiparas (53.9% of the total) had delivered within one year of marriage. Most of them delivered full term baby 127(84.7%). As many as 44 (29.3%) them had delivered by caesarean section. 37 (24.7%) of the pregnant women had one or the other complication or medical illness in the during their

pregnancy. Complications like Preeclampsia, eclampsia, anaemia and post partumhaemorrhage were some of them. None of the studied mothers had abortion or still birth in the last pregnancy. The Edinburgh Postnatal depression Scale score of 46 study participants was ≥ 13 and the prevalence of Postnatal depression was 30.7%. The risk of depression was more in women belonging to nuclear family and unemployed category. The association between these factors are highly significant ($p < 0.5$) Table 1:

Table 1: Association between Type of Family and Depression

FAMILY	NoDepression	Depression(%)	Total
Nuclear	75(50%)	30(20%)	105(70%)
Joint	29(19.3%)	16(10.6%)	45(29.9%)
Total	104(69.3%)	46(30.6%)	150(100%)

$$\chi^2 = 16.681 \text{ df}=3 \text{ p}=0.001$$

DISCUSSION

The prevalence of post-partum depression among postnatal women in our study was found to be earlier studies was found to be 30.7%. The prevalence found in our study was higher than those reported in previous studies done in rural areas of India. There are few epidemiological investigations of maternal depression in developing countries¹⁹. A similar study done in by Suguna *et al* 2013 among rural women was found to be 18%. It is comparable to results of a study done on Egyptian women¹⁹ where the prevalence of PPD was 17.9%, which is similar to previous results in developed countries²⁰. The prevalence in our study is higher might be due differences in the cut-off score used for EPDS, reporting style, differences in perception of mental health, educational status, levels of social support as well as biological vulnerability factors. The factors which have played important role in our study are type of family, employment of women, type of delivery, complications during pregnancy. The factors which were significantly associated with probable post-natal depression was more in women belonging to nuclear family, employed women, type of delivery and had complications during pregnancy. Similar findings have been reported in other studies in Western countries.^{21,22} Women experience depression about twice as much as men. Women are more susceptible than men to stress-induced depression^{23,24}. While pregnancy does not increase the risk for depression, women with past histories of depression are at risk for recurrent episodes or relapse if antidepressant medications are discontinued. Hormonal changes during the postpartum period also increase the incidence of depression. This difference may be accounted for by women experiencing greater poverty, differing social roles and sex discrimination, more negative life events, and violence and abuse²³⁻²⁷.

CONCLUSION

Maternal mental health assessment should be made a part of routine antenatal and postnatal care visits

REFERENCES

1. MSP Saravanan *et al*. Prevalence of depression and risk factors among women in Poonamalle, Tamilnadu, India. Stanley Medical Journal. 2016;3(4) pg: 36-43.
2. Murray C, Lopez A. The global burden of diseases: a comprehensive assessment of mortality and disability from diseases, injuries and risk factors in 1990 and projected to 2020. Boston: Harvard School of Public Health, WHO and World Bank, 1996.
3. World Health Report (2001) WHO, Geneva, Switzerland
4. Kishore J, Reddaiah VP, Kapoor V, Gill JS (1996) Characteristics of mental morbidity in a rural primary health center of Haryana, Indian J Psychiatry 38: 137-42.
5. Amin G, Shah S, Vankar GK (1998) The prevalence and recognition of depression in primary care Indian J Psychiatry 40: 364-369.
6. Pothen M, Kuruvilla A, Philip K, Joseph A, Jacob KS (2003) Common mental disorders among primary care attenders in Vellore, South India: Nature, prevalence and risk factors. Int J Soc Psychiatry 49: 119-125.
7. Nambi SK, Prasad J, Singh D, Abraham V, Kuruvilla A, *et al*. (2002) Explanatory models and common mental disorders among patients with unexplained somatic symptoms attending a primary care facility in Tamil Nadu. Natl Med J India 15: 331-5.
8. Stewart DE, Robertson E, Dennis CL, Grace SL, Wallington T. Postpartum depression: literature review of risk factors and interventions. Toronto: University Health Network Women's Health Program; 2003. Available from: http://www.who.int/mentalhealth/prevention/suicide/lit_review_postpartumdepression.pdf [cited 2017 May 16].
9. Di Florio A, Smith S, Jones I. Postpartum psychosis. The Obstetrician and Gynaecologist. 2013;15(3):145-50. doi: <http://dx.doi.org/10.1111/tog.12041>
10. O'Hara MW, McCabe JE. Postpartum depression: current status and future directions. Ann Rev Clin Psychol. 2013;9:379-407.
11. Hegde S, Latha KS, Bhat SM, Sharma PS, Kamath A, Shetty AK. Postpartum depression: prevalence and associated factors among women. Indian J Women Health Issues Care. 2012;1:13-7.
12. Savarimuthu RJ, Ezhilarasu P, Charles H, Antonisamy B, Kurian S. Post-partum depression in the community: a qualitative study from rural South India. Int J Soc Psychiatry. 2010;56:94-102.
13. Chaudron LH. Postpartum depression: what pediatrician needs to know. Pediatr Rev. 2003; 24(5):154-161.
14. Posmontier B, Horowitz JA. Postpartum practices and depressive prevalences: technocentric and ethnokinshipcultural perspectives. J TranscultNurs.2004; 15:34-43.
15. Gibson J, McKenzie-McHarg K, Shakespeare J, Price J, Gray R. A systematic review of studies validating the Edinburgh Postnatal Depression Scale in antepartum and postpartum women. Acta Psychiatrica Scandinavica. 2009 May;119(5):350-64.

16. Shaikh Z, Pathak R. Revised Kuppuswamy and BG Prasad socio-economic scales for 2016. *International Journal Of Community Medicine And Public Health*. 2017 Mar 28;4(4):997-9.
17. Giri KR, Khatri BR, Mishra RS, Khanal V, Sharma DV, Gartoula PR. Prevalence and factors associated with depressive symptoms among post-partum mothers in Nepal. *Bio Med Central Res Notes*. 2015;8:111.
18. Fernandes MC, Srinivasan K, Stein AL, Menezes G, Sumithra RS, Ramachandra PG. Assessing prenatal depression in the rural developing world: a comparison of two screening measures. *Arch Wom Mental Health*. 2011;14: 209- 16.
19. El SayedSaleh. Predictors of postpartum depression in a sample of Egyptian women: *Neuropsychiatr Dis Treat*. 2013; 9: 15–24.
20. Lanes A, Kuk JL, Tamim H. Prevalence and characteristics of postpartum depression symptomatology among Canadian women: a cross-sectional study; *BMC Public Health*. 2011; 11:302.
21. Leigh B, Milgrom J. Risk factors for antenatal depression, postnatal depression and parenting stress. *BMC Psychiatry* 2008; 8: 24.
22. Bowen A, Muhajarine N. Antenatal depression. *Can Nurse* 2006; 102: 26-30.
23. Kessler RC: The effects of stressful life events on depression. *Ann Rev Psychology* 1997; 48:191–214.
24. Golding J Intimate partner violence as a risk factor for mental disorders: a meta-analysis. *JFam Violence* 1999;14:99–132.
25. Coid J, Petrukevitch A, Chung W, Richardson J, FederG. Abusive experiences and psychiatric morbidity in women primary care attenders. *Br J Psychiatry* 2003;183: 332–9.
26. McCauley J, Kern DE, Kolodner K, Smith J. The “battering syndrome”: prevalence and clinical characteristics of domestic violence in primary care internal medicine practices. *Ann Intern Med* 1995;123: 737–46.
27. Van Hook MP. Challenges to identifying and treating women with depression in rural primary care. *Social Work in Health Care* 1996; 23(3): 73-92.

Source of Support: None Declared
Conflict of Interest: None Declared

