International Journal of Research in Medical Sciences
Ahuja SK et al. Int J Res Med Sci. 2018 Jan;6(1):106-109
www.msjonline.org
pISSN 2320-6071 | eISSN 2320-6012
DOI: http://dx.doi.org/10.18203/2320-6012.ijrms20175503

Original Research Article

Post-partum psychosis: socio-demographic and obstetric profile

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Received: 18 November 2017
Accepted: 24 November 2017

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ABSTRACT

Background: Better knowledge of socio-demographic profile and obstetric features may help in early identification and treatment of patients with post-partum psychosis. The aim of present research is to study the age, parity, socio-demographic and obstetric and menstrual profile of patients suffering from post-partum psychosis. Setting and Design: A cross-sectional study at in-patient department of psychiatry, SS Medical College and associated SGMH Rewa.
Methods: The study was conducted on sixty patients of post-partum psychosis admitted in psychiatry ward. Detailed socio-demographic characteristics, obstetric and menstrual profile along with psychiatric assessment were recorded in proforma specially designed for the study.
Results: Bulk of our post partum psychotic subjects (60%) were in the age range of 18-25 years with 83.33% of women were residing at rural areas. Most of subjects (76.67%) of post partum psychosis were illiterate. 73.33% patient were belonging to low socio-economic status and remaining to middle and high socioeconomic status. Majority of subjects (13.33%) were house wife (86.67%) followed by laborer class. Family jointness reveal 80% and 20% of subjects trailed from joint and nuclear family respectively. the maximum number of subjects (60%) were primipara with only 13.33% of subjects had history of obstetric complication in form of prolonged labour and post-partum heamorrhage. 25% subjects had cesarean delivery. 40% patients of puerperal psychosis were having menstrual irregularity and 60% had regular menstruation.
Conclusions: Screening of vulnerable groups i.e. younger age, primipara, history of irregular menstruation in post partum period for psychiatric sign and symptoms is requisite for early diagnosis and prompt and adequate management. As most of the patients were from rural areas it is necessary to establish psychiatric services in rural areas as well so that this group of population can be provided holistic care along with already existing medical services.

Keywords: Menstruation, Obstetric, Post-partum psychosis, Socio-demographic

INTRODUCTION

The perinatal period is associated with an increased risk of several mental disorders.[1] During this period many susceptible women may experience diverse range of mental health problems including Depression anxiety and psychosis.[2,3] Of these postpartum psychosis is severe form of mental disorder with incidence rate is approximately 0.1%.[4,5] Post-partum psychosis is a medical emergency condition with risk for suicide and infanticide.[6,7] Early detection and treatment of mental disorders are essential for family functioning and parent child relationship and prevention of various short term and long term complications.[8] Faster recognition requires good knowledge of illness. Thus, the observations of present study will help in enhancing the pool of

knowledge regarding various risk factors associated with post partum psychosis, which would guide in searching of various etiological factors associated with post partum psychosis.

METHODS

The present study consisted of 60 patients diagnosed using ICD-10 criteria and was selected from the patients admitted in the female psychiatry ward of Sanjay Gandhi Memorial hospital, Rewa (MP) presenting with psychiatric manifestations in post partum period.

Women between 15 to 40 years of age, with full term pregnancy or full term caesarean section having first episode of post partum psychosis with an onset within six weeks of delivery were included in this study.

Women with emergence of abnormal behavior within three days of delivery, presence of overt neurological disorder e.g. meningitis, encephalitis; seizure disorder etc and having gross physical illness were excluded to remove elements of confounding.

Detailed socio-demographic variables were recorded. Menstrual and obstetric history was obtained regarding number of conception and number of deliveries, menstrual regularity and obstetric complications.

RESULTS

In the above mentioned study, 60 diagnosed cases of post partum psychosis following the inclusion criteria were enrolled in to the study. Patient's socio-demographic variables (age, sex, socio-economic status, occupation, domicile, family type, and education) and obstetric and menstrual profile (type of delivery, parity, obstetric complications, and menstrual history) were studied.

Bulk of our post partum psychotic subjects (60%) were in the age range of 18-25 years. 73.33% patient of puerperal psychosis were belonging to low socio-economic status and remaining to middle and high socioeconomic status. Majority of subject of post partum psychosis were house wife (86.67%) followed by laborer class (13.33%). 83.33% of women were residing at rural area. Family joint ness reveal (80%) and (20%) of subjects trailed from joint and nuclear family respectively. Most of subjects of post partum psychosis were illiterate (76.67%).

On similar line obstetric and menstrual history of Women suffering from post partum psychosis were evaluated with the results shown in Table 2.

As to parity the maximum number of subjects were primipara (60%), II parity were (26.67%) and multipara (13.33%). History of prolonged labour and post-partum haemorrhage was found in 6.67% and 6.67% of subjects respectively. History of cesarean delivery was in 25%% of subjects. On menstrual history parameter 40% patient revealed irregular menstruation and remaining 60% subjects had regular menstruation.

Table 1: Socio-demographic variables in terms of frequency and percentage (n=60).

Age (in years)	Patients (n=60)	
	Number	%
18-25	36	60
26-35	20	33.33
>35	4	6.67
Total	60	100
Socio-economic status		
High	4	6.67
Middle	12	20
Low	44	73.33
Total	60	100
Occupation		
House wife	52	86.67
Labourers	8	13.33
Total	60	100
Domicile		
Rural	50	83.33
Urban	10	16.67
Total	60	100
Family type		
Joint	48	80
Nuclear	12	20
Total	60	100
Education		
Illiterate	46	76.67
Up to class V	6	10
VI-VIII	4	6.67
IX to final	4	6.67
Total	60	100

Table 2: Obstetric and menstrual profile of women with post-partum psychosis (n=60).

Obstetric and Menstrual profile	Patients (n=60)	
	Number	%
Parity		
Primipara	36	60
Ii parity	16	26.67
Multipara	8	13.33
Total	60	100
Obstetric complications		
Prolonged labour	4	6.67
Postpartum haemorrhage	4	6.67
Total	8	13.33
Type of delivery		
Cesarean delivery	15	25
Normal delivery	45	75
Total	60	100
Menstruation		
Regular menstruation	36	60
Irregular menstruation	24	40
Total	60	100

DISCUSSION

The present study was devised to investigate various socio-demographic and obstetric and menstrual variables of patients with postpartum psychosis.

Age

The present study indicates that most of the patients with post partum psychosis are younger age group. The majority of our subjects were in the age range of 18-25 years. Further as high as 60% patients developed psychosis between 18-25 years of age as compared to only 6.67 % above 35 years of age. This finding is consistent with other researchers.[9-11]

Various biological and psychological factors could be responsible for an early age presentation of post partum psychosis. Yet possibility that younger age group is more vulnerable to develop acute psychosis could be another reason.

Socio-economic status

The larger number of our subjects belonged to low class family (73%). Our finding is similar to past studies conducted by other investigators.[9] Even one study found that living in a poor neighborhood socioeconomic environment might contribute to the development of postpartum psychosis.[12]

Higher occurrence of post-partum psychosis in low socio-economic status may be due to various clinical variable viz poverty, long standing maladjustment of patient, unstable family environment, poor communication, malnutrition etc and requires further investigation. Majority of patients were housewives (86.67%) or labourer (13.33%). We could not observe any specific predilection of psychosis towards any occupational group. The large number of subjects hailed from rural area (83.33%) as compared to urban area (16.67%). This finding was similar to other studies.[13,14] The familial infrastructure, intra-familial conflicts, lack of communication and working habits in Indian rural set-up could be the contributory factor for post partum psychosis more in rural background. Most of subjects belonged to joint family. One author found increased risk of post partum depression in joint family belongs to rural area.[15] One of investigator suggested that in non-nuclear families culturally conditioned behavior adversely affect maternal health by compelling them to participate in household activities as against the medically advised minimum rest.[16] Thus, joint family along with rural background could be vulnerable factor for developing post-partum psychosis. Regarding education status the large numbers of subjects were illiterate (76.77%). In one of study most of the patients with post partum psychosis had no formal education.[10] Although the post partum psychosis is over represented in illiterate group, it will not be fair to hypothesize that post partum psychosis is more common in illiterate since majority of rural females are otherwise illiterate.

Parity

Majority of patients were primipara (60%). Present study reveals that post partum psychosis is more common in primipara and this finding also gets support from earlier studies.[15,17,18]

Obstetric complications

In our study only 13.34% subjects are found to have obstetric complication in form of prolonged labour and post partum hemorrhage. Fatoye FO found obstetric complications in 22.4% subjects.[19] Study conducted by Mc Neil TF did not support association between obstetric complication and postpartum psychosis.[20] Nager A concluded in his study that obstetric variables have minor importance.[21] Blackmore ER et al in their study observed that out of 167 deliveries with post partum psychosis 39.5% had delivery complications.[22]

Type of delivery

In current study post partum psychosis was observed significantly higher in full term normal delivery (75%) as compared to cesarean delivery (25%). Hence cesarean delivery does not seem to be a risk factor for genesis of post partum psychosis. Our finding is in conformity with Conclusion from earlier studies.[22,8] Regarding the association of cesarean deliveries with postpartum psychosis. Cesarean deliveries as a risk factor for post partum psychosis was although proposed by few investigators, however various other cause of acute psychosis were not considered.[23]

Menstruation

The large number of subjects (60%) had regular menstruation however 40% subjects provided history of irregular menstruation. Menstrual cycle regularity and length have significant associations with specific current and life time psychiatric disorders.[24]

Increased incidence of irregular menstrual cycle observed in patients of post-partum paychosis may be a risk factor and post-partum psychosis could developed due to lack of rebound biochemical changes in pregnancy.[25] An alternative hypothesis might be that interaction of psychological and endocrine factor at end of pregnancy makes this a particularly stressful period for precipitating psychosis.[26] One author concluded that estradiol may have causal relation to post partum psychosis and significance in the treatment of this illness.[27]

CONCLUSION

Primiparity, younger age, and irregular menstruation appears to be a significant risk factor. These subjects

should be kept under surveillance for early identification of post partum psychosis. Unclear Association between post partum psychosis and cesarean delivery was observed.

Funding: No funding sources
Conflict of interest: None declared
Ethical approval: Not required

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Cite this article as: Ahuja SK, Mishra N, Kumar P. Post-partum psychosis: socio-demographic and obstetric profile. Int J Res Med Sci 2018;6:106-9.