

Psychiatric Illness Following Child Birth – Are There Any Predictors?

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I. Introduction

Although psychiatric ailments following childbirth have been recognised since the time of Hippocrates, there has been a lot of controversy as to its claim as a separate entity. Pregnancy and the post partum period are generally regarded as maturational crises equal in importance to those of adolescence and menopause. Post partum period is considered to be a vulnerable period since a woman is more prone to develop different types of psychiatric disturbances. Various studies document a marked increase in prevalence of psychosis, following childbirth. The post partum period is a time when significant increase in psychiatric disorder, especially of depressive nature are known to occur.^{1,2} Apart from frank psychosis, two non-psychotic disorders have been noted, a dysphoric state in early puerperium (blues) and an increased incidence of depressive symptomatology in the ensuing months.

Pitt¹ suggested that postnatal depression is a specific disorder distinguishable from classical depressive illness; he preferred the term "atypical depression" and considered the disorder to be a response to "non-specific stress" rather than being caused by the hormonal changes accompanying childbirth. In contrast, Dalton³ has maintained that postnatal depression is, by definition, caused by hormonal changes, specifically by a sharp drop in circulating progesterone in the puerperium. There has been much recent work on minor psychiatric disturbances in the puerperium^{4,5}, there have been very few recent studies of the outcome of severe psychiatric illness occurring in puerperium.

The three most common psychiatric disorders after the birth of a baby are postpartum blues, postpartum depression, and postpartum psychosis.⁶ Depression and psychosis present risks to both the mother and her infant, so making early diagnosis and treatment lays importance.⁶

Postpartum blues

Postpartum blues refers to a transient condition, characterised by irritability, anxiety, decreased concentration, insomnia, tearfulness, and mild, often rapid, mood swings from elation to sadness. A large number of women (30% to 70%) in postpartum develop these mood changes⁷, generally within 2 to 3 days of delivery. The symptoms peak on the fifth day postpartum and usually resolve within 2 weeks.⁸

Postpartum depression

The Tenth Revision of the International Classification of Diseases and Related Health Problems (ICD-10)⁹ defines postpartum depression (PPD) as mental disorders associated with the puerperium (commencing within 6 weeks of delivery) that do not meet the criteria for disorders classified elsewhere. Most reports on PPD suggest its development at any point during the first year postpartum, with a peak of incidence within the first 4 months of postpartum.⁷ Controlled studies show that that between 10% and 28% of women experience a major depressive episode in the postpartum period, with the majority of studies favoring a 10%.¹⁰

Postpartum psychosis

Rarely first-onset psychosis in the perinatal period as a condition is seen. The prevalence of postpartum psychosis has been reported as approximately 1 to 2 per 1000 live births. It has a rapid onset, manifesting itself within the first 2 weeks after childbirth or, at most, within 3 months postpartum, and should be considered a medical and obstetrical emergency.¹¹

In India most of the studies have been done on post partum patients attending psychiatric OPD. Very few studies are there which indicate the incidence of psychiatric illness following childbirth. Keeping this in mind the present prospective study was carried out.

Aims and Objectives:

1. To find out the prevalence of psychiatric illness following childbirth.
2. To find out whether socio-demographic variables are related to psychiatric illness following childbirth.
3. To find out possible predictors eg. premorbid personality, past history of psychiatric illness, family history of mental illness, menstrual disturbances, marital relationship, use of contraceptives etc.

II. Materials & Methods:

Sample: 200 Consecutive women registered at a tertiary care Govt. Hospital, Jaipur and giving birth to child in the hospital.

Instruments:

1. A specially designed proforma which included:

- Personal Identification data sheet – name, age, religion, husband's name, address.
- Details of socio-demographic variables- education, occupation, economic status, domicile, type of family, menstrual history etc. and other details like antenatal history, obstetric history, marital history, details of labor, family history of mental illness, details of premorbid personality, past history of mental illness, discrepancy in parent's expectation about sex of the child.

2. Goldberg's Health Questionnaire (Hindi version):

Questionnaire originally developed by David P. Goldberg in 1970. The Hindi version of GHQ duly standardised in North Indian population was used.¹² It is a 60 item, self administered questionnaire concerning psychological distress or altered behaviour.

3. IRRITABILITY – DEPRESSION AND ANXIETY SCALE (SNAITH et al 1978)¹³:

The scale was developed by Snaith, constantopolous, Jardin and Guffin in 1978, to measure irritability, depression and anxiety.

4. INDIAN PSYCHIATRIC INTERVIEW SCHEDULE (IPIS): A structured instrument for investigating psychopathology in an Indian setting.^{14,15} It has four sections, for the present study section C, D and E of the schedule were used.

III. Methodology

All the subjects were subjected to the specially designed proforma and information was collected. All the subjects were given GHQ-H and IDA Scales. Those who scored high on GHQ-H and IDA scale, detailed evaluation was done by using IPIS (Section C, D, E) and a psychiatric diagnosis was made according to ICD-10.⁹ This was done on 3rd day postpartum. All the subjects included in this study irrespective of psychiatric morbidity or normal were evaluated in the same way on 18th, 33rd and 48th day postpartum. This was done through appointment, those who failed to come for follow up at tertiary care govt. hospital, were seen at their homes to ascertain psychiatric morbidity, if any. Scoring was done and the data were analysed by suitable statistical tests.

IV. Results

Table 1 – Distribution of subjects according to psychiatric morbidity

| S.No. | Psychiatric illness after childbirth | N (N=200) | % |
|-------|--------------------------------------|-----------|----|
| 1. | Present | 92 | 46 |
| 2. | Absent | 108 | 54 |

Table 2 – Distribution according to time of onset of symptoms

| S.No. | Time of onset of symptoms | N = 92 | % |
|-------|---------------------------|--------|----|
| 1. | 1st- 3rd day | 75 | 82 |
| 2. | 4th- 18th day | 15 | 16 |
| 3. | 19th- 33rd day | 2 | 2 |

Table 3 – Socio-Damographic Variables

| Age group (in yrs.) | Psychiatric illness after childbirth | | |
|---------------------|--------------------------------------|---------------|---|
| | Present (N=92) | Absent(N=108) | |
| Less than 20 | 17 (40%) | 25 (60%) | X ² = 1.1681 , df= 2, p>.05 – not significant |
| 20-30 | 63 (46%) | 75 (54%) | |
| 30-40 | 12 (55%) | 10 (45%) | |
| Domicile | Psychiatric illness | | X ² = 0.01556 , df= 1, p>.05 – not significant |
| | Present (N=92) | Absent(N=108) | |
| Urban | 52 (46%) | 62 (54%) | |
| Rural | 40 (47%) | 46 (53%) | |
| Religion | Psychiatric illness | | X ² = 1.1399 , df= 3, p>.05 – not significant |
| | Present (N=92) | Absent(N=108) | |
| Hindu | 70 (45%) | 86 (55%) | |
| Muslim | 18 (47%) | 20 (53%) | |
| Others | 4 (67%) | 2 (33%) | |
| Domicile | Psychiatric illness | | X ² = 2.9459 , df= 5, p>.05 – not significant |
| | Present (N=92) | Absent(N=108) | |
| Illiterate | 45 (43%) | 59 (57%) | |
| Primary | 18 (45%) | 22 (55%) | |
| Middle | 16 (62%) | 10 (38%) | |
| Secondary | 6 (43%) | 8 (57%) | |
| Graduate | 4 (44%) | 5 (56%) | |
| Post graduate | 3 (43%) | 4 (57%) | |
| Occupation | Psychiatric illness | | X ² = 3.9450 , df= 1, p<.05 – Significant |
| | Present (N=92) | Absent(N=108) | |
| House-wife | 87 (48%) | 93 (52%) | |
| Service | 5 (25%) | 15 (75%) | |
| Income (Rs/month) | Psychiatric illness | | X ² = 1.9735 , df= 3, p>.05 – not significant |
| | Present (N=92) | Absent(N=108) | |
| <= 1600 | 5 (42%) | 7 (58%) | |
| 1601-8009 | 47 (51%) | 45 (49%) | |
| 8010-32049 | 35 (42%) | 48 (58%) | |
| >=32050 | 5 (38%) | 8 (61%) | |
| Family type | Psychiatric illness | | x ² = 3.9450 , df= 1, p<.05 – Significant |
| | Present (N=92) | Absent(N=108) | |
| Joint | 34 (33%) | 70 (67%) | |
| Nuclear | 58 (60%) | 38 (40%) | |

Table 4 – Distribution according to birth order

| S.No. | Birth order | Psychiatric illness | | Total N=200 |
|-------|-------------|---------------------|---------------|-------------|
| | | Present (N=92) | Absent(N=108) | |
| 1. | Only child | 11 (65%) | 6 (35%) | 17 |
| 2. | Last child | 19 (46%) | 22 (54%) | 41 |
| 3. | 1st child | 27 (43%) | 36 (57%) | 63 |
| 4. | Others | 35 (44%) | 44 (56%) | 79 |

x² = 2.7382 , df= 3, p>.05 – not significant

Table 5 – Distribution according to H/O past psychiatric illness

| S.No. | H/O Past Psychiatric illness | Illness at this time | | Total N=200 |
|-------|------------------------------|----------------------|---------------|-------------|
| | | Present (N=92) | Absent(N=108) | |
| 1. | Present | 8 (80%) | 2 (20%) | 10 |
| 2. | Absent | 84 (44%) | 106 (56%) | 190 |

x² = 4.8985 , df= 1, p<.05 – Significant

Table 6 – Distribution according to family H/O mental illness

| S.No. | Family H/O mental illness or similar illness | Psychiatric illness | | Total N=200 |
|-------|--|---------------------|---------------|-------------|
| | | Present (N=92) | Absent(N=108) | |
| 1. | None | 72 (42%) | 100 (58%) | 172 |
| 2. | Father/ Mother/ Brother/ Sister | 12 (67%) | 6 (33%) | 18 |

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|----|------------------------|---------|---------|---|
| 3. | Maternal Grand parents | 4 (80%) | 1 (20%) | 5 |
| 4. | Paternal Grand parents | 4 (80%) | 1 (20%) | 5 |

$\chi^2 = 8.9351$, $df = 3$, $p < .05$ – Significant

Table 7 – Distribution according to premorbid personality

| S.No. | PMP | Psychiatric illness | | Total N=200 |
|-------|------------|---------------------|---------------|----------------|
| | | Present (N=92) | Absent(N=108) | |
| 1. | Introvert | 25 (76%) | 8 (24%) | 33 |
| 2. | Extrovert | 6 (60%) | 4 (40%) | 10 |
| 3. | Schizoid | 1 (50%) | 1 (50%) | 2 |
| 4. | Obsessive | 1 (50%) | 1 (50%) | 2 |
| 5. | Hysterical | 3 (75%) | 1 (25%) | 4 |

$\chi^2 = 1.9172$, $df = 4$, $p > .05$ – not significant

Table 8 – Distribution according to menstrual history

| Dysmenorrhoea | Psychiatric illness | | $\chi^2 = 27.7809$, $df = 1$, $p < .05$ – Significant |
|---------------|---------------------|---------------|--|
| | Present (N=92) | Absent(N=108) | |
| Present | 55 (69%) | 28 (31%) | |
| Absent | 37 (31%) | 83 (60%) | |
| Cycles | Psychiatric illness | | $\chi^2 = 17.6350$, $df = 1$, $p < .05$ – Significant |
| | Present (N=92) | Absent(N=108) | |
| Irregular | 52 (65%) | 28 (35%) | |
| Regular | 40 (33%) | 80 (67%) | |

Table 9 – Marital history

| Sexual adjustment | Psychiatric illness | | $\chi^2 = 8.6221$, $df = 2$, $p < .05$ – Significant |
|----------------------|---------------------|---------------|---|
| | Present (N=92) | Absent(N=108) | |
| Satisfactory | 74 (42%) | 100 (57%) | |
| Non-satisfactory | 16 (76%) | 5 (24%) | |
| Not reported | 2 (40%) | 3 (60%) | |
| Use of contraceptive | Psychiatric illness | | $\chi^2 = 0.0914$, $df = 1$, $p > .05$ – not significant |
| | Present (N=92) | Absent(N=108) | |
| Present | 50 (45%) | 61 (55%) | |
| Absent | 42 (47%) | 47 (53%) | |

Table 10 – Distribution according to parity

| S.No. | Parity | Psychiatric illness | | Total N=200 |
|-------|-----------|---------------------|---------------|----------------|
| | | Present (N=92) | Absent(N=108) | |
| 1. | Primipara | 67 (66%) | 35 (34%) | 102 |
| 2. | Multipara | 25 (25%) | 73 (74%) | 98 |

$\chi^2 = 32.4770$, $df = 1$, $p < .05$ – Significant

Table 11 – Distribution according to type of labor

| S.No. | H/O labor | Illness | | Total N=200 |
|-------|-----------------------------------|----------------|---------------|----------------|
| | | Present (N=92) | Absent(N=108) | |
| 1. | FTND | 69 (41%) | 99 (59%) | 168 |
| 2. | Delayed labor | 10 (77%) | 3 (23%) | 13 |
| 3. | Application of surgical appliance | 6 (67%) | 3 (33%) | 9 |
| 4. | Caeserian | 7 (70%) | 3 (30%) | 10 |

$\chi^2 = 11.2251$, $df = 4$, $p < .05$ – Significant

Table 12 – Distribution according to mother’s expectation about sex of the child

| Discrepancy | Illness | | $\chi^2 = 12.8388$, $df = 1$, $p < .05$ – Significant |
|-------------|----------------|---------------|--|
| | Present (N=92) | Absent(N=108) | |
| Present | 54 (60%) | 36 (40%) | |
| Absent | 38 (35%) | 72 (65%) | |

B. Distribution according to father’s expectation about sex of the child

| Discrepancy | Illness | | $\chi^2 = 2.8984$, $df = 1$, $p > .05$ – not significant |
|-------------|----------------|---------------|---|
| | Present (N=92) | Absent(N=108) | |
| Present | 40 (40%) | 60 (60%) | |
| Absent | 52 (52%) | 48 (48%) | |

Table 13 – Distribution according to birth of unwanted child

| S.No. | Discrepancy | Illness | | Total N=200 |
|-------|----------------|----------------|---------------|----------------|
| | | Present (N=92) | Absent(N=108) | |
| 1. | Wanted child | 88 (47%) | 101 (53%) | 189 |
| 2. | Unwanted child | 4 (36%) | 7 (64%) | 11 |

$\chi^2 = 0.43502$, $df= 1$, $p>.05$ – Not significant

V. Results

The study was aimed to find out the prevalence of psychiatric illness following child birth and also to find out the possible risk factors / predictors.

A wide range of reported prevalence of post partum depression ranging from 0% to almost 60% in different studies from different countries.¹⁶ A community based prospective study in India found out the incidence of post partum depression in rural women to be 11%.³¹ than incidence in western culture, where 10-15% of all mothers are affected by post partum depression.¹⁷ Whereas, the incidence was found to be around 26% in adolescent mothers.¹⁸

The results of the present study revealed that psychiatric illness was present in 92 (46%) of the women enrolled for the study (Table 1). Majority 75(82%) had onset of psychiatric symptoms during first 3 days post partum while 15(16%) developed psychiatric illness between 4th-18th day postpartum and 2(2%) developed the psychiatric illness between 18 days to 33days of childbirth. (Table 2)

Table 3 reveals the sociodemographic details of the population studied. The results revealed that there were 42 subjects in the age group of less than 20 years out of which 17(40%) developed psychiatric illness; while 63(46%) out of 138 in the age group between 20-30yrs. and 12(54%) out of 22 in the age group of 30-40yrs developed psychiatric illness. No statistically significant difference was found between the two groups. The findings are similar to those of Tod¹⁹ and Pitt¹ who also reported that psychiatric illness in post partum period is equally present in all the age groups. The findings are different from those of Shashi²⁰, who reported that post partum psychiatric syndromes are seen more commonly (81%) in patients below 25years of age.

The results also revealed that domicile, religion, literacy status, financial status & birth order (Table 3&4) have no bearing on the development of psychiatric illness following child birth.

Analysis of data according to the occupation (Table 3) revealed that among house-wives (n=180) psychiatric illness was present in 87(48%) of females while out of 20, only 5(25%) of working women developed psychiatric illness. The postpartum blues and neurotic problems were found to be less among service class women, one of the possible explanation could be that working class women are more confident and have more tolerance to stress. The results in our study were found to be statistically significant.

The analysis of data according to presence of psychiatric illness in the past and family history of psychiatric illness in both first and second degree relatives were found to be significantly related to development of psychiatric illness following childbirth (Table-5 &6). The findings are similar to those of Enomotos²¹ who reported positive family history of mental illness in 26% of patients and Thuuwe²² who reported a higher percentage(47%). The results are contrary to those of Grossman^{23,4} who reported no significant association as far as family history of mental illness is considered.

Table-7 depicts the distribution of presence of psychiatric illness in postpartum period in relation to premorbid personality. Although more persons with introvert 22(76%) and 3(75%) with hysterical premorbid personality suffered from psychiatric illness in postpartum period as compared to other pre-morbid personality type, but the difference was found to be not statistically significant. These findings are similar to those of John^{24,21} but contrary to those of Kumar⁴. Thus one can presume that, subjects who have such personality characteristics, are likely to break down early under stress of childbirth as compared to normal or well adjusted personality types.

The results also revealed that menstrual irregularities, history of dysmenorrhea and unsatisfactory sexual adjustment had a significant relationship with development of psychiatric illness following childbirth (Table 8) It was found that out of 80 subjects who had history of dysmenorrhea 55(68.75%) developed mental illness during postpartum period. Similarly 52(65%) out of 80 subjects with history of irregular cycles developed psychiatric illness. The results were found to be statistically significant. Since menstrual disturbances lead to hormonal changes and there is a dramatic fall in the level of progesterone during postpartum period. It has been reported that women with greater fall in the progesterone level at parturition are more likely to report the blues Nott.²⁵ Thus those who experience difficulties in adjusting the differing hormonal levels premenstruation, will tend to have greater difficulty in adjusting to hormonal levels of postpartum, hence more prone to develop psychiatric illness following child birth.

As far as sexual adjustment between the couple is considered (Table-9) it was found that out of 21 subjects who reported non-satisfactory sexual adjustment, 16(76%) developed illness. The results were found to be statistically significant thereby meaning that sexual maladjustments play a significant role. The findings are

similar to those of Kumar^{4,5}, Cox²⁶ and Watson²⁷ who reported that poor marital relationship was significantly associated with postpartum psychiatric disorders. Sexual adjustment is probably the most common cause of marital disharmony. Moreover, after childbirth, woman fear that they have become less attractive physically and presence of pre-existing poor marital relationship tends to increase this fear and they become more prone to develop psychiatric illness Slater & Roth.²⁸ However, history of use of contraceptives (Table -9) was not found to be related to development of psychiatric illness. The finding was contrary to Kane²⁹ who reported that some women taking oral contraceptives may have more affective disorder in postpartum.

Table 10 reveals the distribution of sample according to parity of the subjects. The results revealed that 67(66%) of the primipara subjects and 25(25%) of the multipara subjects developed psychiatric illness in the postpartum period. The difference was found to be statistically significant. The findings are similar to those of Nott^{25,21} who also reported that postpartum psychiatric disorders were more common in primipara. The findings are opposite to those of Grossman^{23,5} who reported the incidence of postpartum psychiatric disorders was more (60%) in multipara. Thus we can presume that a primipara is more worried and tense on account of added responsibilities and new role of mother and future adjustments to be made, thus, more prone to develop psychiatric illness.

Table-11 depicts distribution according to type of labor. The results revealed that out of 168 subjects who had full term normal delivery only 64(41%) developed psychiatric illness in postpartum period while out of 32 women who had complicated labor like delayed labor, application of surgical appliance and cesarian section 23(72%) of them developed psychiatric illness in postpartum period. The results were found to be statistically significant. Complicated labor gives rise to more stress and contributes in psychiatric illness. This was not in support of the study²³ which reported no significant association with complicated labor.

It is evident from the results that discrepancy between maternal expectation regarding the sex of the newborn child had a significant relationship with the development of psychiatric illness (Table- 12a). The results are similar to those of John²⁴ who also reported that discrepancy in maternal expectation regarding sex of the new born leads to development of psychiatric illness during postpartum period. As regards to the discrepancy in father's expectation about sex of the newborn and development of psychiatric illness in mother following child birth, no significant relationship was found.(Table- 12b)

Table – 13 depicts relationship of development of psychiatric illness following childbirth with wanted / unwanted pregnancy, out of 11 subjects who had unwanted childbirths, 4(36%) developed psychiatric illness. No statistically significance was found in the results. Our findings are similar to those of Grossman²³ who also reported no relationship between development of psychiatric illness and unwanted pregnancy. These findings can not be concluded since the sample size was very small.

VI. Discussion

There is a wide range of reported prevalence of postpartum depression ranging from 0% to almost 60% in different studies from different countries.²⁹

A community based prospective study in India found out the incidence of postpartum depression in rural women to be around 11%³¹ which is comparable to incidence in western culture, where 10-15% of all mothers are affected by postpartum depression.³² In adolescent mothers, postpartum depression was observed to be around 26%.³³ Postpartum psychiatric syndromes are seen more commonly (81%) in patients below 25 years of age. The majority of the Indian women conceive during this part of the childbearing age as the age at marriage is comparatively lower. One can presume that a primipara is more worried and tensed on account of new responsibilities and new role of mother and future adjustments. Our findings are similar to those of Pitt¹ and opposite to that of Kumar⁴ and Paykell⁷ in regards to age as a factor for development of psychiatric illness. 55% of subjects in the age group 30-40yrs have post partum illness.

The family history of mental illness was observed in 25% of the patient.^{34,30} Our findings are similar to those of Enomotos¹², they found positive family history in 26% of patients. Findings also corroborate with Thuuws¹³, who found higher percentage (47%). Findings are contrary to those of Grossman¹⁴ and Kumar⁴, who reported no significant association. This may be explained on the basis of genetics, in psychiatric illnesses, eg. in bipolar affective disorders the concordance rate in monozygous varies between 68%. There is approx. a fourfold increase in concordance monozygotes.

Findings of Nott¹⁵ are different in regards to menstrual disturbances. Menstrual disturbances leads to hormonal changes. In postpartum period, there is a dramatic fall in progesterone. It has been reported that women with greater fall in progesterone at parturition, are most likely to report the blues.¹⁵ Those women who experience difficulties in adjusting to the differing hormonal levels of premenstrum, will tend to have greater difficulty in adjusting to hormonal levels of puerperium, hence are more prone to develop psychiatric illness following childbirth.

Sexual maladjustment play a significant role. Findings are similar to those of Kumar.^{4,7,16,17} They found that poor marital relationship was significantly associated with illness. Sexual mal-adjustment is probably the

most common cause of marital disharmony, due to this it has been considered that when sexual adjustment is poor, marital relationship is also poor. After childbirth, women fear that she has become less attractive to her husband; when poor marital relationship is there, her fear become much more and she is more prone to develop psychiatric illness.¹⁸

It was reported that some women taking oral contraceptives, may have more affective disorders in puerperium.¹⁹

As regards to parity, our findings are similar to those of Nott¹⁵ and Enomotos¹². They all found illness more in primiparae. Findings are opposite to those of Grossman¹⁴ and Paykel⁷. Primiparae are more prone to develop the psychiatric illness following childbirth.⁸

As regards to past h/o psychiatric illness, findings are similar to those of Paykel⁷, Dutta²⁰ and Watson¹⁷. Findings do not support the view of Pitt¹ and Kumar⁴. Many studies document that women who have past history of psychiatric illness are more prone to develop the illness in puerperium. This may be possible explanation for this.^{10,14}

In the view of Grossman¹⁴, who reported no significant association with complicated labor, our study showed that complicated labor gives rise to more stress and contributes in psychiatric illness.

Regarding the discrepancy in mother's expectation, our study had findings similar to those of John²² and do not support view of Grossman¹⁴. Some women are very particular about the sex of the child. They always think about the sex of the child. In our culture, female child is thought to be a burden on parents due to dowry system, most of the women have expected that they will give birth to male child, but when they came to know that child is female, they became very much anxious and depressed.

VII. Conclusion

The present study was undertaken to find out the prevalence of psychiatric illness following childbirth and also to find out the possible risk factors related to it. The results revealed that 46% of the women developed psychiatric illness during postpartum period. Majority 82% developed symptoms during first three days of postpartum, 16% developed in between 4th to 18th day and only 2% developed psychiatric illness after 18 days. It was also found that contrary to the usual belief, psychiatric illness following childbirth was found to be more prevalent in housewives as compared to working women. The results also revealed that history of psychiatric illness in the past, presence of family history of mental illness, presence of menstrual disturbances (dysmenorrhea, irregular menstrual cycles, unsatisfactory sexual adjustment, primipara, complications of labor, discrepancy in the mother's expectation about sex of the child, birth of an unwanted child were found to be possible risk factors for the development of psychiatric illness in postpartum period.

It was also found that certain type of premorbid personalities eg. Introvert, histrionic type were more susceptible to develop psychiatric illness in the post partum period, although the results were not found to be statistically significant.

Thus it can be concluded that above possible risk factors should be kept in mind and special attention and care should be given to such patients and counselling sessions shall be carried out for such women during antenatal period in order to reduce the risk of development of psychiatric illness in post partum period.

LIMITATIONS IN THE STUDY

The size of the sample was small, thus it is not possible to generalise these findings. A multi centre study with large sample will be more informative & conclusive.

References

- [1]. Pitt, B. (1968) Atypical depression following childbirth. *Brit J Psy* 114;1325-1335.
- [2]. Pitt, B. (1973) Maternity blues. *BJP* April 1973, 122;431-433.
- [3]. Dalton, K. (1971) Prospective study into puerperal depression. *BJP* 1971,118;698-92.
- [4]. Kumar, R. & Robson K. Neurotic disturbance during pregnancy and the puerperium: preliminary report of a prospective study of 119 primigravida. In *mental illness in pregnancy and puerperium* (ed. M.Sandler Oxford)1978.
- [5]. Snaith R.P., Constantopoulos, A.A., Jardin M.Y. and Guffin, Mc. A clinical scale for the self assessment of irritability. *BJP* 1978;132:164-71.
- [6]. Tod E.D.M. Puerperal depression. A prospective epidemiological study *Lancet*,2;1264-1266.
- [7]. Paykel E.S. et al. Life events and social support in puerperal depression. *BJP*.1980;136:339-340.
- [8]. Kaplan H.I. & Sadock J.B.1985. *Comprehensive textbook of Psychiatry* IV.
- [9]. International Statistical Classification of Diseases and Related Health Problems. Tenth Revision. 1993.3. Geneva, World Health Organization.
- [10]. Silva L.D., Johnstone E.C. A follow up study of severe puerperal psychiatric illness. *BJP*. 1981;139:346-354.
- [11]. Bhattacharya D., Vyas J.N. Puerperal Psychosis. *Indian J Psy*.11;36.
- [12]. Enomotos S, Nakagawa K., Mizutoni H., Matsumoto K. Department of Neuropsychiatry. *J.P.N. J. Psychosomatic Med*.1984, 24/51:401-408.
- [13]. Thuuwe I. Genetic factors in puerperal psychosis. *BJP*.1974;125:378-85.
- [14]. Grossman K-G. Recent advances I in clinical psychiatry.1971.

- [14]. Nott P.N., Franklin M., Armitage C., Galder M.G. Normal changes and mood in the puerperium. *BJP*.1976;128:379-83.
- [15]. Cox J.L. et al. Prospective study of psychiatric disorders of childbirth. *BJP*.Feb.1982;111-117.
- [16]. Watson J.P. Psychiatric disorders in the pregnancy and first postnatal year. *BJP*. May 1984;453-462.
- [17]. Salter E & Roth M. *Clinical psychiatry* third edition.1979.
- [18]. Kane F.J., Harman W.J., Keller M.H., Ewing J.A. Emotional and cognitive disturbances in the early puerperium. *BJP*.1968;114:99-102
- [19]. Dutta D. et al. Psychiatric illness following childbirth. *Indian J Psy*.1983;128-123.
- [20]. Deirdre Ryan, Psychiatric disorders in the postpartum period. Issue: *BCMJ*, Vol. 47, No. 2, March 2005, page(s) 100*103 Articles
- [21]. John Jacob et al. Psychiatric disturbances during the postpartum period. A prospective study. *Indian J Psy*.1977;19(4):40-43.
- [22]. O'Hara MW, Zekoski EM, Phillips LH, et al. A controlled prospective study of postpartum mood disorders: Comparison of childbearing and nonchildbearing women. *J Abnorm Psychol* 1990;99:315
- [23]. O'Hara MW, Schlechte JA, Lewis DA, et al. Prospective study of postpartum blues. Biologic and psychosocial factors. *Arch Gen Psychiatry* 1991;48:801-806
- [24]. O'Hara MW, Swain AM. Rates and risk of postpartum depression, a meta-analysis. *Int Rev Psychiatry* 1996;8:375-4
- [25]. Altshuler LL, Cohen LS, Szuba MP, et al. Pharmacologic management of psychiatric illness during pregnancy: Dilemmas and guidelines. *Am J Psychiatry* 1996;153:592-606.
- [26]. Kapur R.L, Kapur M. And Carstairs G.M. Indian Psychiatric survey schedule, *Social Psychiatry*,9:61-69.
- [27]. Kapur R.L, Kapur M. And Carstairs G.M. Indian Psychiatric survey schedule, *Social Psychiatry*,9:71-76.
- [28]. Uriel Halbreich, Sandhya Karkun. Cross-cultural and social diversity of prevalence of postpartum depression and depressive symptoms. *J of Affective Disorders*.April 2006;91(2-3):97-111.
- [29]. Shashi Rai, Abhishek Pathak, Indira Sharma. Postpartum psychiatric disorders: early diagnosis and management. *IJP*.2015 July;57(Suppl 2): S216-S221.
- [30]. Chandran M, Tharyan P, Muliylil J, Abraham S. Post-partum depression in a cohort of women from a rural area of Tamil Nadu, India. Incidence and risk factors. *Br J Psychiatry*. 2002;181:499–504.
- [31]. O'Hara MW, Swain AM. Rates and risks of post-partum depression – A meta-analysis. *Int Rev Psychiatry*. 1996;8:37.
- [32]. Troutman BR, Cutrona CE. Nonpsychotic postpartum depression among adolescent mothers. *J Abnorm Psychol*. 1990;99:69–78.
- [33]. Gautam S, Nijhawan M, Gehlot PS. Post partum psychiatric syndromes-an analysis of 100 consecutive cases. *Indian J Psychiatry*. 1982;24:383–6.

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