PREVALENCE OF PSYCHIATRIC MORBIDITIES AMONG WOMEN DURING POSTPARTUM PERIOD IN BLOCK HAZRATBAL, DISTRICT SRINAGAR

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Introduction:

Pregnant women and their families expect the postpartum period to be a happy time, characterized by the joyful arrival of a new baby. Unfortunately, women in the postpartum period can be vulnerable to complications like postpartum hemorrhage sepsis and psychiatric disorders¹. Because of untreated postpartum psychiatric disorders can have long-term and serious consequences for both the mother and her infant, screening for these disorders must be considered part of standard postpartum care². The terms puerperium or puerperal period or immediate postpartum period are commonly used to refer to the first 6 weeks following childbirth³. Despite mounting evidence of the impact of maternal mental health on women and children, prevention, and treatment have been slow to enter into maternal and child health (MCH) programs as rightly described as the neglected “m” in MCH programs⁴. The WHO’s mental health Gap Action Program has recently produced evidence based guidelines for the treatment of depression in the primary health care setting in Low And Middle Income Countries, including in the context of pregnancy and the postnatal period⁵. Despite the launch of India’s national mental health programme in 1982, maternal mental health is still not a prominent component of the programme. Dedicated maternal mental health services are largely deficient in health-care facilities, and health workers lack mental health training. The availability of mental health specialists is limited or nonexistent in peripheral health-care facilities⁶. India is experiencing a steady decline in maternal mortality, which means that the focus of care in the future will shift towards reducing maternal morbidity, including mental health disorders⁷. In J&K the data on postpartum psychiatric disorders at community level is limited and inconsistent. There the study is undertaken to assess the prevalence of psychiatric morbidities among women during postopartum period.

There are mainly three types of postpartum psychiatric morbidities⁸,⁹:

Postpartum blues:

Present with self-limited mild and depressive symptoms such as mood labiality, anxiety insomnia, tearfulness, during the first week after delivery and resolves spontaneously⁸,⁹. Prevalence rate is 30-75%. Its onset and duration is usually in Hours to days. No treatment is required other than reassurance⁸,⁹.
Postpartum depression:
Is a common medical problem and is reported in 8-15% of women after delivery. It has insidious onset in first 1-3 months after delivery depression symptoms are stronger and suicidal ideations are often seen. The problem of postnatal depression not only has immediate adverse effects but episodes of depression later on. Postpartum depression is characterized by tearfulness, despondency, emotional lability, feelings of guilt, loss of appetite, and sleep disturbances as well as feelings of being inadequate and unable to cope with the infant, poor concentration and memory, fatigue and irritability. Some women may worry excessively about the baby’s health or feeding habits and see themselves as, “bad”, inadequate, or unloving mothers. Treatment is usually required.

In India, prevalence rate is 23% in Goa (2002) and 11% in Tamil Nadu (2002). Postpartum depression (PPD) affects 10-15% of all new mothers.

Postpartum psychosis:
Has severe effects on mother, her new born child and family but can also lead to long term morbidity as the condition can persist or may present with recurrent form of psychiatric illness seen in 2-4 weeks after delivery. Its presentation is often dramatic. It usually it usually presents with depressed mood, suicidal thoughts, delirium and hallucinations and is reported in 1-2% of pregnancies. It is regarded as a psychiatric emergency. Its prevalence rate is 0.1-0.2%. Its onset and duration is usually within weeks to months. Hospitalization is usually required.

Infanticide and suicide are observed in 4% and 5% of the women suffering from postpartum psychosis respectively. Enquiring about suicidal and infanticidal thoughts is crucial during the assessment of women suffering from postpartum psychosis.

The risk factors associated with the development of postpartum disorders are: Primigravida; cesarean sections or other perinatal or natal complication; family history of psychiatric illness, especially mother and sister having postpartum disorder; lack of social support/unsupportive spouse, gender preference (male). In addition no documented study has been done in this regard in Kashmir at community level to the best of our knowledge. This study will also provide base line data to formulate policies and strategies for prevention and management of postpartum psychiatric morbidity.

Objectives:
1. To determine the prevalence of postpartum psychiatric morbidities in block Hazratbal.
2. To find out the determinants of postpartum psychiatric morbidities in block Hazratbal.

Materials and Methods:
This was a cross-sectional, community based study conducted in Block Hazratbal, Jammu and Kashmir from 1st April 2017 to 30th September 2018.

Inclusion criteria:
1. Women who are within their post-partum period (within 6 weeks of delivery).
2. Women who are residing in the study area during period of study.

Exclusion criteria:
1. Women who are diagnosed as psychiatric disorder before delivery.
2. Women who did not gave consent.

The sample size was calculated using the formula for single population proportion. As a result, a total of 422 women were included based on the assumption of 95% confidence interval, margin of error 3%, anticipated proportion of psychiatric morbidity in study population=10%, and a nonresponse rate of 10%.

For administrative convenience, the block has been divided into 4 health zones Hazratbal, Harwan, Nishat and Tailbal and 12 sub centers, comprising of 16 health centers. These 16 health centres served as study areas. Total antenatal registrations in block Hazratbal for year march 2016 to April 2017 were 1349 and ANC registrations per month were 114 for that period. To achieve the required sample, consecutive sampling technique was used. From the ANC registration records of subcentre the women who were in the 4th week of postpartum period were visited at their household with the help of an ASHA worker and were interviewed after taking the consent. We approached 422 women and only 400 gave consent for the interview.
Post-partum psychiatric morbidities which include depression and post-partum psychosis in these women were assessed using the MINI (International Neuropsychiatric Interview 2006 English Version 5.0.0 DSM-IV\textsuperscript{20} at 4 weeks after delivery. Postpartum blues were not assessed as they usually resolve spontaneously after first week of delivery\textsuperscript{26}. Study participants who were having depression were referred to psychiatry department of Government Medical College Srinagar for management and treatment and their identity was kept confidential. The socioeconomic status was obtained using Modified Kuppuswamy Scale 2017\textsuperscript{21}. This scale includes the education, occupation of head of the family, and income per month from all sources.

The collected data was entered in Microsoft Excel spreadsheet and analysis was done using IBM SPSS V23. Frequencies were obtained using descriptive statistics using appropriate statistical tools (IBM SPSS V23) for analysis. Parametric tests were used for the data which followed normal distribution and non-parametric tests were used for the data set which did not follow normal distribution. p value <0.05 was considered statistically significant.

Results:
Among the subjects 12.5% belonged to the age group of 20-25 years, 41% belonged to age group 26-30 years, 43% belonged to age group 31-35 years and remaining 3.3% subjects were of 30-40 years age group. Majority of the subjects i.e. 39.75% were illiterate followed by 36.75% who were high school level and higher secondary level and 2.75% had acquired primary education, 8.75% were of middle school level, 12% of the study population were graduate and postgraduate level. Among the study subjects 87% were unemployed and rest 13% were employed. Majority of the subjects 52.5% belonged to nuclear family type and 47.5% belonged to joint family. Majority of subjects 45% belonged to lower middle class followed by 43.25% belonged to upper middle class. 11% were of upper lower class 0.25% were lower class and rest 0.50% were upper class. Majority of the subjects were 98.75% were married, 0.75% were divorced and widows were 0.5%. Majority of the subjects 33.25% were married for 6 years followed by 29.75% of subjects were married for 5 years, 15% of subjects were married for 4 years, 7.75% of subjects were married for 7 years 6.75% were married for 3 years, 3.25% were married for 2 years, 2.25% were married for 8 years, 1.75% were married for 10 years and 0.25% were married for 12 years. Majority of study subjects 77.25% delivered by LSCS and 22.75% were delivered normally at full term.

Among the study participants 45.50% were para 2 and 43.50 were para 1 followed by 9.75% who were para 3 and only 1.25% of women were para 4. Among the study subjects abortion was present in 11.75% and absent in 88.25%. Among the study participants 51.50% mothers delivered female child and 48.50% delivered male child. Among the babies, 1.25% died after birth and 98.75% were alive. Majority of babies i.e. 45.50% had birth order 2 followed by 43.50% babies had birth order 1 and 9.75% had birth order 3 and rest 1.25% had birth order 4. Gender preference (i.e. male child) was present in 52.25% of subjects and in rest 47.75% gender preference was absent. Marital conflict was present in 5.75% of subjects and in rest 94.25% marital conflict was absent. Social support was present in 92.50% of subjects and in 7.50% of subjects it was absent. Among the study subjects 0.75% were having family history of psychiatric disorder and in rest 99.25% subjects family history of psychiatric disorder was absent. Postpartum depression was present in 40 (10.00%) of subjects and in 360 (90.00%) of subjects it was absent. Postpartum psychosis was absent in all 100% of the subjects. Out of 50 participants in the age group of 20-25 years, 4 (8.0%) were having depression and 46 (92.0%) were not having depression Out of 164 participants in the age group of 26-30 years, 18 (11.0%) were having depression and 146 (89.0%) were not having depression Out of 173 participants in the age group of 31-35 years, 18 (10.4%) were having depression and 155 (89.6%) were not having depression Among 13 participants in the age group of 36-40 years none was having depression. Out of the 159 illiterate participants, 17 (10.7%) were having depression and 143 (89.3%) were not having depression. Among the 11 study participants who were primary pass, 4 (36.4%) were having depression pass and 7 (63.6%) were not having depression. Out of 35 subjects who were middle pass, 2 (5.7%) were having depression and 33 (94.3%) were not having depression. Out of the 147 subjects who were matric pass 7 (4.8%) were having depression and 140 (95.2%) were not having depression.

Among the 48 postgraduate/graduate subjects, 10 (20.8%) were having depression and 38 (79.2%) were not having depression. The association between educational status and depression was statistically significant. Out of 348 unemployed participants 34 (9.8%) were having depression and 314 (90.2%) were not having depression. Among the 46 employed participants 6 (11.5%) were having depression and 40 (88.5%) were not having depression. The association between depression and employment status was not statistically significant. Among the 190 study participants who lived in joint family 14 (7.4%) were having depression and 176 (92.6%) were not having depression. Out of 210 study participants who lived in nuclear family, 26 (12.4%) were having depression and 184
women (87.6%) were not having depression. However the association between type of family and depression was not statistically significant. Out of the 180 women who belonged to lower middle class 18 (10%) were having depression and 162 (90%) women from lower middle class were not having depression. Out of 44 women who were from upper lower class, 4 (9.1%) were having depression and 40 (90.9%) were not having depression. Among the 173 women who belonged to upper middle class 18 (10.4%) were having depression and 155 (89.6%) were not having depression. However the association between depression and socioeconomic status was not statistically significant. Out of 395 women who were married 38 (9.6%) were having depression and 357 (90.4%) were not having depression. Among the 3 divorced mothers (recently divorced) 2 (66.7%) were having depression and 1 (33%) was not having depression. None was having depression among the widow mothers (recently widowed). The association between the marital status and depression was statistically significant.

Out of 133 women who had been married for 6 years, 12 (9%) women were having depression and 121 (91%) were not having depression. Among the 119 women who had been married for 5 years 15 (12.6%) were having depression and 104 (87.4%) were not having depression. Out of the 60 women who had been married for 4 years 6 (10%) women were having depression and 54 (90%) were not having depression. Among the 31 women who had been married for 7 years, 3 (9.7%) were having depression and 28 (90.7%) were not having depression. Among the 27 women who had been married for 3 years, 4 (14.8%) were having depression and 23 (85.2%) were not having depression. None was having depression among women who had been married for 2 years, 8 years, 10 years and 12 years. The association between depression and time since marriage was not statistically significant. Among the 174 women who were para 1, depression was present in 19 (10.9%) and absent in 155 (89.1%). Among the 182 women who were para 2, depression was present in 16 (8.8%) and absent in 166 (91.2%). Among the 39 women who were para 3, depression was present in 5 (12.8%) and absent in 34 (87.2%). The association between depression and parity was not statistically significant. Among the 91 women who had normal delivery 9 (9.9%) were having depression and 82 (90.1%) were not having depression. Among the 309 women who delivered by LSCS, 31 (10%) were having depression and 278 (90.0%) were not having depression. The association between mode of delivery and depression was not statistically significant. Out of 353 women who did not have history of abortion 8 (17.0%) were having depression and 345 (83.0%) were not having depression. However the association between depression and history of abortion was not statistically significant.

Out of the 194 women who were having male babies, 10 (5.2%) were having depression and 184 (94.8%) women were not having depression. Among the 206 mothers who had female babies 30 (14.6%) were having depression and 176 (85.4%) were not having depression. The association between depression and sex of the baby was statistically significant. Out of the 395 women who had live babies, 35 (8.9%) were having depression and 360 (91.1%) were not having depression. Among the 5 women who had dead babies, all 5 (100%) were having depression. The relationship between current baby status and depression was statistically significant. Among the 174 women who had baby with birth order of one, 19 (10.9%) were having depression and 155 (89.1%) were not having depression. Among the women who had birth order of two, 16 (8.8%) were having depression and 166 (91.2%) were not having depression. Among 39 women who had baby with birth order of three, 5 (12.8%) were having depression and 34 (87.2%) were not having depression. None was having depression among the women who had baby with birth order of four. The association between birth order and depression was not statistically significant. Among the 191 women who did not have gender preference (male baby), 9 (4.7%) were having depression and 182 (95.3%) were not having depression. Among the 209 women who had gender preference for (male baby), 31 (14.8%) were having depression and 178 (85.2%) were not having depression. The association between gender preference and depression was also statistically significant. Among the 377 women who did not have marital conflict, 34 (9.0%) were having depression and 343 (91.0%) were not having depression. Among the 23 women who had marital conflict 6 (26.1%) were having depression and 17 (73.9%) were not having depression. The association of marital conflict with depression was statistically significant.

None was having depression among the 30 women who did not have social support and among those women who had social support, depression was present in 40 (10.8%) and absent in 330 (89.2%). The association between social support and depression was not statistically significant. Out of 397 women who had no family history of psychiatric disorder, 38 (9.6%) were having depression and 359 (90.4%) women were not having depression. Among the 3 women who had family history of psychiatric disorder, 2 (66.7%) were having depression and 1 (33.3%) were not having depression. The association between family history of psychiatric disorder was statistically significant.
Discussion:-

In our study out of 400 study subjects, depression was present in 40 (10%) of subjects and in 360 (90%) of subjects it was absent. and thus the prevalence of depression among the women in the postpartum period was found to be 10%, which is similar to the findings in the studies by Hamadan and Tamim et al (2011)\(^2\) in United Arab Emirates (10%), Chandran M et al (2002)\(^12\) in Tamil Nadu in India (11%). However Savarimuthu et al (2010)\(^23\) reported 26.3% prevalence of postpartum depression, while in study conducted by Patel et al (2002)\(^11\) in Goa India, 25% of mothers were having depression.

Postpartum psychosis was not seen in any of the participants. This may be due to the fact that our study was conducted in the community and postpartum psychosis is an acute emergency condition mostly seen in maternal and child health institutions soon after delivery. Rachel Vander Kruik et al (2018)\(^24\), conducted a meta- analysis and found that the prevalence of postpartum psychosis is 0.89-2.6 (per 1000) Harlow BL et al (2007)\(^25\) reported that approximately 90% of all postpartum psychotic episodes occurred within the first 4 weeks after delivery.

Majority of the subjects 52.5% belonged to nuclear family type and rest 47.5% belonged to joint family. This may also be termed as homemaker. Out of 348 unemployed participants 34(9.8%) were having depression and among the 46 gainfully employed participants 6(11.5%) were having depression. The association between depression and employment status was not statistically significant. Similar findings were reported by Hamadan and Tamim et al (2011)\(^2\) and Khairabadi et al (2009)\(^27\). Majority 39.75% were illiterate followed by 36.75% who were high school level and higher secondary level and 12% of the study participants were graduate and postgraduate level. 8.75% were of middle school level and rest 2.75% had acquired primary education. The reason for low education is due to gender bias which is still prevalent in our society and the sociocultural influences prevalent in the area and the socioeconomic scale of the parental families. In a study conducted by Kheirabadi et al (2009)\(^27\) in Iran majority of participants were illiterate. The Iranian socio culture values are almost in accordance with those in Kashmir. Out of the 159 illiterate participants, 17 (10.7%) were having depression and among the 11 study participants who were primary pass, 4(36.4%) were having depression.

Out of 35 subjects who were middle pass, 2(5.7%) were having depression. Out of the 147 subjects who were matric pass 7(4.8%) were having depression and among the 48 postgraduate/graduate subjects, 10(20.8%) were having depression. The association between educational status and depression was statistically significant. The high percentage of depression in the illiterate mothers may be due to their low understanding of the entire natlaity process and its sequelae. The findings are similar to the study conducted by Khairabadi et al (2009)\(^27\) and Savarimuthu et al (2010)\(^23\), Prost A et al (2012)\(^28\).

Majority 43.25% subjects were from the age group of 30-36 years followed by 41.0% were from the age group of 26-30 years while 12.5% belonged to age group of 20-25 years and only 3.3% were from age group of 35-40 years. The mean age of the study participants was 30 years (with a standard deviation of 3.71), which corresponds well with the usual childbearing age of females. The reason can be that Kashmiri females usually tend to marry after 25 years which can account for high percentage of subjects 25 years and above. In a study done by Affonso et al (2000)\(^26\), the mean age of the study participants was >25 years. Out of 50 participants in the age group of 20-25 years, 4(8.0%) were having depression and out of 164 participants in the age group of 26-30 years, 18 (11.0%) were having depression. Out of 173 participants in the age group of 31-35 years, 18(10.4%) were having depression and none was having depression in the age group of 36-40 years. Similar findings were reported by Khairabadi et al (2009)\(^27\) and Savarimuthu et al (2010)\(^23\), Prost A et al (2012)\(^28\).

Among the 400 study subjects, majority (87%) were unemployed and rest 13% were employed. It is not out of place to mention that the females labeled as unemployed in the study were performing routine normal household chores and may also be termed as homemakers. Majority of participants were homemakers. In studies conducted by Patel et al (2002)\(^11\), Chandran M et al (2002)\(^12\) and Thanagaph et al (2005)\(^31\) majority of participants were homemakers. Out of 348 unemployed participants 34(9.8%) were having depression and among the 46 gainfully employed participants 6(11.5%) were having depression. The association between depression and employment status was not statistically significant. Similar findings were reported by Hamadan and Tamim et al (2011)\(^2\) and Khairabadi et al (2009)\(^27\).

Majority of the subjects 52.5% belonged to nuclear family type and rest 47.5% belonged to joint family. This may be due to modernization where individual and materialistic interests prevail over social values and nuclear family is considered as a symbol of modernity while as joint family system is considered as old fashioned and young couples don’t like to share the extended responsibilities. However, Kashmir being a Muslim dominated traditional society and people still respect the old culture of joint families which has now become obsolete in modern society. Majority of the participants were from nuclear family in a study conducted by Thanagaph et al (2005)\(^31\). Among the 190 study
participants who lived in joint family 14(7.4%) were having depression. Out of 210 study participants who lived in nuclear family, 26(12.4%) were having depression. This again shows a trend that the mothers who had enjoyed the joint family care during their pregnancy were better off than the mothers who lived in the nuclear families. However the association between type of family and depression was not statistically significant. Thanagapha et al (2005) found that depression was more in nuclear families as compared to joint family. However Shivalli S et al (2014) reported that depression was more in joint family system.

Majority of subjects 45% belonged to lower middle class followed by 43.25% belonged to upper middle class. 11% were of upper lower class, 0.25% were lower class and rest 0.50% were upper class. Out of the 180 women who belonged to lower middle class 18 (10%) were having depression. Out of 44 women who were from upper lower class, 4 (9.1%) were having depression. Among the 173 women who belonged to upper middle class 18 (10.4%) were having depression. It means that middle class mothers were more stressed than other socioeconomic groups. However the association between depression and socioeconomic status was not statistically significant. Gosh A Govswami et al (2011), Rahman et al 2004, El-Sayed et al (2013), Prost A et al 2012 found that low socioeconomic status is associated with depression. Nagpal et al (2008) found that lower and middle socioeconomic status was associated with depression. In a study conducted by Jane Fisher et al (2012) found that middle and low income countries depression has strong association with socioeconomic status.

Majority of study subjects 77.25% delivered by LSCS and 22.75% were delivered normally at full term. The reason for higher percentage of LSCS in our scenario might be that the study population is located within Srinagar municipal limits which is the capital of J&K and has easy accessibility of tertiary care obstetric health services like tertiary hospitals, district hospitals and number of private nursing homes and another reason may be the personal choice. Probing into the mode of delivery and any possible association with depression it was found that out of the 91 women who had normal vaginal delivery, 9 (9.9%) were having depression and out of the 309 women who had undergone Lower Segment Caesarean Section due to any reason, 31 (10%) were found to have postpartum depression. The association between mode of delivery and depression was not statistically significant. Prost A et al (2012) reported that caesarean delivery is associated with postpartum depression in a study conducted by Sohel Baig Sarah et al (2017) in Iran they found that emergency cesarean section was the main factor associated with postpartum depression.

Majority of the study participants i.e. 45.50% were para 2. This was followed by 43.5% participants who were para 1, 9.75% who were para 3 and only 1.25% of women were para 4. Trying to associate mothers parity with postpartum depression it was found that out of the 174 women who were para 1, depression was present in 19 (10.9%) and out of the 182 women who were para 2, depression was present in 16 (8.8%) and out of the 39 women who were para 3, depression was present in 5 (12.8%). These results exhibit a classic pattern as the first pregnancy is usually associated with a threat of being sought forthcoming events. However the association between postpartum depression and parity was not statistically significant. In a study conducted by MunkOslen et al (2014) in Danish population in which they found that highest risk of postpartum psychiatric disorder was found in those mothers who were paraone.

Talake Azale et al (2018) reported that multiparity is associated with postpartum depression.

Among the study subjects history of abortion was present in 11.75% and absent in 88.25%. This could be due to the early registration and better antenatal care. Out of 353 women who did not have history of abortion, 32 (9.1%) were having depression. Among the 47 women who had history of abortion, 8 (17.0%) were having depression. However the association between depression and history of abortion was not statistically significant. Similar findings were reported by Thanagapha et al (2005) however in contrast to this, Stephanie A.M Giannandrea, MD, et al (2013) found that abortion and postpartum depression had strong association.

Majority of the babies 98.75% were alive and 1.25% of babies died after birth. The reason of the low perinatal mortality rate is attributed to the fact that in the recent decade the maternal and child health care delivery services have improved by leaps and bounds and also the much specific programmes under National Health Mission, (Janani Shishu Surakshakaryakaram), JSSY (Janani Shishu Suraksha Yojna) are now being taken seriously by the state. Enquiring about the current baby status or birth outcome, it was found that out of 395 mothers whose babies were live and thriving, 35 (8.9%) were having postpartum depression and among the 5 mothers whose babies died after birth, all 5 (100%) were having postpartum depression. The loss of a child during or after birth is considered a landmark event mentally, physically and socially for the mother who suffered the loss. The death of baby is major factor in making the mother prone to postpartum depression. The relationship between current baby status and...
depression was statistically significant. In a study conducted by Prost A et al (2012)\textsuperscript{28}, it was found death of the baby was associated with depression in the postpartum period. Kumar N et al (2016)\textsuperscript{32} also reported similar findings.

As per birth order of the offspring of the study subjects 45.50% had birth order 2 followed by 43.50% babies had birth order 1 and the rest were in the higher birth order. Among the 174 women who had baby with birthorder of one, 19 (10.9%) were having depression. Among the women who had birthorder of two, 16 (8.8%) were having depression. Among 39 women who had baby with birth order of three were 5 (12.8%) were having depression and 34 (87.2%) were not having depression. None was having depression among the women who had baby with birth order of four. The association between birthorder and depression was not statistically significant. In a study conducted by MunknOlsen et al (2014)\textsuperscript{36} in Danish population in which they found that highest risk was found in those mothers whose babies had birth order of one.

Among the study subjects majority (52.25%) had male gender preference and in rest 47.75% had no gender preference and they had left the outcome to their destiny. Further analyzing the gender preference of the study subjects for male child it was found that out of the 191 women who did not have gender preference (male baby), 9 (4.7%) were having depression. Among 209 women who had gender preference for (male baby), 31 (14.8%) were having depression. This finding has a significant association many females who expected/wanted or their family wanted, male baby but delivered a female child further upsetting their hopes. The reason could be female gender bias due to which male gender is preferred over female in our society. The association between gender preference and depression was also statistically significant. The findings in our study were similar to the study conducted by Patel, 2002\textsuperscript{11}, M. Chandran et al. (2002)\textsuperscript{12}, Upadhyay RP et al (2017)\textsuperscript{43}, TelakeAzle et al (2018)\textsuperscript{40}. However, in a study by Sylvén SM et al (2011)\textsuperscript{41} no significant difference in risk of PPD in relation to baby gender could be shown 6 weeks and 6 months after delivery. However, women who gave birth to a male offspring had a significantly higher risk of self-reported depressive symptomatology 5 days after delivery.

In majority (94.25%) marital conflict was not seen and 5.75% of the subjects admitted having undergone some sort of stress due to marital conflict during the course of recent pregnancy. The reason for low percentage of marital conflict could be that our culture and values promote harmony among family and marital relationships due to which the conflicts cannot find their way in the relationships. The association of marital conflict with depression was statistically significant. Similar findings were reported similar findings were reported by O Hara and Swain (1996)\textsuperscript{13}, Beck (2001)\textsuperscript{45}, Upadhyay RP et al (2017)\textsuperscript{43}, Halim N et al (2017)\textsuperscript{46} also reported that postpartum depression in middle and low income countries is associated with marital conflict due to intimate partner violence.

Conclusion:
As evident from our study postpartum psychiatric morbidities mainly depression is major problem in our community so there is indication for routine screening of mothers in the postpartum period. In our study the main determinants (risk factors) which had significant association with postpartum depression in mothers were female gender of the born child, sex of the born child, current baby status, marital conflict, marital status, educational status and family history of psychiatric disorder. Routine screening is also mandated to avoid, recognize and manage postpartum psychiatric morbidity (depression), risk factors associated, and its consequence on mothers and their developing children.

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