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RESEARCH ARTICLE

A STUDY TO ASSESS THE POSTNATAL DEPRESSION AND ITS ASSOCIATES WITH THE SELECTED SOCIO- DEMOGRAPHIC VARIABLES IN POSTNATAL MOTHERS ATTENDING REGIONAL HOSPITAL

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ABSTRACT

Background: Postnatal depression is a serious mental health problem among women and its consequences have important implications for the welfare of the family and the development of the child. **Objectives:**

The purpose of the study are:

1.To assess depression among the postnatal mothers residing at the regional hospital Kullu and with the families

2.To find out the association between depression in postnatal mothers residing at the regional hospital Kullu with selected demographic variables.

Hypothesis:

H0-There will be no significant association between Postnatal depression with their selected socio demographic variables.

H1- There will be significant association between the Postnatal depression with their selected socio demographic variables.

Methods: Cross sectional descriptive survey design was used. 60 sample were selected at regional hospital Kullu by using simple convenient sampling technique .Edinburgh Depression Scale –Long form used to assess the level of postnatal depression among postnatal mothers. Level of postnatal depression was assessed by using descriptive and inferential statistics.

Result: In this study findings reveal that majority of postnatal mothers in regional hospital Kullu belongs to Hindu religion 96.6%, 1.6% muslim and 1.6% christian Majority of postnatal mothers were lliterate in regional hospital Kullu was 96.6% and 3.3% were illiterate. Majority of postnatal mothers belongs to joint family 61%, nuclear family 26.6% and 3rd generation 11.6%. **Conclusion:** The study finding revealed that postnatal mothers residing at regional hospital Kullu are more affected with depression as compare to postnatal mothers residing with their families. The finding of the study served as a basis for the nursing professionals and students to conduct further studies regarding depression on health status of postnatal mother.

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INTRODUCTION

God could not be everywhere and therefore he made mothers.

- Jewish Proverb

Postnatal depression (PND) also known as Postpartum depression (PPD). Postnatal period or puerperium is the period

following childbirth during which the body tissues, especially the pelvic organs revert back approximately to the prepregnant state both anatomically and physiologically. Thepuerperium starts immediately after birth of the placenta and membranes and continues for 6 weeks. A general expectation is that by 6 weeks after birth a woman's body will have recovered sufficiently from the effects of pregnancy and the process of parturition. A postnatal period or puerperium is an adjustment after pregnancy.

When the anatomic and physiological changes of pregnancy are reversed and the body returns to the normal stage. During this time, women recover from the stress of pregnancy and delivery. Postnatal care covers the core care that every healthy women and healthy baby should be offered during the first 6-8 weeks after the birth. Evidence suggests that postpartum morbidity and its impact on woman's health after child birth is an area of genuine concern. 4 Giving birth to a new life can be very emotional and at the same time very exhausting. But this is also a phase of life wherein nutritious diet, personal hygiene, emotional status, postnatal exercises, family planning, rest, breastfeeding, immunization of the baby and exercise plays a very important role not only to get back in shape but also to bring up a healthy mother and healthy baby. Postnatal care should be main focus.⁵ Affective disorders occur commonly in postpartum period, ranging in severity from mild and transient "baby blues" experienced by 50-80 % of women to postpartum psychosis which affects <1 % of women ⁶. During the postpartum period, up to 85% of women experience some type of mood disturbance. In most women, symptoms are transient and mild, and are referred to as postpartum blues; however, it is the postpartum depression experienced by women, which is more disabling and is a persistent form of mood disturbance.^{7,8}

Postpartum Depression (PPD) is clinical depression which affects women after childbirth. Depression is a common and serious medical illness that negatively affects how you feel, the way you think and how you act. 10 Depression is a mood disorder that affects one in four women at some point during their lifetime. It is a serious mental health problem among women and its consequences have important implications for the welfare of the family and the development of the child.⁹ Symptoms are found to occur anytime from soon after delivery to up to a year post delivery. Effects of postpartum depression include relationship difficulties (particularly marital), disturbed mother-infant interactions including compromised care giving activities, feeding practices, sleep routines, well child visits, vaccinations, safety practices as well as long term negative effects on child health. 11 It is important to identify postnatal depression early because, without treatment, it can lead to ongoing depression. It can also have an impact on maternal competence in childcare and has lasting and serious consequences upon the physical and psychological development of the child. 12 Women afflicted with PPD are at high risk for recurrent depression¹³. Majority of them exhibit symptoms by 6 week postpartum and if not treated, many women continue to be depressed at the end of the first postpartum year. Despite its serious consequences and amenity to treatment, PPD often remains unrecognized¹⁴. Screening helps in identifying mothers at risk and assists in prevention of PPD by means of psychosocial interventions for mothers who screen positive, anticipatory guidance by pediatricians for depressed mothers, intensive care by midwives or Public Health Nurse for mothers with depressive symptoms etc. 15

MATERIALS AND METHODS

Research approach: Quantitative research approach is used in this study.

Research design: Research design is cross sectional comparative research design to assess the level of Postnatal

depression among in postnatal mother in Regional Hospital, Kullu.

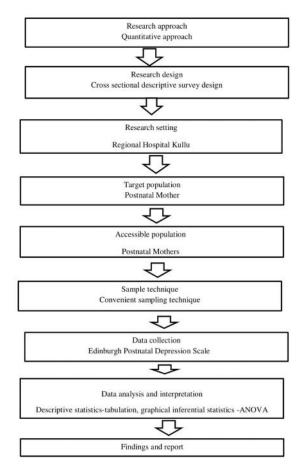


Figure 1. Schematic representation of research design

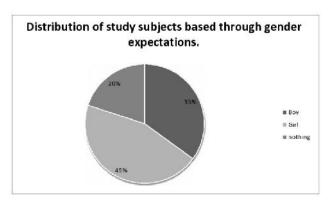


Figure 2. Pie diagram showing gender expectation of postnatal mothers

Variables: Research variables: Postnatal Depression among Postnatal Mothers

Demographic variables: A characteristics of attribute of a study subject such as: age, gender, education level, pattern of financial support, family type, socioeconomic status, monthly family income, religion, mode of delivery, parity, high risk pregnancy, family history of depression, gender expectation, family support, stressful life events, number of children, duration of stay in hospital, admission to hospital, performance of activity, religion, types of family, caregiver present.

Research setting: The setting selected site is Regional Hospital Kullu.

Population for study

Target Population: The population comprised of Postnatal Mothers.

Accessible population: The population comprised of Postnatal Mothers in Regional Hospital Kullu

Sample: Postnatal mother after delivery.

Sample size: Total of 60 postnatal mother were recruited for the study i.e., Regional Hospital, Kullu.

Criteria for sampling technique

Inclusion criteria

Postnatal Mothers
 Those admitted in Regional Hospital Kullu.
 Both Primi and multipara
 Those willing to participate in this study
 Those educated up to 5th standard.

Exclusion criteria

Postnatal Mothers

Those with any psychiatric disorders and any other mental illness.

Sample technique: Convenient sampling technique was used for the study.

Description of data collection instruments: To accomplish the objectives following tools were used:

PART 1: Socio- demographic Performa: It consists of age, gender, religion, educational status, type of family, pattern of financial support, any chronic health problem, number of chronic health problems, preparation of their own health(self-reported health), caregiver present, per capita income, occupation, marital status.

PART 2: The EPDS scale is a 10 item self-report assessment used to identify depression in the postnatal Mother. Each question is scored either 0/1/2/3.

Scoring procedure: Edinburgh postnatal depression scale (EPDS) scoring is given in the following table as:

Content validity: The tools used in the study are a standardized tool that has been used in many previous studies in the Indian and Western countries. The tool was developed by Scottish Health Center in Edinburgh and Livingston and published in Journal of Psychiatric Research, 1987.

Reliability: The scale Edinburgh Postnatal Depression scale (EPDS) used for assessment of Postnatal depression is well validated, its reliability score with high internal consistent (standardized =0.91).

Ethical consideration

Privacy was provided during the data collection and confidentiality was maintained throughout the study.

The investigator introduced herself to the study participants and explained about the study in their local language and informed consent was obtained.

Data collection procedure

- Data collection was done from 9-05-2019 to 25-09-2019. The data collection was done using
- Semi structured socio-demographic proforma.
- Definition Depression Scale (EPDS) which is standardized and self-administered questionnaire. Assistance was provided for subjects who found difficulty in filling the questionnaire.

Plan for Data Analysis

- The collected data was compiled and scored and analysis was with descriptive and inferential statistics will used in the study.
- The distribution of socio-demographic variables will express as frequencies, mean, percentage and standard deviation.
- Comparison of Postnatal Depression was done using ANOVA test.
- Statistical analysis was carried out at 5% level of significance and value less than 0.05 was considered significant.

RESULTS

Both descriptive and inferential statistics were used to analyze the data. The findings of the study were organized and presented under the following sections:

Socio-demographic profile of the study participants: The details of the distribution of the study subjects based on demographic variables are given in **Table-1.** According to the number of postnatal mothers 25(42%) were having postnatal depression and 35(58%)were having no depression.

Figure 2 showed 35% postnatal mothers having expectation for boys, 45% postnatal mothers having expectation for girls and 20% mothers having no gender expectation.

Prevalence of postnatal depression among the postnatal mothers: The distribution of study subjects based on the prevalence of depression is given in the **table-2.** It showed that 25 (41.6%) patients had depression. Whereas, 35 (58.3%) patients found to have no depression.

Association of postnatal depression with selected demographic variables: Association with selected demographic variable was given in table-3. Based on the computation of chi square for the variables like age education, family, socio-economic condition etc. There was no association found between the Postnatal Depression (PND) and socio-demographic variables. Whereas, association was found between occupation (2 =7.56), monthly income (2 =6.19), gender expectation (2 =12.18), stressful life events (2 =10.73), family support (2 =4.73) and Postnatal Depression (PND). Here, as table value/ is less than the calculated value of 2.

Table 1. Socio-demographic characteristics of study participants

(N=60)

| Sr. No | Demographic Variables | Categories | Frequency (f) | Percentage (%) | | |
|--------|---------------------------------------|--------------------|---------------|----------------|--|--|
| 1) | Age | <20 | 7 | 11.66% | | |
| | | 20-25 | 31 | 51.6% | | |
| | | >25 | 22 | 36.66% | | |
| 2) | Education | Uneducated | 2 | 3.3% | | |
| | | Primary | 15 | 25% | | |
| | | Secondary | 23 | 38.3% | | |
| | | Graduate | 12 | 20% | | |
| | | Post graduate | 8 | 13.3% | | |
| 3) | Type of Family | Joint | 37 | 61% | | |
| | | Nuclear | 16 | 26.6% | | |
| | | 3 Generation | 7 | 11.6% | | |
| 4) | Occupation | Housewife | 50 | 83.3% | | |
| , | 1 | Working women | 10 | 16.6% | | |
| 5) | Socio-economic-status | A.P.L | 24 | 40% | | |
| | | B.P.L | 25 | 141.6% | | |
| | | No employee | 5 | 8.33% | | |
| | | No response | 6 | 10% | | |
| 6) | Monthly Income | <5000 | 34 | 56.6% | | |
| , | | >5000 | 26 | 43.33% | | |
| 7) | Religion | Hindu | 58 | 96.66% | | |
| | | Muslim | 1 | 1.66% | | |
| | | Isai | 1 | 1.66% | | |
| | | Sikh | - | - | | |
| 8) | Mode of Delivery | Normal | 45 | 75% | | |
| -/ | | L.S.C.S | 15 | 25% | | |
| | | Forcep | - | - | | |
| | | Vaccume | - | - | | |
| 9) | Gravida | | | | | |
| - / | | Primi | 39 | 65% | | |
| | | Multi | 21 | 35% | | |
| 10) | Complication | Yes | 14 | 23.3% | | |
| - / | r | No | 46 | 76.66% | | |
| 11) | Family History | Yes | 4 | 6.66% | | |
| , | | No | 56 | 93.33% | | |
| 12) | Gender Expectation | Boy | 21 | 35% | | |
| , | F | Girl | 27 | 45% | | |
| | | Compromise | - | - | | |
| | | Nothing | 12 | 20% | | |
| 13) | Family Support | Good | 57 | 95% | | |
| -, | , , , , , , , , , , , , , , , , , , , | Partial | 3 | 5% | | |
| | | No support | - | - | | |
| 14) | Stressful life event | Death | 2 | 3.33% | | |
| 14) | | Disease | 4 | 6.66% | | |
| | | Divorce | - | - | | |
| | | Nothing | 54 | 90% | | |
| 15) | No. of children | No. of male child | 29 | 48.33% | | |
| -0) | 1.0. of Simulation | No of female child | 31 | 51.66% | | |

Table 2. Prevalence of depression among postnatal mothers

| | | N=60 |
|---------|--|-----------|
| Sr. No. | Prevalence of Postnatal depression based on the EDPS Score | Frequency |
| | | (n) |
| 1. | Depression | 25(42%) |
| 2. | No depression | 35(58%) |

Hence the alternative hypothesis that there is a relationship between the socio-economic condition and Postnatal Depression (PND) is accepted.

DISCUSSION

In the present study, the prevalence of postnatal depression was more (26.6%) in normal delivery and was less (13.3%) in LSCS.

The study result of previous studies also discuss about the prevalence of postnatal depression was more in LSCS, and less in the normal delivery. A study conducted by **Kerie S et al** found association of postnatal depression with unplanned pregnancy adjusted odds ratio (AOR) = 4.49, 95% CI (2.31, 8.71), age from 15 to 24 years AOR = 0.420, 95% CI (0.18, 0.98), having a chronic physical illness AOR = 7.71, 95% CI (2.34, 25.44), experiencing death of infant AOR = 4.12, (1.78, 9.51) and unstable marital condition AOR = 6.02, (2.79, 12.99) were significantly associated with postpartum depression 42

¹F=frequency %= Percentage

Table 3. Association of postnatal depression with selected demographic variables

| Age | Variables | | ession | | Depre | | n Chi Square (X ²) | Table Value | DF | Significance |
|--|------------------|----|----------|----|-------|-----|--------------------------------|-------------|-----|--------------|
| Section Sect | A | F | % | F | Ģ | % | | | | |
| 20-25 | Age | - | | | | | 2.26 | 7.01 | | NG |
| Section Sect | | | | | | | 3.26 | 7.81 | 3 | NS |
| Education | | | | | _ | | | | | |
| Uncludated | | 8 | 13 | 14 | 4 | 23 | | | | |
| Primary | | 2 | 2 | | - (| 1 | | | | |
| Secondary | | | | | | | _ | | | |
| Graduate 4 6 8 13 5.34 9.49 4 NS Post Grad. 2 3 6 10 NS Jamily Browner of Samuel and Part | | | | | | | | | | |
| Post Grad. | | | | | _ | | 5.34 | 9.49 | 4 | |
| Family | | | | | _ | | = 0.0 . | 7 | · | NS |
| Joint | | | 1 3 | 0 | - - | | | | | |
| Nuclear | | 13 | 21 | 2 | 1 / | 10 | | | | |
| Socio economic status | | | | | | - | 2.50 | 5 99 | 2 | NS |
| Socio economic status | | | | | _ | | | 3.77 | _ | 110 |
| APL | | | 3 | J | | , | | | | |
| BPL | | | 15 | 1 | 5 2 | 25 | | | | |
| No emp. | | | | | _ | | 0.21 | 7.81 | 3 | NS |
| No response | | | + | _ | | | | 1.01 | | 140 |
| Note | | | | | | | | | | |
| Housewife | Occupation | 1 | 1 | | | - | | 1 | 1 | I. |
| Working women S | | 21 | 3 | 2 | 9 4 | 18 | | | | |
| Monthly Income | | | | | | | 7.56* | 3.84 | 1 | S |
| Solid | | | 1 | | | | I . | l | | I. |
| Solition Solition | | 24 | 40 | 1 | 0 1 | 16 | 6.19* | 3.84 | 1 | S |
| Religion | | 10 | | | | _ | | | | |
| Hindu | | | | | | , | | ' | | II. |
| Sikh | | 22 | 36 | 3 | 6 6 | 60 | 1.59 | 7.81 | 3 | NS |
| Sikh | Muslim | 1 | 1 | - | | | | | | |
| Mode of Delivery Normal 16 | Isai | - | - | 1 | 1 | | | | | |
| Normal 16 | Sikh | - | - | - | - | | | | | |
| L.S.C.S | Mode of Delivery | | • | | | | | | | |
| Forcep | Normal | 16 | 26 | 2 | 9 4 | 18 | 1.48 | 3.84 | 1 | NS |
| Vaccum | L.S.C.S | 8 | 13 | 7 | 1 | 1 | | | | |
| Gravida Primary 14 23 25 41 0.27 3.84 1 NS Multi 9 15 12 20 3.84 1 NS Complication 9 15 12 20 3.84 1 NS Yes 3 5 11 18 1.82 3.84 1 NS Family History Yes 3 35 1 6 2.18 3.84 1 NS Gender expectation 8 10 16 11 18 12.58* 5.99 2 S Girl 11 18 16 26 26 20 2 S Girl 11 18 16 26 20 2 S Family Support 2 - - - - - - - - - - - - - - - - - | Forcep | - | - | - | - | | | | | |
| Primary 14 23 25 41 0.27 3.84 1 NS Multi 9 15 12 20 3.84 1 NS Complication 7 12 20 12 20 12 12 20 Yes 3 5 11 18 1.82 3.84 1 NS Family History Yes 3 35 1 6 2.18 3.84 1 NS Gender expectation 8 1 6 2.18 3.84 1 NS Gender expectation 8 1 18 16 26 2.18 3.84 1 NS Girl 11 18 16 26 20 2 S 2 S Girl 11 18 16 26 2 3 3.84 1 S Family Support 9 15 3 4 4 < | | - | - | - | - | | | | | |
| Multi 9 15 12 20 Complication 1 | Gravida | | | | | | | | | |
| Complication | | 14 | 23 | 2. | 5 4 | 11 | 0.27 | 3.84 | 1 | NS |
| Yes 3 5 11 18 1.82 3.84 1 NS No 19 31 27 45 3.84 1 NS Family History Yes 3 35 1 6 2.18 3.84 1 NS No 21 5 35 - | | 9 | 15 | 1 | 2 2 | 20 | | | | |
| No | Complication | | | | | | | | | |
| Family History Yes 3 35 1 6 2.18 3.84 1 NS No 21 5 35 - | | | | | | | 1.82 | 3.84 | 1 | NS |
| Yes 3 35 1 6 2.18 3.84 1 NS No 21 5 35 - 2.18 3.84 1 NS Gender expectation Boy 10 16 11 18 12.58* 5.99 2 S Girl 11 18 16 26 12.58* 5.99 2 S Compromise - <t< td=""><td>110</td><td>19</td><td>31</td><td>2</td><td>7 4</td><td>15</td><td></td><td></td><td></td><td></td></t<> | 110 | 19 | 31 | 2 | 7 4 | 15 | | | | |
| No | | | | | | | | 1 | | T |
| Sender expectation | | | 1 | | | _ | 2.18 | 3.84 | 1 | NS |
| Boy | | | 5 | 3. | 5 - | | | | | |
| Girl 11 18 16 26 Compromise - - - - Nothing 3 5 9 15 Family Support Good 21 35 36 6 4.73* 3.84 1 S Partial 3 5 - | - | | | | | | | 11 | | T |
| Compromise | | | | | _ | | 12.58* | 5.99 | 2 | S |
| Nothing | | | | | | - | | | | |
| Samily Support Good 21 35 36 6 4.73* 3.84 1 S | | | | | | | | | | |
| Good | | 3 | 5 | 9 | | 15 | | | | |
| Partial 3 5 - - | | | 1 | 1 | _ | - 1 | 1.50% | 100: | 1 - | |
| No Support - | | | | | | _ | 4.73* | 3.84 | 1 | S |
| Stressful life event Death | Partial | 3 | 5 | - | _ - | _ | | | | |
| Stressful life event Death | No Support | - | - | - | - | | | | | |
| Death 6 - 2 3 10.73* 5.99 2 S Disease 4 6 - | | t | 1 | | | | | 1 | 1 | I |
| Disease 4 6 - - 10.73* Divorce - - - - - - - No. of Children No. of Children 10 16 19 31 0.71 3.84 1 NS | | | _ | | 2 | 3 | | 5.99 | 2. | S |
| Divorce - - - No 18 3 36 6 No. of Children Male children 10 16 19 31 0.71 3.84 1 NS | | | | | | | 10.73* | 3.77 | 1 | |
| No 18 3 36 6 No. of Children Male children 10 16 19 31 0.71 3.84 1 NS | | - | | | | + | 105 | | | |
| No. of Children Male children 10 16 19 31 0.71 3.84 1 NS | | | | | | | _ | | | |
| Male children 10 16 19 31 0.71 3.84 1 NS | | 1 | <u> </u> | | 20 | 1 0 | 1 | 1 | 1 | I |
| | | 1 | () 1 | 5 | 19 | 31 | 0.71 | 3.84 | 1 | NS |
| Female children 14 23 17 28 | Female children | | | | 17 | 28 | | | - | |

Table 3: Association of postnatal depression with selected demographic variables²

²X²=Chi square DF=Degree of freedom

Whereas, in our study significant association was found with the between occupation (2 =7.56), monthly income (2 =6.19), gender expectation (2 =12.18), stressful life events (2 =10.73), family support (2 =4.73) and Postnatal Depression (PND).

CONCLUSION

The study finding revealed that postnatal mothers residing at regional hospital Kullu are more affected with depression as compare to postnatal mothers residing with their families. Nurses can play pivotal role in improving home based care, adult day care and routine frequent home visit. The results of the study implicated that nurses should conduct regular screening to identify high risk, needs ,and preferences. Nurses should work with the caregivers to identify the needs of caregivers, care-giving burdens faced by them and to initiate suitable interventions. Nurses should teach caregivers in developing adoptive coping strategies psycho education can be given to the caregivers. Professional counseling and by the assistance of support groups will help in reducing caregiver.

Conflict of Interest statement: Nil

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GLOSSARY OF ABBREVIATIONS

ANOVA Analysis of Variance

EDPS Edinburgh Postnatal Depression Scale

PND Postnatal depression PPD Postpartum depression

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