

To Identify the Level of Postnatal Depression among Postnatal Mothers with Modified Edinburgh Post-Natal Depression Scale

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Abstract: *It is said that a woman is complete only after she becomes a mother to a baby. The birth of the baby is the most celebrated event in a family. Though it is the happiest moment for the family members as well as the mother, the journey of pregnancy and motherhood is very challenging. Pregnancy brings about many physical and mental changes in the woman. Tiredness and exhaustion, sexual problems, abdominal pain, backache are some of the common problems that a woman experiences after a childbirth. Post-natal depression is one of the common but a serious issue faced by the women after a few weeks or months of the delivery. Post-natal depression can bring about anxiety in the mother leading to low self-confidence and self-esteem. This study was conducted to identify the level of postnatal depression among postnatal mothers with modified Edinburgh post-natal depression scale from selected maternity hospitals, Kolhapur. The study followed a Non experimental, Descriptive research design. **Objectives:** To identify the level of postnatal depression among postnatal mothers with modified Edinburgh post-natal depression scale and also to find out an association between postnatal depression among postnatal mothers with their selected socio-demographic variables. **Material and Method:** The population of this study was postnatal mothers admitted in Dr. D. Y. Patil Medical College Hospital and Research Institute Kolhapur. Non-probability convenient sampling method was used to collect 100 samples. Post-natal mothers who were willing to participate and who have completed 7th post-natal day were included in the study. The data was collected by using socio demographic data and Modified Edinburgh Postnatal Depression Scale to identify the level of postnatal depression. The data collection period was taken from 11/07/2021 to 19/07/2021. Reliability of Modified Edinburgh Postnatal Depression scale is checked by using Crombach's alpha. **Results:** The result showed that, in majority of the postnatal mothers (76%) was having moderate level of postnatal depression and minimum (7%) were having severe postnatal depression and (17%) were mild postnatal depression. **Conclusion:** The present study reveals that majority of postnatal mothers had moderate level of postnatal depression. There is significant association between level of postnatal depression among postnatal mothers with their selected socio-demographic variables. Therefore it is concluded that there is need to prevention of postnatal depression among postnatal mothers by providing informational booklet.*

Keywords: Post-natal, depression, pregnancy, mothers, childbirth

1.Introduction

Childbirth is a matter of happiness to everybody. It is an event which is welcomed and celebrated. Mother feels that she has ultimately become a complete woman. Father walks with an air of accomplishment. However, a minority women experience psychological distress following child birth. ^[1] There are high levels of maternal morbidity after child birth. One study has documented that 85% women report at least one health problem 1 weeks after birth and 12-18 months later 76% of women are still suffering from at least one problem. The common problems encountered by women in the postnatal period are tiredness and exhaustion, abdominal pain, backache, painful perineum, sexual problems, haemorrhoids, depression, mastitis if breastfeeding, bowel problems. ^[2] The overall prevalence of depressive symptoms in the postnatal period in developing country i.e., in India is 1,566,280 people are affected. Patel cohort study of women attending a district hospital antenatal clinic in Goa, India, reported a prevalence of 23%. Chandran community cohort study from Tamil Nadu, India, documented prevalence and incidence of 19.8% in West Bengal 43%, Agra 1.56%, Haryana 12%,

Kerala 4%, Pondicherry 36.5% were reported. Depression was reported in 9.1% of women Bangalore city in South India in the WHO study. ^[3] A Study to assess the level of postnatal depression among postnatal mothers admitted in the Krishna Hospital, Karad was conducted by Tukaram B. Zagade, Prasanna Deshpande. There is a need to resolve some of the competing analyses which are related to the postnatal depression. Firstly, few important questions about the nature and duration of postnatal depression need to be answered. These include whether depression experienced by women in the postnatal period differs qualitatively and/or quantitatively from the depression as compared to other times. Secondly, whether depression is caused due to childbirth (lifestyle changes related to caring for a young child). The key research question addressed in this study is whether childbirth leads to an increase in the rate of depression and, if such an increase occurs, then the intensity and duration of this depression needs to be addressed in the postnatal period. ^[4] The future research endeavours need to focus on intervention strategies to prevent postnatal depression that can have adverse effects on mother-infant interaction over the first 12 months after birth and choice of screening

scales for postnatal depression should be based on acceptable levels of sensitivity and specificity. Thus, by taking all the above factors into consideration the investigator felt the need to find out the prevalence of depression among postnatal mothers. ^[5]

2. Materials and Methods

Before data collection procedure, prior permission was obtained from the concerned authorities of Dr. D. Y. Patil Medical College Hospital and Research Institute Kolhapur. Planning of time schedule for data collection was done as per the timings provided by the concerned authorities of the hospitals. Sample size taken for the study was 100 patients. The postnatal mothers who are willing to participate in study and those who have completed 7th

postnatal day were included in the study. Females who had complications of postnatal period and who were not available at the time of data collection were excluded from the study. An informed consent was taken from the postnatal mothers. The study was conducted for the time period from 11/07/2021 to 19/07/2021. The Quantitative, Descriptive survey approach was adopted for this study. The non-experimental, Descriptive research design was selected for this study. The non-probability, convenient sampling technique was used to select samples for the present study. The data was collected using Socio-demographic data and Modified Edinburgh postnatal depression Scale. The Modified Edinburgh postnatal depression was administered to postnatal mothers to assess the depression.

3. Results

Table 1: Findings related to distribution of frequency and percentage of subjects according to their socio-demographic variables

Sr.no	Sociodemographic variables	Frequency	Percentage
		(f)	(%)
1	Age in years		
a	18-22	11	11
b	23-27	27	27
c	28-32	30	30
d	33 & above	32	32
2	Education		
a	Primary	16	16
b	Secondary	35	35
c	Higher secondary	30	30
d	Graduate and above	19	19
3	Habitat		
a	Urban	45	45
b	Rural	55	55
4	Age at marriage		
a	18-22	45	45
b	23-27	45	45
c	28-32	10	10
d	33 & above	0	0
5	Duration of marriage		
a	0-4	45	45
b	4-8	40	40
c	10 & above	15	15
6	consanguineous marriage		
a	Yes	29	29
b	No	71	71
7	Religion		
a	Hindu	45	45
b	Muslim	30	30
c	Christian	12	12
d	Others	13	13
8	Type of family		
a	Joint family	43	43
b	Nuclear family	57	57
	Obstetrical variables		
9	Gravida		
a	1	30	30
b	2	30	30
c	3 & above	40	40
10	Parity		
a	1	45	45
b	2	30	30
c	3 & above	25	25

11	No. of Living children		
a	1	50	50
b	2	39	39
c	3& above	11	11
12	History of previous Abortion		
a	0	62	62
b	1	26	26
c	2 & above	12	12
13	History of still birth		
a	0	81	81
b	1	19	19
c	2 & above		
14	Mode of Delivery		
a	Normal delivery	16	16
b	Caesarean delivery	84	84

Table 1 indicates findings related to distribution of frequency and percentage of subjects according to their socio-demographic variables. It shows that the majority of postnatal mothers (32%) belonged to the age group of 33& above years and minimum (11%) belonged to 18-22 years of age group. Majority of postnatal mothers (35%) had secondary and minimum (16%) primary education. Majority of postnatal mothers (55%) were from rural area and minimum (45%) were from urban area. For (45%) of the postnatal mothers age at marriage was and 23-27 years and none of them married after the age of 33 years. Majority of postnatal mothers (45%) had completed the duration of marriage 0-4 years and for minimum (15%) the duration of marriage was 10 years and above. For majority of postnatal mothers (71%) there was no history of

consanguineous marriage and minimum (29%) were with consanguineous marriage. Postnatal mothers (45%) belonged to Hindu religion and minimum (12%) belonged to Christian religion. When asked about the family backgrounds, majority of postnatal mothers (57%) belonged to nuclear family and (43%) belongs to joint family. Majority of postnatal mothers (40%) were multigravida 3 & above (30%) primigravid as well as 2nd gravida. Majority of postnatal mothers (45%) were primipara and minimum (25%) were para 3 & above. Majority of postnatal mothers have one living child (50%) and minimum (11%) had above three & more living children. Majority of postnatal mothers (62%) have no history of abortion while minimum (12%) was having history of abortion for twice and above.

Table 2: Findings related to frequency and percentage distribution of level of postnatal depression among postnatal mothers

Depression level	Frequency (f)	Percentage (%)
Mild (0-20)	17	17
Moderate (21-40)	76	76
Severe (41-60)	7	7

Table 2 indicates that in majority of the postnatal mothers (76%) were having moderate level of postnatal depression

and minimum (7%) were having severe postnatal depression and (17%) were mild postnatal depression.

Table 3: Findings related to mean, median, mode and standard deviation range of level of postnatal depression

Area of analysis	Mean	Median	Mode	Standard deviation	Range
Level of postnatal depression	27.56	27	26	7.71	61

Table 3 indicates the mean was 27.56, median was 27, mode was 26, standard deviation was 7.71 and range was 61.

Table 4: Findings related to association between depression level of s of postnatal mothers with their selected socio-demographic variables

Sr.no	Socio-demographic variables	Level of depression			Chi-square value		Degrees of Freedom
		Mild	Moderate	Severe	Calculated	Tabulated	
1	Age in years						
a	18-22	4	6	1	10.24	12.59	6
b	23-27	7	17	2			
c	28-32	5	25	1			
d	33 & above	1	28	3			
2	Education						
a	Primary	2	13	1	5.73	12.59	6
b	Secondary	4	29	2			
c	Higher secondary	6	20	4			
d	Graduate and above	5	14	0			

3	Habitat						
a	Urban	10	33	2	2.15	5.99	2
b	Rural	7	43	5			
4	Age at marriage in years						
a	18 to 22	7	33	5	2.41	12.59	6
b	23 to 27	8	35	2			
c	28 to 32	2	8	0			
d	33 & above	0	0	0			
5	Duration of marriage in years						
a	0 to 4	15	27	3	20.76*	9.49	4
b	5 to 9	2	37	1			
c	10 & above	0	12	3			
6	Consanguineous marriage						
a	Yes	8	19	2	2.28	5.99	2
b	No	9	57	5			
7	Religion						
a	Hindu	7	34	4	2.79	12.59	6
b	Muslim	4	24	2			
c	Christian	2	10	0			
d	Others	3	10	0			
8	Type of family						
a	Joint family	6	32	5	2.74	5.99	2
b	Nuclear family	11	44	2			
	Obstetric variables						
9	Parity						
a	1	10	20	0	15.25*	5.99	2
b	2	4	23	3			
c	3 & above	1	34	5			
10	Parity						
a	1	13	29	1	8.7	9.49	4
b	2	3	29	3			
c	3 & above	2	18	5			
11	No. of Living children						
a	1	11	37	2	18.38*	9.49	4
b	2	6	32	1			
c	3 & above	0	7	4			
12	History of Abortion						
a	0	15	45	2	16.95*	9.49	4
b	1	0	24	2			
c	2 & above	0	9	3			
13	History of Still birth						
a	0	15	60	6	0.88	9.49	4
b	1	2	16	1			
c	2 & above	0	0	0			
14	Mode of delivery						
a	Normal	4	10	2	2.3	5.99	2
b	Caesarean	12	67	5			

In this table the researcher analysed and categorized the association between variables depression level of s of samples with their selected socio-demographic variables. Testing of hypothesis at 0.05 level of significance for an association between level of postnatal depression of postnatal mothers with their selected socio-demographic variables.

H₁: There is an association between level of postnatal depression among postnatal mothers with their selected socio-demographic variables at 0.05 level of significance. There was significant association between postnatal depression Level of s with their selected socio-demographic variables, like duration of marriage [$\chi^2_{cal} = 20.76$ $\chi^2_{tab} = 9.49$], gravida [$\chi^2_{cal} = 15.25$ $\chi^2_{tab} = 9.49$], no. of living children [$\chi^2_{cal} = 18.38$ $\chi^2_{tab} = 9.49$], history of abortion [$\chi^2_{cal} = 16.95$ $\chi^2_{tab} = 9.49$]. The calculated chi-

square value was higher than tabulated value at 0.05 level of significance. This indicates that there is significant association between level of postnatal depression with selected socio-demographic variables. **Hence H₁ is accepted** at 0.05 level of significance.

4. Conclusion

The present study reveals that majority of postnatal mothers had moderate level of postnatal depression. There is significant association between levels of postnatal depression among postnatal mothers with their selected socio-demographic variables. Therefore it is concluded that there is need in prevention of postnatal depression among postnatal mothers by providing informational booklet.

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