

# **Prevalence of Postpartum Depression Among** Postnatal Mothers in Kadaghari, Nepal

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#### **ABSTRACT**

Background: Postpartum depression is one of the most common non-psychotic depressions experienced by a post-partum mother as measured by the Edinburg depressive scale with a score of 12-13.

Aim: The major objective of this study was to assess the prevalence of post-natal depression among postnatal mothers.

Methods: A descriptive cross-sectional study was carried out in ward number 09, Kadaghari, Kathmandu. Among total 100 postnatal mothers who were selected through random sampling method. Validated Nepalese version of Edinburg Postnatal Depression Scale was used to screen depressive symptoms. Data was collected after receiving ethical approval letter. Data entry was done using SPSS version 16.

Results: Out of total mothers, prevalence of Postpartum depression among postpartum mother of ward number 09 was nil. However, they all had mild level of Postpartum depression.

Conclusion: Since, all the respondents had mild level of Postpartum depression it becomes one of the public health concerns which has directly or indirectly affected health of many women. As the study showed all the women had mild form of post-partum depression.

**KEYWORDS:** Postpartum depression; Prevalence; Nepal

# INTRODUCTION

Postpartum depression is a form of a mental disorder associated with childbirth during pregnancy or within the first postpartum year that has been identified as a common psychological health problem. According to the accepted diagnostic and statistical manual (DSM-IV), postpartum depression is defined as an episode of non-psychotic depression that begins within one year following childbirth. It is the most common complication in ladies and a mental issue related to labor during pregnancy or inside the principal post-pregnancy year. Maternal depression is progressively perceived as an overall general medical problem and can adversely affect an individual's life which influences work, family, wellbeing, and improvement of the child [1-3].

Approximately 50-80% of women suffered from maternal sadness in the puerperal period; with about 20% of those women developing postpartum depression. Postpartum depression affects about 13% of women around the world. Considering that there are almost four million births in the United States every year, a half-million ladies have this issue each year. The prevalence of

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postpartum depression varied with the prevalence of 10-15% universally. Around 11-40% of postpartum depression has been found in India and Pakistan while it ranged from 3.5 to 63.3% in Asia. In Nepal, about 5-22% of postpartum depression has been found [1,4,5]. The prevalence of postpartum depression varies widely between countries, ranging from 8% to 50% of postpartum mothers. The prevalence of postpartum depression is assessed to be higher in low and center-pay nations than for high-income salary nations basically as numerous women don't look for help or enlighten others concerning their sentiments. The English Medical Bulletin, 2012, detailed that the prevalence of postpartum depression in low-wage countries such as Nepal and Malaysia were less than 13%, compared to 13-50% in other low-wage countries

The maternal mortality and morbidity survey identified suicide as a cause of death (16%) among reproductive age with postpartum depression being a major cause. Among the cofactors, educational background, occupation, pregnancy intention, family support, and pregnancy-related problems/complications were found to be significantly related to postpartum depression [3,5].

The main aim of this study was to assess the prevalence of postpartum depression among postpartum mothers of ward number 09, Kadaghari Kathmandu, Nepal.

#### **MATERIALS AND METHODS**

#### **Study Design and Samples**

A descriptive cross-sectional study was conducted in ward Number 09 at Kadaghari Kathmandu, Nepal. The study was conducted among the postnatal women within six months of postpartum women residing at Kadaghari, ward no 09, Kathmandu. Data collection period was one month from December 2021 to January 2021.

The inclusion criteria of the study were mothers of both primigravida and multi gravida without any previous psychiatric diagnosis. Both non-literate and literate women who have fluency in Nepali speaking or English speaking.

#### **Instruments**

Tools were previously validated, and reliability were calculated previously among Nepalese by several studies. Furthermore, pretesting of tools were done among 10% of sample size. Sample characteristics were made by researcher herself under the guidance of previous literature and experts.

Part I: Socio-demographic questions

Part II: \*Edinburg postnatal depression scale for Postpartum Depression

\*Standard tools were used after taking the permissions

#### Procedure/Data Collection

The ethical approval of the study was obtained from the Nagarik College of Health Sciences. Then written permission (Ref no: 1132) was taken from authority of Kadaghari, Kathmandu 09 to conduct the research. Written informed consent from each participant was taken before starting the interview. Prevalence of 14.7% was taken from a study conducted in Nepal. The sample size was not calculated as the study included all postnatal mothers visiting the Gothatar Health Post for immunization of child. There was total 150 postnatal mothers. However, only 100 samples met the inclusion criteria as majority had previous history of mental illness, some were under medications and some discontinued in between.

## Statistical Analyses

After collection of data, all collected data was reviewed, coded, and checked for completeness, consistency, and accuracy. The collected data was first edited, classified, and tabulated and was entered in SPSS for further analysis. The mean, frequency, percentage, and standard deviation were calculated using the descriptive approach.

# **RESULTS**

#### Sample Characteristics of Respondents

The majority of respondents (79%) were between the ages of 20 and 30, while the minority (21%) was between the ages of 31 and 40. The respondents were all married. In terms of educational attainment, the maximum of persons (35%) have attended primary school, while only 15% have completed secondary school. The majority of the responders (97%) were Hindus and Chhetri (79 percent). The majority of the family (58 percent) lived together. Business accounted for 38 percent of the total, with service accounting for 14 percent. Sixty-two percent of respondents earned less than 25,000, while 7 percent earned > 50,000 as shown in Table 1.

**Table 1:** Socio-Demographic Characteristics of postpartum mothers.

Variables	Frequency	
Age in Years		
20-30	79	
31-40	21	
Marital Status		
Married	100	
Education Status		
Primary	35	
Secondary	24	
Higher secondary	15	
Bachelors	20	
Masters	6	

Religion		
Hindu	97	
Buddhist	3	
Ethnicity		
Brahmin	9	
Chhetri	79	
Newar	8	
Others (Rai, Tamang)	4	
Family Types		
Nuclear family	42	
Joint family	58	
Occupation		
Agriculture	21	
Business	38	
Service	14	
Others (Maid, Finance, Parlour)	7	
Income		
≤ 25,000	62	
25,000-40,000	25	
40,000-50,000	12	
>50,000	1	

# **Postpartum Characteristics of Respondents**

In terms of postpartum characteristics, the majority of women (56%) were primiparous, and 29% experienced a postpartum period of 4-5 months. Surprisingly, all mothers responded exclusively nursed their children. The majority of those

polled (84%) said they had no pregnancy difficulties. However, polyhydramnios, oligohydramnios and macrosomia were reported as complications of pregnancies. The majority of respondents 99% did not have any form of mental illness in the family, whereas only 1% reported presence of autism in the family as shown in Table 2.

Table 2: Postpartum Characteristics of postpartum mothers.

Variables	Frequency	
Postpartum Period		
Less than 1 month	7	
1-2 month	17	
2-3 month	22	
3-4 month	11	
4-5 month	29	
5-6 month	14	
Parity		
Primi-parous	56	
Multi-parous	44	
If, Multi parous specify Gender of first child		
Male	27	
Female	17	
Gender of Recent Child		
Male	72	
Female	28	
Exclusively Breastfeeding		
Yes	100	
Did you have any Pregnancy related Complications?		
Yes	16	
Oligo-hydramnios	6	

Poly-hydramnios	3	
Preterm delivery	4	
Macrosomia	6	
No	84	
Do you or any of your Family Members have Mental Illness?		
Do you or any of your Family	Members have Mental Illness?	
Do you or any of your Family Yes	Members have Mental Illness?	
	Members have Mental Illness?	

### Prevalence of Depressive Symptoms among Post-Partum **Mothers**

Stunningly, there was no evidence of Post-partum Depression

among postpartum mothers which might be due high cut out points of EPDS and the existing work Government of Nepal in uplifting the mental health and sensitization program among postpartum groups as shown in Table 3 and Table 4.

Table 3: Distribution of Respondents in terms of prevalence of Post-partum depression among postpartum.

Prevalence of Postpartum Depression (EPDS >13)	Frequency (Percentage)
Yes	-
No	100

**Table 4:** Distribution of respondents showing levels of postpartum depression.

Levels of Postpartum depression	Frequency (Percentage)
Mild (0-9)	100
Moderate (10-12)	-
Severe (13+)	-

#### **Postpartum Depression and its Association**

As there was no presence of postnatal depression in the current study. All participants were categorized under Mild level of depression. Hence, bivariate logistic regression was performed but no association was found between the variables.

## DISSCUSSION

The current study was focused to assess the prevalence of postpartum depression among postnatal mothers (6 months) following childbirth of Kageshwori, Manahara ward number 09 Kathmandu. Although there was no evidence of postpartum depression in the current study, modest symptoms were detected. Furthermore, when utilizing the EPDS measure, the resultant score was less than 9, indicating that only mild PPD symptoms were present, which differed significantly from the findings of a prior study conducted in Nepal. However, results from study conducted in other part of Nepal showed higher prevalence of Postpartum Depression. In the study conducted in Paropakar Maternity and Women's Hospital, Nepal the prevalence of Postpartum Depression (PPD) was seen among 14.7% mothers [6].

Similarly, another study revealed that 33.7% of postpartum mothers had depressive symptoms and women having family income less that 150 USD and having husband migrated away for works had higher depressive score [7]. This difference in prevalence might be due to the change in demographic components as present study consisted of woman who were with their family members and family income was in higher side as well.

As one's economic status is low, the lack of availability and accessibility of adequate and proper healthcare facilities becomes a major worry of PPD; many of the women are illiterate and have no understanding of risk factors, indications and symptoms, and early

detection and management. Despite an improvement in women's literacy and understanding of PPD, there are still impediments that allow it to flourish, such as fear of PPD, embarrassment, guilt, and so on [8].

The majorities of people in current study (46 percent) have completed primary school and have strong support from their spouses and families. Because all of the respondents have a reliable source of income (66 percent earned < 25,000), they were able to handle the pregnancy difficulty with ease. Therefore, PPD might be less common in this study than in earlier research due to these reasons.

## **Strength and Limitation of Study**

The findings of the study are based on the primary information which was collected using the validated EPDS scale in the community settings. The result of the study could be taken as positive outlook towards the success of various campaign and initiative of different groups from central to peripheral regions as the prevalence rate of PPD was nil. This might be taken as positive aspects and motivate the community workers. Our study has some limitations as this study was conducted in a community setting; women were hesitant to provide accurate information regarding their symptoms due to fear of being judged in their community.

#### CONCLUSION

Moreover, the purpose of the study was to assess the prevalence of postpartum depression among postnatal mothers at Kageshwori Manahara, ward number 09, Kathmandu. According to the data, 100 percent of the women showed no signs of distress or had minimal symptoms that they assumed would go away on their own. As a result of this research, it appears that providing proper health education and knowledge to people about postpartum depression could help them avoid subsequent difficulties. Furthermore, adequate screening throughout and after pregnancy, as well as postpartum psychotherapy that focuses on altering responsibilities and crucial connections, would be useful in alleviating depression symptoms.

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