

## IDENTIFYING RISK FACTORS AND SCREENING OF POSTPARTUM DEPRESSION IN POSTNATAL MOTHERS IN A TERTIARY CARE CENTRE, A PROSPECTIVE STUDY

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### Abstract

**Introduction:** Postpartum depression (PPD) is defined as a depressive episode occurring during pregnancy or until 4-weeks post-childbirth. Studies show that postpartum depression (PPD) affects at least 10 percent of women and that many depressed mothers do not get proper treatment<sup>(1)</sup>. The Edinburgh Postnatal Depression Scale (EPDS) was developed to assist health professionals in detecting mothers suffering from Postpartum depression.

**Aim & Objective:** To Identify the risk factors and screening of Post partum depression in postnatal mothers in a Tertiary care centre.

**Materials and Methods:** A Prospective Study conducted on Postnatal women. Data collected regarding history, complaints, risk factors and Edinburgh postnatal depression scale.

**Results:** In our study, according to Edinburgh Postnatal Depression Scale (EPDS), among postnatal mothers screened 1% of postnatal mothers have postpartum depression, 19% mothers are at risk of postpartum depression, remaining 80% of population screened is devoid of symptoms.

**Conclusion:** The EPDS was tailored to distinguish between the typical stress and fatigue postpartum women often experience and the more severe symptoms of depression. This method of questioning aims to capture the frequency and severity of depressive symptoms, providing clinicians with a clear picture of a patient's mental state.

**Keywords:** Postpartum depression, EPDS Scale, Screening tool

### Introduction:

Postpartum depression (PPD) often goes undiagnosed, and if it remains untreated, it can lead to significant consequences for both mothers and their infants. Postpartum depression (PPD) may appear right after childbirth or can occur in conjunction with antenatal depression, necessitating prompt treatment<sup>(2)</sup>. Various studies indicate

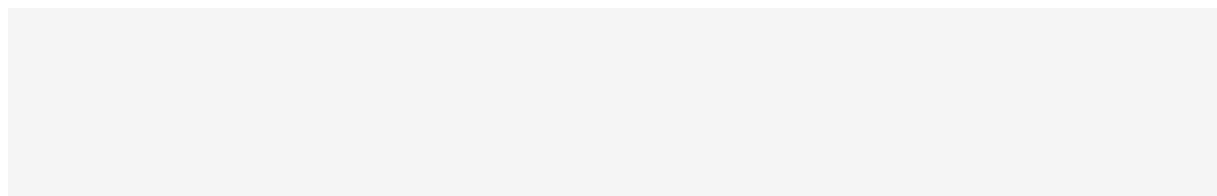
that the incidence of postpartum depression ranges between 10% and 15%, with recent reports from India suggesting a prevalence of 22% <sup>(3)</sup>.

Current research highlights that the burden of perinatal mental health disorders, including postpartum depression, is notably high in low- and lower-middle-income countries. A systematic review encompassing 47 studies across 18 nations found a prevalence rate of 18.6% (95% confidence interval: 18.0–19.20) <sup>(4)</sup>.

The screening for postpartum depression is typically conducted using the "Edinburgh Postpartum Depression Scale" (EPDS), a straightforward and validated 10-point questionnaire<sup>(1)</sup>. This scale is routinely administered to all patients we care for. Our study enrolled patients to explore risk factors and assess the prevalence of postpartum depression among them .

Effective screening tools like the EPDS have shown high sensitivity and specificity for diagnosing postpartum depression. The English version of the scale has established a cutoff score of over 13 out of 30, achieving a sensitivity of 86% and a specificity of 78%.

Untreated maternal depression can adversely affect a child's growth, disrupt the mother-child bond, and heighten the risk of anxiety and depressive symptoms in later childhood <sup>(5)</sup>. Additionally, it may lead to marital discord, problems in mother-child interactions, and behavioral issues in children, thereby indirectly impacting the mental health of the entire family<sup>(6)</sup>.



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**Aim & Objective:** To Identify the risk factors and screening of Post partum depression in postnatal mothers in a Tertiary care centre.

## Methods :

This prospective study was carried out over 1 month at the Department of Obstetrics and Gynaecology in the tertiary care centre, Government medical college ,Anantapur India. We screened 200 postnatal women. We screened postpartum patients on day 3 and day 14 by using a validated questionnaire—EPDS. Patients who scored more than 13 were managed in combined team with psychiatry for depression Women with different complaints, ,it includes EDPS Questionnaire, high risk factors such as H/O psychiatric illness, Family h/o psychiatry illness, medical illness, marital conflicts, domestic violence, recent stressor events ,younger age, were included in this study. Those not willing to participate in the study were pregnant women who are not delivered ,excluded from the study. A detailed history was taken using a predetermined EDPS Scale that identifies women who may be experiencing symptoms of perinatal depression.

ETHICS APPROVAL: Institution review board and ethics committee approved the study protocol. Informed written consent was taken from all the respondents for voluntary participation in local language

## Results : TABLE 1:

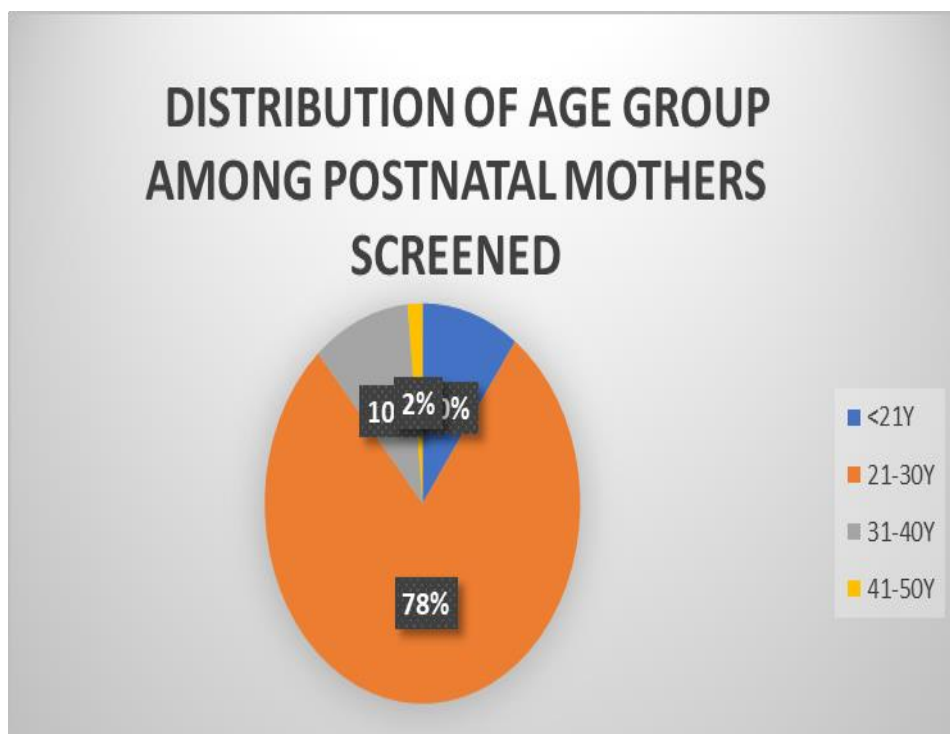
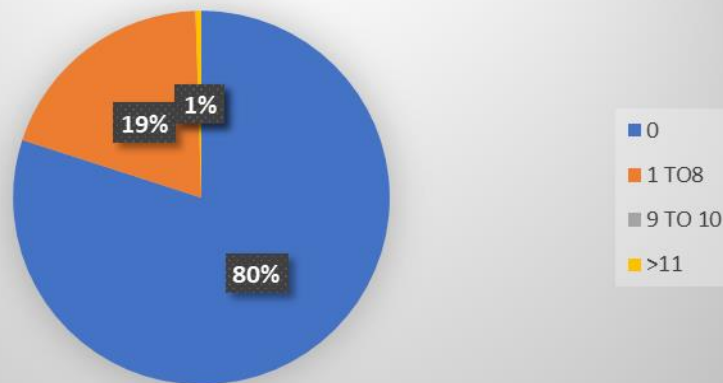
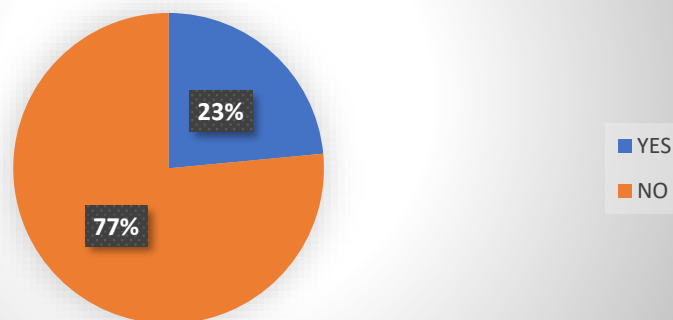


TABLE 2:3:4

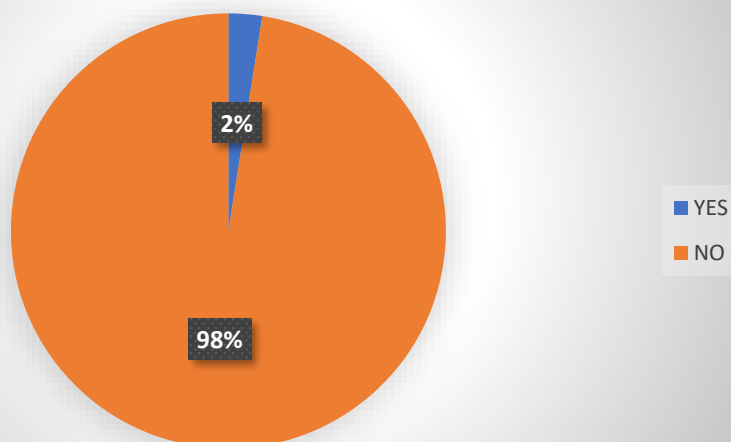
### DISTRIBUTION OF SCORE AMONG POSTNATAL MOTHERS SCREENED



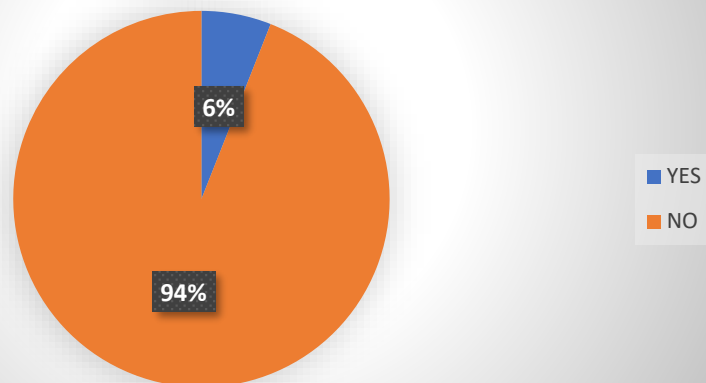
### MEDICAL ILLNESS AMONG POSTNATAL MOTHERS SCREENED



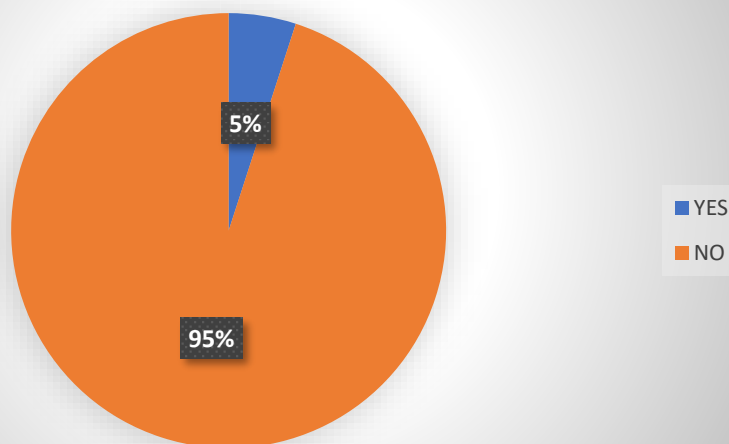
### FAMILY H/O PSYCHIATRIC ILLNESS



### RECENT STRESSORS AMONG POSTNATAL MOTHERS SCREENED



### H/O MARITAL CONFLICTS



### H/O DOMESTIC VIOLENCE

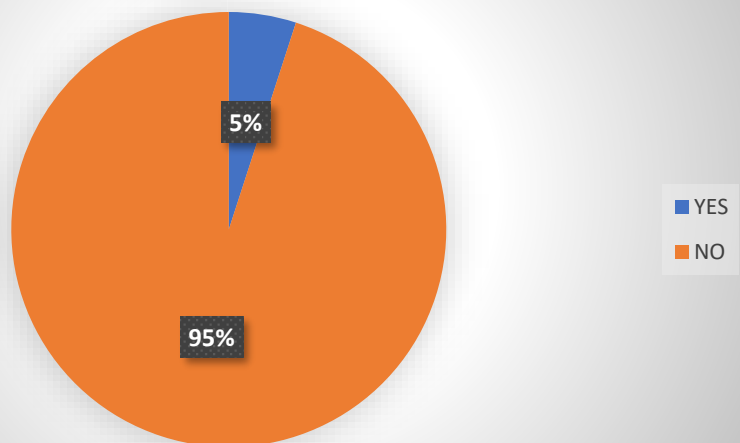


TABLE:5;6;7

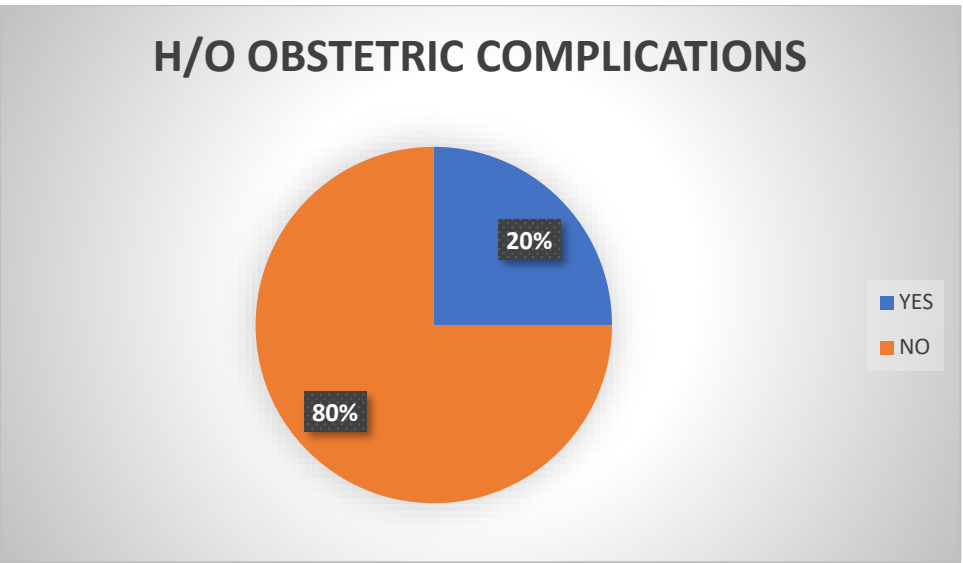
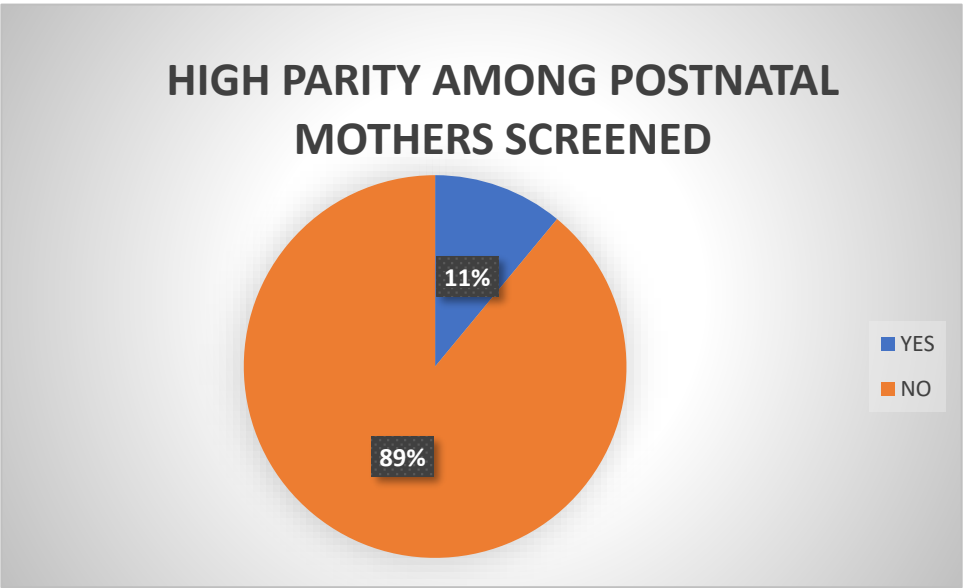


TABLE:8,9

## DISCUSSION :

In recent decades, mental health disorders have become more prevalent resulting in an increase in psychiatric issues across different age groups <sup>(7)(8)</sup> .

Typically, emotional symptoms appear four to six weeks after delivery. The ideal period for screening for postpartum depression is between 2 weeks and 6 months postpartum. A commonly used screening tool is a straightforward 10-item questionnaire that mothers can fill out quickly. This scale scores from 0 (indicating no symptoms) to 30 (indicating severe depression and anxiety), with a cutoff score of 10 frequently used to detect those at risk<sup>(9)</sup>. This assessment is known for its accuracy and reliability

Several key factors contribute to postpartum depression in India, including stressful living conditions, family disputes, financial challenges, and the demands of caring for multiple children, coupled with limited job opportunities. Specific stressors during the postpartum period may include caring for a sick baby, undergoing a caesarean section, worries about physical appearance, managing baby , and having an unsatisfactory experience during delivery<sup>(10)</sup>.

Our study found a 1% prevalence of postpartum depression (PPD) among postnatal mothers, with an additional 19% at risk. This result aligns closely with the findings of Tambawala and Rajput (2019), who highlighted that the prevalence of PPD can significantly vary based on socio-demographic factors in different regions of India<sup>(11)</sup>. Their research emphasizes the influence of education and socioeconomic status, suggesting that our results might reflect the need for targeted screening and intervention strategies, especially in diverse cultural contexts.

In contrast, the systematic review by Upadhyay et al.(2017) indicated a higher overall prevalence of PPD, suggesting that factors such as socio-economic conditions and cultural beliefs significantly affect mental health outcomes for new mothers<sup>(12)</sup>. Their findings emphasize that the context of maternal mental health in India is multifaceted, necessitating a comprehensive approach to screening that considers these variables.

Shivalli and Gururaj's study (2015) among rural women in South India underscored the critical role of educational attainment and social support in mitigating the risks of postnatal depression<sup>(13)</sup>. Similar to their findings, our study identified financial hardships and domestic violence (both at 6%) as notable risk factors for PPD. This highlights the interconnectedness of mental health and socio-economic factors and indicates a pressing need for community support systems that can alleviate these pressures.

Furthermore, Nandini and Bhaskaran's research (2024) corroborates our findings regarding the prevalence of PPD and associated risk factors, emphasizing the necessity of implementing routine mental health screenings within healthcare settings<sup>(14)</sup>. They found that the psychological impact of obstetric complications parallels our observation that 20% of mothers experienced obstetric complications, which can heighten the risk of developing PPD.

Additionally, our demographic analysis revealed that 10% of participants were under 21 years old, supporting existing literature that indicates younger maternal age as a consistent risk factor for PPD. The psychological stress associated with early motherhood, compounded by social and economic pressures, may exacerbate vulnerability to depression, as reflected in both our findings and the referenced studies.

Overall, the comparison of our results with these studies underscores the importance of localized research and tailored interventions to address the unique challenges faced by postnatal mothers in various contexts. The integration of mental health support into prenatal and postnatal care could significantly improve outcomes for mothers, necessitating collaboration among healthcare providers, community organizations, and policymakers to effectively address the mental health needs of new mothers.

## Conclusion :

The study found that a significant proportion of postnatal women experienced symptoms of postpartum depression ,highlighting the need for early detection and intervention.

High risk factors such as history of psychiatric illness, family history of psychiatric illness, younger age, multiparity, recent stressors, marital conflicts ,domestic violence, were strongly associated with postpartum depression.

The use of the Edinburgh Postnatal Depression Scale (EPDS) proved effective in screening and identifying women at risk. Incorporating routine screening for postpartum depression into postnatal care protocols can enable timely support and intervention, improving the mental well-being of new mothers and potentially reducing the long-term impacts of untreated depression.

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