

# The Rate of Perinatal Depression

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**Abstract:** *Perinatal depression is a common condition with significant adverse maternal, fetal, neonatal, and early childhood outcomes. The perinatal period is an opportune time to screen, diagnose, and treat depression. Improved recognition of perinatal depression, particularly among low-income women, can lead to improved perinatal health outcomes.*

**Keywords:** disparities, perinatal depression, pregnancy, women

## 1. Introduction

Perinatal depression is a significant mental and public health problem and may be one of the most disabling disorders among women of childbearing age (1). Perinatal depression is associated with a multitude of negative sequelae for women, children, and families, including poor maternal-fetal attachment, adverse neonatal outcomes (low birth weight, preterm birth, small for gestational age), poor infant attachment, early childhood developmental delays, and relationship strain (2).

Despite the prevalence and sequelae of perinatal depression, most women who present with depressive symptoms are not screened and do not receive adequate treatment. Even in health systems that perform "universal screening" for antenatal depression, only about a third of the charts have documented depression screening scores and provider counseling. These shortcomings are disconcerting, as research suggests that effective treatment is available for antenatal depression and that diagnosed women are more likely to receive treatment (3).

Extant research has identified barriers and facilitators to successfully recognizing and treating perinatal depression. These barriers and facilitators may occur at the patient, healthcare provider, and system levels of care. Timely and appropriate screening and patient-centered treatment are critical to addressing perinatal depression barriers. The purpose of this article is twofold. The first is to present an overview of research related to the impact of perinatal depression on maternal and infant outcomes. The second is to briefly address the topic areas of screening, assessment, diagnosis, treatment, and evaluation of perinatal depression among patients presenting to perinatal healthcare providers (e.g., family practice, pediatric, and obstetric settings).

Because perinatal depression can have serious consequences regarding maternal morbidity and mortality (as well as adverse neonatal and early childhood outcomes), there is significant interest in improving its detection to increase appropriate treatment modalities. Screening for depression has been widely supported as a component of routine obstetric care. In 2015, the American Congress of Obstetricians and Gynecologists (ACOG) released a committee opinion recommending that clinicians screen

patients for depression and anxiety symptoms at least once during the perinatal period using a validated tool (4).

ACOG's guidelines also highlight the importance of coupling screening with appropriate follow-up and treatment as indicated. Recognizing the negative effects of perinatal depression on early childhood outcomes and the critical role pediatric healthcare providers play in providing care, the American Academy of Pediatrics recommends that pediatric providers routinely screen mothers for depression during 1-, 2-, and 4-month well-child visits (5).

The EPDS is the most commonly utilized instrument to screen for perinatal depression. This self-rated, 10-item instrument asks a woman to answer questions based on how she has felt in the previous 7 days ("I have felt sad or miserable; I have been able to laugh and see the funny side of things; things have been getting on top of me") and choose one of four possible responses (6). The EPDS does not focus on some of the somatic symptoms (changes in appetite, sleeping difficulties, energy level) that are more common among perinatal women in the absence of a mental disorder. Its psychometric properties are the most established of any depression screening tool and it has been validated in diverse perinatal populations (7). The aim of the study was to

## 2. Material and Methods

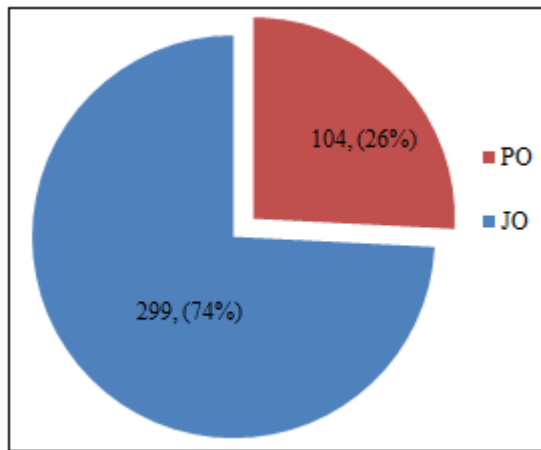
This is a prospective study carried out at "Queen Geraldine Maternity Hospital" in Tirana, Albania over the period 2010-2012. Edinburgh Postnatal Depression Scale (EPDS), was used to screen for depression.

### Statistical analysis

Data was analyzed using the Statistical Package for the Social Sciences (SPSS) (version 20). Categorical variables are presented as absolute frequencies and percentages. Chi-square test was used to compare the proportions between categorical variables. A *p-value*  $\leq 0.05$  was considered statistically significant. The statistical tests are two-sided.

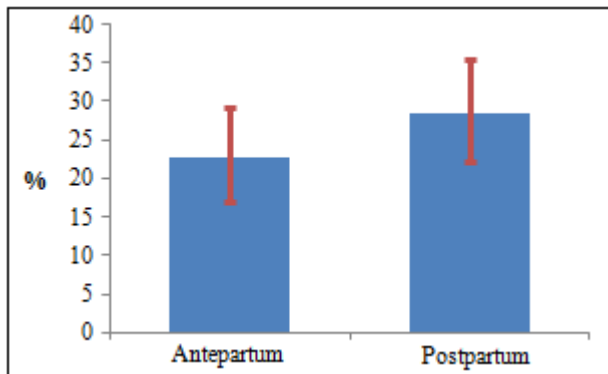
## 3. Results and Discussion

The study included 403 women with average age 29 ( $\pm 4.5$ ) years. The prevalence of depression for the total study population was 26%. (figure 1).



**Figure 1:** Prevalence of Depression for the total of participants

With antepartum depression were diagnosed 44 or 22.8% of the 193 women of this period (95% CI 17.082 - 29.373) whereas with postpartum depression 60 or 28.6% of 210 women of this period (95% CI 22.34-35.531) without a significant difference between them ( $\chi^2 = 0.2$   $p = 0.6$ ). (figure 2).



**Figure 2:** Prevalence of antepartum and postpartum Depression (error bars 95%CI)

Understanding risk factors for perinatal depression is essential for healthcare providers to more easily identify women at risk for developing this condition. Many risk factors for perinatal depression have been identified in the literature. Women with a lifetime history of depression are at increased risk for perinatal depression. Furthermore, antenatal period depression is the most significant risk factor for postpartum depression development. Depression and anxiety are highly comorbid in nonpregnant samples, with nearly 60% of women diagnosed as depressed also meeting diagnostic criteria for an anxiety disorder (8).

A recent systematic review, which examined the relation between maternal anxiety and depression in 11 studies, found anxiety to be one of the strongest associations with antenatal depressive symptoms (9). Depression disproportionately affects low-income women. Research suggests that poverty is a powerful predictor of depression irrespective of race/ethnicity. Research has found that nearly 40% of mothers participating in Head Start, a program serving predominantly low-income preschool children and their families, may experience depression. Other studies have concluded that race and ethnicity are risk factors for

perinatal depression. This is particularly concerning, as research also demonstrates that ethnic minority patients are less likely to obtain care for depression than White patients and are less likely to receive clinically appropriate treatment when they do access care (10).

Stress is another established risk factor for perinatal depression. Stress can be conceptualized in many ways, and the majority of studies that have examined the relation between stress and depression have conceptualized stress as stressful life events (divorce, serious illness, death in the family) or daily hassles (work hassles, time pressures, financial strain) (11). A significant body of research has examined life stress as a predictor of perinatal depression, with most studies finding positive associations.

A sizeable body of research supports a significant relation between social support and perinatal depression. There is a moderate correlation between social support and perinatal depression across many studies when assessing social support available to perinatal women as support from any source (12). However, perinatal women who report the absence of a supportive partner have been found to be at greatest risk for perinatal depression across multiple studies. It is important to mention that many studies do not adequately control for important confounders of this relation (income, education, socioeconomic status, relationship violence).

Experiencing intimate partner violence (IPV) is also a predictor of perinatal depression. Extant research has found that between 3% and 9% of women experience IPV during pregnancy, though there are well-established risk factors associated with higher rates of abuse during pregnancy, including young age, low socioeconomic status, single marital status, and minority race/ethnicity (13). Research conducted in low-income perinatal women found that up to 85% of women experiencing IPV during pregnancy also screened positive for depressive symptomatology on the Edinburgh Postnatal Depression Scale (EPDS); these women were at significantly increased risk for suicidal ideation (14).

Additional risk factors for perinatal depression include pregnancy complications. Numerous studies have examined the relation between cesarean delivery and postpartum depression, with the majority of studies concluding mode of delivery is not a significant predictor; however, research has demonstrated that women with a strong preference for vaginal delivery but who require a cesarean delivery are at increased risk for postpartum depression in the early postpartum period (15). Further, neonatal factors may be associated with an increased risk for depressive symptoms, for example, infant colic and inconsolable crying are associated with maternal depressive symptoms (16).

Regardless of the instrument used to screen for depression, it is important for healthcare providers to be aware that a positive screening result is not diagnostic for depression. The EPDS was developed specifically to screen for symptoms of possible perinatal depression. Screening techniques aim to identify women at risk for perinatal depression and in need of further diagnostic assessment.

Depressive symptoms in the perinatal period range from maternity blues (commonly seen in the postpartum period) to major depressive disorder and postpartum psychosis. Approximately 50% to 80% of new mothers experience maternity blues within the first few days after delivery.<sup>1</sup> Symptoms may include crying, sadness, and mood swings; however, these symptoms most often resolve within 1 to 2 weeks. Major depressive disorder (MDD) is defined by one or more major depressive episodes (MDE) along with the lifetime absence of mania and hypomania (17). An MDE is constituted by a patient's report of at least five of nine symptoms present during the same 2-week period. Specific to MDD in the perinatal period, the *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition* (DSM-5) expanded the previous DSM-IV qualifier "with postnatal onset" to include "with peripartum onset." (18).

In addition to MDD onsets occurring within 4 weeks after delivery, the DSM-5 now includes onsets over the course of the entire pregnancy. This change recognizes that a high prevalence of "postpartum" depressive episodes has an onset in pregnancy and persist (often becoming more severe) throughout the postpartum period (19). Further, this revision dispels the previously held belief that the pregnancy timeframe was protective against the development of MDD and acknowledges the importance of healthcare providers in addressing mental health throughout the perinatal period.

#### 4. Conclusion

Perinatal depression is an important public health issue with well-documented consequences for mothers, children, and families. Timely screening and appropriate treatment are requisite to prevent needless suffering. Healthcare providers caring for perinatal women and their children are uniquely situated to address perinatal depression given women are more likely to access healthcare during this time. Providers caring for underserved women and families are well positioned to improve maternal and early childhood outcomes for families at greatest risk of healthcare disparities. Efforts to expand access to care and facilitate the coordination of care in the perinatal period may serve to improve perinatal outcomes.

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