Perinatal depression screening: Improving outcomes during COVID-19

BY KELLY ELLINGTON, DNP, RN, APRN, WHNP-BC, RNC-OB

Abstract: Recommendations for social distancing and avoidance of mass gatherings during the COVID-19 pandemic have correlated with increased depressive symptoms in some individuals, such as loss of interest in daily activities, sleeplessness, or sadness. Perinatal depression screening using established, validated tools can aid with early diagnosis, guide management strategies, and optimize outcomes for pregnant women and their families. Identifying at-risk patients early in pregnancy and implementing a plan of care with appropriate mental health resources such as counseling or therapy have been shown to decrease clinical depression by more than 40%.

Keywords: COVID-19, Edinburgh Postnatal Depression Scale, EPDS, perinatal depression, pregnancy, screening tool

Perinatal depression includes major and minor depressive episodes occurring during pregnancy or in the first 12 months after delivery. Episodes of perinatal depression affect one in seven expectant women.1,2 The US Preventive Services Task Force (USPSTF) has issued updated clinical guidelines for quick identification of at-risk populations early in pregnancy. Clinical risk factors correlated with risk of perinatal depression include a personal or family history of depression, history of abusive relationships (physical or sexual), undesired or unplanned pregnancy, managing stressful life events, pregestational or gestational diabetes, and pregnancy complicated by elevated risk factors.3,4 (See Risk factors for perinatal depression.)

During the COVID-19 pandemic, nurses have played a vital role as an integral part of the healthcare team to help improve mental health outcomes for patients. RNs are uniquely positioned as valuable healthcare team members to identify depressive or anxiety symptoms during pregnancy and in the postpartum period.5 Depressive symptoms may include irritability, uncontrolled crying episodes, lack of joy in daily activities, difficulty sleeping, moodiness, and feelings of hopelessness.

Identifying depression early in pregnancy allows an opportunity for treatment such as counseling, which can improve outcomes. Unidentified or untreated depression can change how a woman experiences her pregnancy and how she interacts with family members at home.2-4 During pregnancy, a woman’s mental health may have consequences for fetal neurobehavioral development that subsequently...
impacts child development. Research underpins the importance of proactively considering the effects of women’s mental health on child development during the perinatal and postpartum periods. 

Untreated perinatal depression and other mood disorders can have devastating effects on the mother, her baby, and her family. The USPSTF recommends that clinicians refer pregnant and postpartum patients at increased risk of perinatal depression for counseling interventions. The American College of Obstetricians and Gynecologists (ACOG) recommends that all healthcare providers use a validated instrument to assess mood and emotional well-being during a comprehensive postpartum visit. 

**Literature review**

Depression screening alone can have clinical benefits, although initiation of treatment or referral to mental health providers offers maximum benefit. Clinical providers in obstetrics and gynecology practices as well as primary care offices should be prepared to initiate medical therapy, refer patients to appropriate behavioral health resources when indicated, or both. 

The CDC reviewed data from the Pregnancy Risk Assessment Monitoring System (PRAMS), which evaluated how often healthcare teams inquire about depression at obstetric visits during pregnancy and in the postpartum period. The PRAMS project used a patient-reported questionnaire to collect state-specific, population-based data on maternal attitudes and experiences before, during, and shortly after pregnancy. PRAMS results found 9% of pregnant women and 10% of postpartum women met the criteria for major depressive disorders. 

---

### Risk factors for perinatal depression**1-6**

**Depression during pregnancy**
- Maternal anxiety
- Life stress
- History of depression
- Lack of social support
- Unintended pregnancy
- Domestic violence
- Lower socioeconomic factors
- Smoking
- Relationship issues

**Postpartum depression**
- Depression during pregnancy
- Anxiety during pregnancy
- Experiencing stressful life events
- Traumatic birth experience
- Preterm birth
- Limited social support
- History of depression
- Breastfeeding challenges

---

The American College of Obstetricians and Gynecologists (ACOG) recommends that all healthcare providers use a validated instrument to assess mood and emotional well-being during a comprehensive postpartum visit. 

Healthcare team members, including RNs, providers, and support staff, are challenged to stay abreast of current evidence-based recommendations. During COVID-19, the use of telemedicine has been vital for improving outcomes of pregnant women. The Edinburgh Postnatal Depression Scale (EPDS) is a self-reported, validated screening tool to integrate high-quality, evidence-based healthcare to evaluate patients for depression. EPDS screening is recommended by professionals during pregnancy and in the postpartum period. 

The 10-question EPDS is a valuable and efficient way of recognizing patients at risk for perinatal depression. The EPDS is easy for patients to complete and has proven to be an effective screening tool. An EPDS depression screening score of 13 or higher is a positive screening for depression. Mothers who score above 13 are likely to be experiencing a depressive illness of varying severity. The EPDS score should not override clinical judgment. A careful clinical assessment should be carried out to confirm the diagnosis. 

The scale indicates how the mother has felt during the previous week. You can download a copy of the EPDS online at www.cope.org.au/wp-content/uploads/2018/02/EPDS-Questionnaire.pdf. 

ACOG guidance includes screening for depression as an ongoing process, rather than a single encounter. Services and a supportive plan of care should be tailored to each woman’s individual needs. 

The evidence supports follow-up maternal care with the obstetric healthcare team within the first 3 weeks postpartum as a best practice. ACOG recommendations include an initial perinatal screening assessment during pregnancy, ongoing care, and a comprehensive postpartum visit, ideally by 12 weeks after giving birth. 

---

52 | Nursing2021 | Volume 51, Number 10 | www.Nursing2021.com
Implications for practice

The specific aim of the perinatal depression screening quality improvement (QI) project was to implement USPSTF and ACOG recommendations for depression screening in pregnancy. EPDS screening is widely established as a postpartum screening tool. EPDS screening during pregnancy is a new, updated guidance for best practice for improving patient outcomes.

The QI project had an ambitious goal of implementing EPDS screening at the new obstetrical patient visit and offering an updated list of local mental health community resources with expertise in perinatal depression. Another goal included electronic medical record (EMR) enhancements to capture Current Procedural Terminology (CPT) coding for EPDS screening to underpin the QI project sustainability.

Triage RNs identified an increase in the number of “walk in” patient visits for symptoms of depression, which were amplified by the COVID-19 pandemic. Updated mental health community resources for counseling, therapy, or providers are vital to support this increased demand. Nursing care is supportive of evidence-based initiatives and plays a significant role in improving patient outcomes by applying best practices.

Methods

The plan–do–study–act (PDSA) QI method provided a structure for evaluation of the QI practice enhancements. The PDSA model is widely established as a healthcare improvement method. The theoretical framework for utilizing a PDSA model is based on its reliability when compared with other methods in the peer-reviewed literature.

The QI project captured one group of subjects, N = 77, by random convenience sampling based on patients’ desire to participate in data collection. Subjects were recruited from available adult female new obstetrical patients during a 4-week data collection window. New obstetrical patients were scheduled for visits 3-5 days per week. The average number of new obstetrical patients varied, with a mean of four. All patients were early in pregnancy at 8-10 weeks’ gestation at the new obstetrical visit. (See Descriptive analysis.)

Eligible patients were those in their first trimester of pregnancy who were 18 years or older and presenting for new obstetrical care. Exclusion criteria were patients who had an existing diagnosis of depression or a treatment plan currently in place with a mental health provider. Patients’ ages ranged from 19 to 43 years. An Institutional Review Board review was completed, and the QI project was exempt.

Quantitative data collected via an electronic survey was used with a Likert scale to assess overall satisfaction with implementing perinatal depression screening during pregnancy. The electronic survey was distributed to 15 healthcare team members. The survey rated overall satisfaction with EPDS screening, EMR upgrades, and an educational pamphlet for local community mental health resources.

Before the QI project started, staff received education that included a review of at-risk criteria for perinatal depression and the project goals. Office administrative staff, nursing staff, medical assistants, and providers attended this educational meeting. Follow-up data by a retrospective medical record review captured the completion of mental health referral services. At-risk patients whose EPDS screening was positive for depression were given a mental health referral, and the EMR problem list was updated. The triage nurse protocol included follow-up visits with patients to assist with mental health referrals. Patients and triage nurses received contact information for emergency mental health services.

| Descriptive analysis |
|----------------------|
| **Age** | N  |
| 18-30 | 42 |
| 31-40 | 31 |
| >40 | 4 |
| **Race** |  |
| Native American or Alaska native | 2 |
| Asian | 11 |
| Black | 23 |
| Other Pacific Islander | 5 |
| White | 36 |
| **Ethnicity** |  |
| Hispanic or Latino | 22 |
| Not Hispanic or Latino | 55 |

Note: <18 years = excluded; total participants: N = 77.
Results
Descriptive statistics were used in the QI project data analysis. A total of 24 patients were identified as at risk or had a positive EPDS screening for perinatal depression. All 24 patients were given an immediate mental health referral. A retrospective medical record review identified three patients who later declined referral.

More than 50% of patients reported COVID-19-related social isolation as a contributing factor for depressive symptoms. Patients with no risk factors for depression or a negative EPDS were encouraged to follow up if symptoms developed. All new obstetrical patients were encouraged to follow up immediately if new onset or worsening of depressive symptoms occurred.

A survey of nursing staff and providers found that 100% were very satisfied with EPDS at the new obstetrical visit. Office nursing staff and providers already were familiar with EPDS because it was used at the postpartum visit. Survey results noted that familiarity with the EPDS tool was beneficial for implementation.

Barriers identified during the QI project data collection included the refusal of some patients to participate. Clinical staff feedback included some concern about staying on schedule. The use of EPDS perinatal screening at the new obstetrical appointment helped clinical staff and providers stay on time with the office schedule.

The average new obstetrical visit is approximately 45 minutes. The EPDS estimates were less than 5 minutes for patients to complete the screening tool. The EPDS screening was given to patients when they checked into the office. Clinical staff members were encouraged to provide feedback, and in-office adjustments were made if appropriate.

Discussion
Implementation of Healthy People 2030 initiatives is important for overall health. One Healthy People 2030 goal under development includes an initiative for increased perinatal depression screening. Maternal, infant, and child initiatives focus on improving outcomes for mothers, infants, and children. Women’s health before, during, and after pregnancy can have a positive effect on infants’ health and welfare.

Improving quality and availability of community-based mental health resources and counseling helps to improve health equity, overall well-being, and quality of life. The QI project translated evidence-based practice focused on improving national benchmarks.

The QI project provided a framework for translational research of USPSTF guidelines in a private, free-standing, outpatient obstetrics/gynecology setting in suburban North Carolina. Lessons learned underpin the critical importance of early and quick identification of at-risk populations for perinatal depression to improve overall pregnancy outcomes for mothers and their families.

The EMR upgrade helped to sustain the project design by completing prefilled templates with proper CPT coding. Providing an updated local community resource education pamphlet for new obstetrical patients helped to increase the completion of mental health referrals, as evidenced by retrospective medical record reviews of nursing triage protocols.

Fear and anxiety about the unknown nature of a novel disease like COVID-19 may increase patients’ stress and can contribute to the onset of depressive symptoms. Public health interventions such as social distancing may increase feelings of isolation. RNs are critically important for improving health outcomes. Proactive assistance to help patients cope with stress may help alleviate mental health challenges.

The COVID-19 pandemic requires the active engagement of all healthcare team professionals to improve outcomes for pregnant women and their families.

REFERENCES
1. American College of Obstetrics and Gynecology. ACOG redesigns postpartum care. 2018. www.acog.org/About-ACOG/News-Room/News-Releases/2018/ACOG-Redesigns-Postpartum-Care#isMobileSet=false.
2. United States Preventive Services Task Force. Perinatal depression: preventive interventions. 2019. www.uspreventiveservicestaskforce.org/uspstf/recommendation/perinatal-depression-preventive-interventions
3. Curry SJ, Krist AH, Owens DK, et al. Interventions to prevent perinatal depression: US preventive services task force recommendation statement. J Am Med Assoc. 2019;321(6):580-587.
4. Centers for Disease Control and Prevention. PRAMStat system. www.cdc.gov/prams/prams-data/work-directly-PRAMS-data.html.
5. Kinsella MT, Monk C. Impact of maternal stress, depression & anxiety on fetal neurobehavioral development. Clin Obstet Gynecol. 2009;52(3):425-440.
6. American College of Obstetrics and Gynecology. Screening for perinatal depression: committee opinion 757. 2018. www.acog.org/Clinical-Guidance-and-Publications/Committee-Opinions/Committee-on-Obstetric-Practice/Screening-for-Perinatal-Depression.
7. Office of Disease Prevention and Health Promotion. HealthyPeople 2030. U.S. Department of Health and Human Services. https://health.gov/healthypeople

Kelly Ellington is an assistant professor at the University of North Carolina Wilmington College of Health and Human Services School of Nursing in Wilmington, N.C.

The author has disclosed no financial relationships related to this article.

DOI-10.1097/01.NURSE.0000791712.24103.2e

Copyright © 2021 Wolters Kluwer Health, Inc. All rights reserved.