# **Universal screening for postpartum depression:** an inquiry into provider attitudes and practice

Rachel Delatte, MD; Hongyuan Cao, BS, MS; Samantha Meltzer-Brody, MD; M. Kathryn Menard, MD

**OBJECTIVE:** This study evaluated the use of the Edinburgh Postnatal Depression Scale (EPDS) for detection of postpartum depression (PPD) in an academic medical center outpatient population and assessed knowledge and attitudes of obstetric providers regarding detection and treatment of PPD.

**STUDY DESIGN:** A total of 512 charts were reviewed for demographic, medical, and psychiatric information. Also, a validated e-mail survey was sent to University of North Carolina obstetrical providers (n = 47).

**RESULTS:** Our chart review revealed that providers documented the EPDS score in 39% of visits and counseled patients on their score and/or depression in 35% of visits. The survey results show that all respondents agree that they are responsible for screening for PPD, and 94% are confident in diagnosing PPD.

**CONCLUSION:** The majority of obstetric providers are not documenting the EPDS in their postpartum assessment, yet they feel responsible for and confident in screening for postpartum depression.

**Key words:** Edinburgh Postnatal Depression Scale, postpartum depression, screening, survey

Postpartum depression (PPD) affects 10-20% of pregnant women and can have significant consequences on the well-being of both mother and infant.1 Studies in the pediatric literature have shown that depressed mothers report less use of safety practices, such as using car seats and safety latches on cabinets, and less healthy child development practices, such as reading to and playing with the child. Additionally, depressed mothers report more frequent use of harsh discipline practices and a higher incidence of infantile colic.2,3 Unfortu-

From the Department of Obstetrics and Gynecology, Division of Maternal Fetal Medicine (Drs Delatte and Menard), Department of Psychiatry (Dr Meltzer-Brody), and the Department of Statistics and Operations Research (Cao), University of North Carolina at Chapel Hill, Chapel Hill,

Presented at the Annual Meeting of the North Carolina Obstetrical and Gynecological Society, June 2008, the Ross Society Annual Meeting, April 2008 and the 29th Annual Meeting of the Society for Maternal Fetal Medicine, January 2009.

Received Aug. 9, 2008; revised Oct. 26, 2008; accepted Dec. 10, 2008.

Reprints: Rachel Delatte, MD, 118 Old Maple Ln., Durham, NC 27713. rdelatte@unch.unc.edu.

0002-9378/free © 2009 Mosby, Inc. All rights reserved. doi: 10.1016/j.ajog.2008.12.022

nately, PPD is frequently undiagnosed and therefore untreated.

Screening tools, such as the Edinburgh Postnatal Depression Scale (EPDS), improve the detection and treatment of PPD.<sup>1,4</sup> The EPDS is a 10-item scale, typically self-administered, that has been validated and used in the United States and at least 23 other countries.<sup>5</sup>

In March 2006, the Department of Obstetrics and Gynecology paired with the Department of Psychiatry to institute universal screening for PPD. The EPDS was administered to all patients attending their 6-week postpartum visit, and an algorithm was distributed to obstetric providers. The algorithm describes that for a score less than 10, no further action is required; for a score of 10-12, the provider should counsel the patient and provide an educational pamphlet. For a score greater than 12, the provider should assess the need for treatment with medication, counseling, or immediate psychiatric referral. Medication doses and referral information to our readily available Perinatal Psychiatry Center are included on the algorithm. We evaluated the use of the EPDS for detection of PPD and assessed the knowledge and attitudes of providers in regard to detection and treatment of PPD.

#### MATERIALS AND METHODS

In the first phase of our study, we examined the electronic medical records of 512 postpartum patients seen from March 1, 2006, to July 17, 2006. All women who were seen for a postpartum visit were included, even if they had no dictated note. Women were excluded from the study if they were billed as a postpartum visit but were actually seen for some other reason. Demographic, medical, and psychiatric information was obtained through structured chart abstraction. When available, the EPDS score was recorded, as well as counseling and/or psychiatric referral.

We investigated whether women with a positive screen (score of > 10) were referred to our Psychiatry Department and whether this visit was attended. In the second phase of our study, we adapted a previously validated survey to e-mail format.6 This survey included open-ended and multiple-choice questions and was sent to 47 providers, including attending and resident physicians, certified nurse midwives (CNMs), and nurse practitioners (NPs).

## RESULTS **Chart review**

Of 512 charts examined, 458 met inclusion criteria. The patient population studied was low risk, with 90% delivered at full term. Patients reported a 12% incidence of depression, 9% incidence of treatment with psychiatric medications either before or during their pregnancy, and < 1% incidence of a past history of PPD. Providers documented the EPDS

### TABLE 1 Results of the EPDS score

EPDS score	n (%)
0-9	146 (82%)
10-12	16 (9%)
> 12	16 (9%)

EPDS, Edinburgh Postnatal Depression Scale. Delatte. Universal screening for postpartum depression. Am J Obstet Gynecol 2009.

score in 39% of visits and counseled patients on their score and/or depression in 35% of visits. Of patients with a documented EPDS, the mean score was 5.8 (Table 1).

There was a significant difference in documentation of the EPDS among the 4 provider types examined (P < .0001)(Table 2). Higher EPDS scores resulted in increased patient counseling (P <.003) (Table 3) and increased referral to psychiatry. Of patients with a normal score on the EPDS (< 10), 97% (143/ 146) were not referred to psychiatry. Of those with a very high score on the EPDS  $(\geq 13)$ , 75% (12/16) were referred to psychiatry.

#### Survey

The e-mail survey had a 77% response rate. Ninety-four percent of respondents were confident with diagnosing PPD when using both clinical assessment and a screening instrument. Respondents varied in their level of comfort with treating PPD: 76% were confident with initiating treatment with medications, and 70% were confident with providing counseling and

### TABLE 2 **Documentation**

Provider	n (%)
Resident	20 (17%)
Attending	80 (42%)
CNM	65 (67%)
NP	16 (94%)

CNM, certified nurse midwife; NP, nurse practitioner. Delatte. Universal screening for postpartum depression. Am J Obstet Gynecol 2009.

education about PPD. All respondents agreed with the statement that diagnosing PPD is their responsibility.

#### **COMMENT**

The burden of suffering associated with PPD warrants universal screening to facilitate prompt treatment. This study reveals that, although the Department of Obstetrics and Gynecology instituted a novel program to ensure universal screening in 2006, our providers are not using the EPDS to screen for PPD. Furthermore, use varied broadly according to the type of provider that saw the patient as well as the degree of severity of the EPDS score.

Our survey showed that providers feel responsible for and confident with screening for PPD using both clinical judgment and a screening tool. Prior studies have shown that instituting an organized approach to screening for PPD can make a difference in the rate of detection. 7-9 A retrospective study is only as good as the documentation of providers. The true number of providers using the EPDS may be actually higher than what we were able to extract from the medical records. However, our study is the first to evaluate in a 2-part approach both providers' practices and their attitudes concerning screening for PPD. This allowed us to comprehensively assess and begin to remove the barriers to effective, universal screening for PPD.

This study defines the gap between what providers know should be done and what is actually being done at postpartum visits. By presenting the results of this study at a departmental meeting, we have increased provider awareness of the need for increased use of the EPDS. We plan to increase use of the EPDS additionally by having our nurses document the EPDS as a vital sign. We have increased communications between the Departments of Obstetrics and Gynecology and Psychiatry to facilitate continued referral of patients to the Perinatal Psychiatry Center. Future research may focus on whether these measures affect the use of the EPDS and referral patterns to the Perinatal Psychiatry Center.

#### TABLE 3

# Counseling

Counseled, n (%)	Not counseled, n (%)
27 (84%)	5 (16%)
78 (53%)	68 (47%)
	n (%) 27 (84%)

EPDS, Edinburgh Postnatal Depression Scale. Delatte. Universal screening for postpartum depression. Am I Obstet Gynecol 2009.

#### **ACKNOWLEDGMENTS**

We thank Karen Dorman, RN, BSN, MS, and Julie Ann Decoster.

#### REFERENCES

- 1. Gaynes BN, Meltzer-Brody S, Lohr KN, et al. Perinatal depression: prevalence, screening, accuracy and screening outcomes. Summary, evidence, report/technology assessment no. 119. Rockville, MD: Agency for Healthcare Research and Quality; 2005:1-7.
- 2. McLearn KT, Minkovitz CS, Strobino DM, Marks E, Hou W. Maternal depressive symptoms at 2 to 4 months post partum and early parenting practices. Arch Pediatr Adolesc Med 2006;160:279-84.
- 3. Akman I, Kuscu K, Yurdakul Z, Solakoglu M, Orham L, Karabekiroglu A. Mothers' postpartum psychological adjustment and infantile colic. Arch Dis Child 2006;91:417-9.
- 4. Evins GG, Theofrastous JP, Galvin SL. Postpartum depression: a comparison of screening and routine clinical evaluation. Am J Obstet Gynecol 2000;182:1080-2.
- 5. Eberhard-Gran M, Eskild A, Tambs K, Opjordsmoen S, Samuelson SO. Review of validation studies of the Edinburgh Postnatal Depression Scale. Acta Psychiatr Scand 2001;104: 243-9.
- 6. Thomas N, Sleath BL, Jackson E, West S, Gaynes B. Survey of characteristics and treatment preferences for physicians treating postpartum depression in the general medical setting. Community Ment Health J 2007;44:47-56.
- 7. Gordon TE, Cardone IA, Kim JJ, Gordon SM, Silver RK. Universal perinatal depression screening in an academic medical center. Obstet Gynecol 2006;107:342-7.
- 8. Fergerson SS, Jamieson DJ, Lindsay M. Diagnosing postpartum depression: can we do better? Am J Obstet Gynecol 2002;186:899-902.
- 9. Buist A, Condon J, Brooks J, et al. Acceptability of routine screening for perinatal depression. J Affect Disord 2006:93:233-7.