

Abstract

Purpose: The primary purpose of this study was to evaluate acceptability by new mothers of postpartum depression (PPD) screening and education about community resources by hospital-based perinatal nurses. A secondary purpose was to determine further screening for PPD that women received by community providers in the first few weeks after birth.

Methods: The study design was descriptive. As per standard practice on the unit, all new mothers were screened for depression the night before hospital discharge using the Edinburgh Postnatal Depression Scale (EPDS). New mothers identified as high risk for depression by EPDS scores greater than or equal to 10 ($n = 75$) and a comparison group of mothers at low risk for depression with EPDS scores less than 10 ($n = 26$) were recruited from an academic health sciences center. Participants were contacted by telephone 2 to 4 weeks later and asked about the acceptability of screening for depression and education about community resources by hospital-based perinatal nurses, as well as if they had received further screening for depression by community providers. Descriptive and correlational statistics were used to analyze data.

Results: The majority of new mothers found it acceptable to be screened for depression and educated about community resources by hospital-based perinatal nurses. Many new mothers were not asked about depressive symptoms by community providers. There was no significant correlation between demographics and depression risk.

Clinical Implications: New mothers viewed depression screening and receiving information on community resources as a positive part of their care. Communication between inpatient and community caregivers should be improved so that new mothers can benefit from seamless depression assessment, evaluation, and treatment.

Key words: Depression; Mass screening; Nurse; Postpartum period.

Screening for Postpartum Depression by Hospital-Based Perinatal Nurses

M. Cynthia Logsdon, PhD, WHNP-BC, FAAN, Krista Vogt, BSN, RN, Deborah Winders Davis, PhD, John Myers, MSPH, PhD, Felicia Hogan, BSN, RN, Diane Eckert, BSN, RN, and Katlin Masterson, BSN

Postpartum depression (PPD) is the most common pregnancy-related complication, affecting 10% to 15% of new mothers (American College of Obstetricians and Gynecologists [ACOG], 2015; Le, Perry, & Sheng, 2009). Postpartum depression is associated with undesirable outcomes for the mother, child, and entire family because it diminishes a woman's functioning and parenting abilities (Hansotte, Payne, & Babich, 2017; Segre, Pollack, Brock, Andrew, & O'Hara, 2014). This can lead to long-term consequences such as impaired maternal-infant bonding and infant development, marital discord, and even maternal suicide (Wilkinson, Anderson, & Wheeler, 2017). More maternal deaths are caused by suicide related to PPD than due to hemorrhage and hypertensive disorders combined (ACOG, 2015). Children of mothers who have experienced PPD also suffer long-term consequences that include having more difficulties in their cognitive, social-emotional, and language development, as well as having general psychopathology later

in life (Baisch, Carey, Conway, & Mounts, 2010; Canuso, 2008; Dolbier, Rush, Sahadeo, Shaffer, & Thorp, 2013; Van der Zee-van den Berg, Boere-Boonekamp, Ijzerman, Haasnoot-Smallegange, & Reijneveld, 2017). Therefore, detection and treatment of PPD in new mothers is essential to minimize risk of associated adverse outcomes.

Despite the high prevalence and negative implications of PPD, healthcare facilities do not provide adequate resources to women with high-risk needs such as those with PPD (Berg, 2012). Screening for PPD is not a standard part of in-hospital maternal care in the United States (Wilkinson et al., 2017). Many PPD cases are undetected because new mothers may be reluctant to initiate discussions about their feelings to their healthcare provider (ACOG, 2015; Van der Zee-van den Berg et al., 2017). Professionals may fail to ask new mothers about PPD symptoms (Van der Zee-van den Berg et al.). As a result, approximately half of women with PPD do not receive any mental health treatment (Le et al., 2009). Multiple women's health

*Postpartum depression
is the most common
complication among
childbearing women.*



Wavebreak Media / Alamy Stock Photo

organizations and task forces emphasize the importance of screening for detection of PPD and of ensuring follow-up care. The Association of Women's Health, Obstetric, and Neonatal Nurses (AWHONN, 2015) states that all health-care facilities should have policies and protocols in place to ensure screening for mood disorders, such as PPD, is a standard part of new mothers' care. The United States Preventive Services Task Force (2016) and ACOG (2015) have released congruent statements urging that all pregnant and postpartum women have this recommended screening at least once. In ACOG's 2008 guidelines, strategies are provided on how the healthcare team can introduce validated PPD screening tools and referral services to new mothers. Systems should be in place to initiate follow-up care (if indicated by screening results) to ensure new mothers receive needed treatment, and the postpartum plan of care should be reviewed with new mothers during the perinatal period to improve care after discharge (ACOG, 2008, 2015, 2018; Hansotte et al., 2017; Kozhimannil, Adams, Soumerai, Busch, & Huskamp, 2011). The most recent professional guidelines support these recommendations (e.g., the Consensus Bundle for Maternal Mental Health; Maternal Health and Safety Initiative of the Alliance for Innovation on Maternal Health) (ACOG, 2018; Council on Patient Safety in Women's Health Care, 2018; Kendig et al., 2017).

There are many effective tools for PPD screening such as the Edinburgh Postnatal Depression Scale (EPDS). According to ACOG (2008), this tool has demonstrated its effectiveness in multiple studies across the globe; it has been an effective screening tool in the perinatal period, which has implications for earlier detection of depression in new mothers rather than just in the postpartum period.

Screening for postpartum depression by nurses is not common practice on maternity units in hospitals in the United States.

Identifying depression earlier leads to better long-term outcomes for mothers and their children (Neiman, Carter, Van Sell, & Kindred, 2010; O'Hara & Wisner, 2014). Therefore, screening for and detecting PPD before hospital discharge would be optimal. Nurse scientists have stated that depression screenings should be the responsibility of nurses in obstetrics, pediatrics, and family practice (Logsdon, Tomasulo, Eckert, Beck, & Dennis, 2012; Segre et al., 2014). Hospital-based perinatal nurses have extensive contact with new mothers and are involved in the earliest part of postpartum care, placing them in a unique and optimal position to screen new mothers for PPD. These nurses could also teach new mothers about mental health treatment and community support resources (Segre, O'Hara, Arndt, & Beck, 2010).

Studies related to nurses and screening for PPD have been equivocal. Some researchers have found that nurses are accepting PPD screening, that nurses believe depression screening of perinatal women is important and is a duty, that they are willing to screen new mothers for depression, and that the screening process is cost-effective (Rush, 2012; Segre et al., 2014; Wilkinson et al., 2017). In a survey of 520 nurses, 93.7% agreed that they believe nurse-performed PPD counseling would be beneficial, and 75% were willing to attend training for PPD counseling (Segre et al., 2010). Although some nurses have

a positive attitude toward providing PPD screening and counseling, this finding is not universal. In a study in a community hospital in the southern United States, 58% of nurses had rarely or never taught new mothers about PPD and 42% of these nurses had never been told that they were expected to teach new mothers about PPD in the hospital setting (Logsdon, Foltz, Scheetz, & Myers, 2010). These findings were replicated in an academic health sciences center (Logsdon, Eckert, Tomasulo, & Myers, 2013). Results may partly be attributed to lack of implementing evidence-based guidelines for PPD screening and education in the hospital setting. Implementing PPD evidence-based guidelines for hospital-based perinatal nurses could improve identification and adequate intervention for depression in new mothers.

Our research team of academic and community partners collaborated with international nursing experts to develop evidence-based guidelines on PPD to promote screening, teaching, and referral of women prior to hospital discharge by hospital-based perinatal nurses (Logsdon et al., 2012). This study sought to determine whether the screening and education of women prior to hospital discharge were acceptable to new mothers, and if screening for PPD continues for new mothers in the community after hospital discharge.

Methods

Design and Ethics

The design of the study was descriptive. Approval was obtained from the academic health sciences center research committees and from the university institutional review board. Study participants provided informed consent.

Sample and Instrument

New mothers identified as high risk for depression by the EPDS with scores greater than or equal to 10 ($n = 75$) and a comparison group of mothers at low risk for depression with EPDS scores less than 10 ($n = 26$) were recruited from the mother-baby unit of an academic health sciences center. The academic health science center has about 1,700 births per year. Inclusion criteria were age ≥ 18 years and English speaking. The EPDS (Cox, Holden, & Sagovsky, 1987) is a 10-question scale that assesses the severity of depressive symptoms experienced by mothers in the past week. A score of 10 or above has been predictive of at least mild symptoms of PPD (McCabe-Beane, Segre, Perkhounkova, Stuart, & O'Hara, 2016).

Procedure and Instrumentation

As per hospital policy, all new mothers were screened with the EPDS by hospital-based perinatal nurses the night before the planned hospital discharge. They were designated as high- or low-risk for PPD based on their EPDS score. Women who were considered high-risk ($n = 75$) based upon EPDS screening received a

referral for a home visiting program, unless the evaluation of the obstetrician determined that the referral was not needed. Two to 4 weeks after hospital discharge, participants ($n = 101$) were contacted by the research staff and asked questions on acceptability of the questions and education by the perinatal nurses, demographic information, and about further screening received by community providers. Demographic information included: marital status, ethnicity, age, type of insurance (private or public), number of pregnancies, and number of births. Questions asked during the telephone interview were as follows:

1. Was it acceptable for a hospital-based perinatal nurse to ask you about symptoms of PPD before hospital discharge?
 2. Was it acceptable for a hospital-based perinatal nurse to provide education about places or people in the community that could help you if you started to experience symptoms of PPD?
 3. Since discharge, have you had any symptoms of PPD?
 4. Since leaving the hospital, has your doctor or your baby's doctor asked you about depression or feeling blue?
- Acceptability and other data were coded as yes/no.

Table 1. Demographics

Categorical Variable	Overall	Low Risk $n = 26$ (27.5%)	High Risk $n = 75$ (70.5%)	p-value
Marital Status				0.795
Single	62 (61.4%)	17 (65.4%)	45 (60.0%)	
Married	33 (32.7%)	7 (26.9%)	26 (34.7%)	
Separated	6 (5.9%)	2 (7.7%)	4 (5.3%)	
Ethnicity				0.133
White	47 (46.5%)	11 (42.3%)	36 (48.0%)	
Black	33 (32.7%)	11 (42.3%)	22 (29.3%)	
Hispanic	12 (11.9%)	4 (15.4%)	8 (10.7%)	
Other	11 (10.9%)	0 (0.0%)	11 (14.7%)	
Age Group				0.661
<20	24 (23.8%)	6 (23.1)	18 (24.0%)	
20-30	55 (54.5%)	12 (46.2)	43 (57.3%)	
>30	22 (21.8%)	8 (30.8)	14 (18.7%)	
Insurance				0.737
Public	55 (54.5%)	14 (53.8%)	41 (55.4%)	
Private	43 (42.6%)	11 (42.3%)	32 (43.2%)	
Uninsured	2 (2.0%)	1 (3.8%)	1 (1.4%)	
Continuous Variables		Low Risk Mean (SD)	High Risk Mean (SD)	p-value
Gravidity	3.0 (3.2)	2.9 (6.1)	3.0 (2.0)	0.823
Parity	2.2 (1.4)	2.3 (1.3)	2.2 (1.5)	0.936
Age	26.0 (6.1)	26.4 (6.1)	25.8 (6.1)	0.689
Edinburgh Postnatal Depression Scale	12.2 (3.5)	3.8 (3.0)	14.2 (3.6)	<0.001**



New mothers find screening for symptoms of depression acceptable by hospital-based perinatal nurses.

Table 4. Association Between Depressive Symptoms and Questions

Outcome	Low Risk N= 26 (25.7%)	High Risk N=75 (74.3%)	OR (95% CI) Low:High	p-value
Acceptability of being asked about PPD	25 (96.2%)	57 (76.0%)	3.2 (0.4-7.3)	0.073
Acceptability of nurses educating on resources	25 (96.2%)	65 (86.7%)	0.8 (0.2-4.8)	0.357
Experienced PPD symptoms after discharge	2 (7.7%)	33 (44.0%)	0.2 (0.1-0.7)	0.001
Healthcare provider asked about PPD after discharge	13 (50.0%)	31 (41.3%)	1.6 (0.6-4.0)	0.442

Statistical Analysis

Descriptive and correlational statistics were used for data analysis. Chi-square techniques were used to test for differences between demographics and (1) acceptability about being screened for PPD, (2) acceptability about nurses educating on resources, (3) experienced PPD symptoms after discharge, and (4) whether a healthcare provider asked about PPD after discharge. Spearman correlation coefficients were used to test for correlation between the continuous variables (age and pregnancy-related data [gravity and parity]) with (1) acceptability about being asked about PPD, (2) acceptability about nurses educating on resources, (3) experienced PPD symptoms after discharge, and (4) whether a healthcare provider asked about PPD after discharge. Logistic regression techniques were used to test if risk of depression (high vs. low) predicted the odds of (1) acceptability about being asked about PPD, (2) acceptability about nurses educating on resources, (3) experienced PPD symptoms after discharge, and (4) whether a healthcare provider asked about PPD after discharge.

Results

A majority of participants were single ($n = 62$, 61.4%), Caucasian ($n = 47$, 46.5%), aged 20 to 30 years ($n = 55$, 54.5%), had private insurance ($n = 55$, 54.5%) with a mean age of 26.0 years ($SD = 6.1$). See Table 1. Mean

gravity was 3.0 ($SD = 3.2$) and mean parity was 2.2 ($SD = 1.4$). The only significant difference between the two groups was scores on the EPDS (14.2 vs. 3.8, $p < 0.001$). This was expected as participants were recruited based upon EPDS scores.

No predictor was associated with any of the four questions with the exception of marital status and experiencing PPD symptoms after discharge ($p = 0.019$). The post-hoc results suggest that married women experience less PPD symptoms after discharge than single women ($n = 5$, 15.2% vs. $n = 28$, 46.3%; $p = 0.008$). See Tables 2 and 3 (Supplemental Digital Content, <http://links.lww.com/MCN/A46>).

A majority of responders had positive feeling about being asked about PPD (82.1%) and nurses educating on resources. Positive feelings expressed included such phrasing as: *It was a good thing, people with PPD really need help, It provided me a good tool and some good resources. I was glad I was asked. It felt good, I felt it was good to answers question about your feelings, I think it was a good idea to be asked about my feelings, it was beneficial, Nurses provided a lot of good information, It was good to know what to do if I started to experience symptoms, It was awesome, This could help people, and the nurses provided helpful information.* Nonpositive feelings expressed included such phrases as: *It was fine, it was okay, it didn't bother me, I don't care to be asked, I didn't care and It didn't offend me it was okay.*

Clinical Implications

- All new mothers should be screened for postpartum depression in every healthcare setting.
- Nurses need education on how to screen for postpartum depression and how to make appropriate referrals based on results.
- Nurses should screen, teach, and refer postpartum women with positive depression screens.
- A list of providers who can see and treat women at high risk for postpartum depression should be available for hospital-based perinatal nurses.
- Postpartum women are open to having postpartum depression screening during their hospital stay for childbirth.
- Follow-up telephone calls by hospital-based nurses to new mothers during postpartum offer opportunities to evaluate if women at high risk for postpartum depression are getting the care that they need.
- Protocols in which nurses ensure that new mothers with positive depression screens receive mental health evaluation and treatment should be adopted.
- Nurses should be aware of the risks of, and the importance of preventing, suicide in women with postpartum depression.

Group affiliation (high vs. low risk for depression) only affected the odds of experiencing PPD symptoms after discharge (OR = 0.2, 95% CI 0.1–0.7, $p = 0.001$). Less than half of the women ($n = 44$, 43.6%) were asked about PPD after discharge, with the largest number being asked by both an obstetrician and pediatrician ($n = 21$, 47.8%). Women stated that obstetricians asked them about PPD symptoms ($n = 13$, 29.5%) slightly more than pediatricians only ($n = 10$, 22.7%). See Table 4.

Limitations

There are several limitations to our study. The sample size of the comparison group was small, women were not specifically asked about services or depression screening provided by home visitation programs, and the short time frame between hospital discharge and the assessment may not have allowed sufficient time for further screening. Yes/no questions were used to collect data rather than standard instruments. Future research should address these limitations.

Clinical Nursing Implications

Although most new mothers found it acceptable to be screened for PPD and to be provided education about community resources from hospital-based perinatal nurses, information found on screening will only be beneficial

with effective follow-up care and further screening and treatment in the community (ACOG, 2018; Kendig et al., 2017; Logsdon, Eckert, & Tomasulo, 2014; United States Preventive Services Task Force, 2016). Ineffective follow-up care and inadequate discharge education about mental health resources on PPD could lead to new mothers not seeking PPD treatment after hospital discharge. Nurses play a key role in discharge teaching and education, placing them in the perfect position to ensure that adequate referrals are coordinated and to stress the importance of follow-up care to new mothers. After screening, nurses could identify the mental health needs of each new mother before discharge, allowing nurses to create individualized plans of care and increasing the likelihood that follow-up care will be appropriate and effective for new mothers. Consulting with social workers can create additional support and resources for the new mothers. Each organization should designate a professional who is in charge of ensuring that screening for depression and adherence to a follow-up protocol is consistently followed (Kendig et al.).

Women of racial and/or ethnic minorities are traditionally more at risk for health problems related to childbearing (Tucker, Berg, Callaghan, & Hsia, 2007) as well as lower rates of effective depression treatment (Kozhimannil, Trinacty, Busch, Huskamp, & Adams, 2011). However, our results revealed no significant correlation between demographics and higher depressive symptoms. It is important that all new mothers receive screening and

New mothers are agreeable to receive education about community resources for depression evaluation and treatment by hospital-based perinatal nurses.

education, regardless of demographics. Therefore, incorporating a protocol in all postpartum hospital settings to screen all new mothers, such as the one in this study, is important and necessary.

Follow-up care for the new mothers in our study after discharge was poor despite their evident risk for depression and need for mental health evaluation. It is part of nurses' role to provide continuity of care after discharge. Nurses are vital in evaluating the follow-up care and resources patients will need after discharge. Nurses could use evidence-based PPD referral guidelines such as the one created by AWHONN (2015) to assist the collaborative healthcare team in choosing appropriate follow-up plans of care for new mothers at risk for PPD.

Future research could benefit from a more diverse sample of childbearing women recruited from a large healthcare system, allowing comparisons of different infrastructures of support across urban and rural sites. The impact of sharing electronic health record data across healthcare sites should be explored. The roles of supervisors in supporting nurses in implementing policies to

screen and educate new mothers about PPD should be investigated.

Acknowledgment

This study was supported by funding from the University of Louisville Hospital Nursing and Interdisciplinary Research Committee. ✱

M. Cynthia Logsdon is a Professor, School of Nursing, University of Louisville, Louisville, KY. The author can be reached via e-mail at Mclogs01@louisville.edu

Krista Vogt is an Undergraduate Research Scholar, School of Nursing, University of Louisville, Louisville, KY.

Deborah Winders Davis is a Professor, Department of Pediatrics, Child & Adolescent Research Design & Support (CAHRDS) Unit, University of Louisville, School of Medicine, Louisville, KY.

John Myers is a Professor, Department of Pediatrics, Child & Adolescent Research Design & Support (CAHRDS) Unit, University of Louisville, School of Medicine, Louisville, KY.

Felicia Hogan is a Clinical Nurse, University of Louisville Hospital, Louisville, KY.

Diane Eckert is a Clinical Manager, Mother-Baby Unit, University of Louisville Hospital, Louisville, KY.

Katlin Masterson is an Undergraduate Research Scholar, School of Nursing, University of Louisville, Louisville, KY.

The authors declare no conflicts of interest.

DOI:10.1097/NMC.0000000000000470

References

- American College of Obstetricians and Gynecologists. (2008). *Perinatal depression screening: Tools for obstetricians-gynecologists*. Retrieved from <http://mail.ny.acog.org/website/DepressionToolKit.pdf>
- American College of Obstetricians and Gynecologists. (2015). Screening for perinatal depression (Committee Opinion No. 630). *Obstetrics and Gynecology*, 125(5), 1268–1271. doi:10.1097/01.AOG.0000465192.34779.dc
- American College of Obstetricians and Gynecologists. (2018). Optimizing postpartum care (Committee Opinion No. 736). *Obstetrics and Gynecology*, 131(5), e140–e150. doi:10.1097/AOG.0000000000002633
- Association of Women's Health, Obstetric, and Neonatal Nurses. (2015). Mood and anxiety disorders in pregnant and postpartum women (Position Statement). *Journal of Obstetric, Gynecologic, & Neonatal Nursing*, 44(5), 687–689. doi:10.1111/1552-6909.12734
- Baisch, M. J., Carey, L. K., Conway, A. E., & Mounts, K. O. (2010). Perinatal depression: A health marketing campaign to improve screening. *Nursing for Women's Health*, 14(1), 20–33. doi:10.1111/j.1751-486X.2010.01504.x
- Berg, C. J. (2012). From identification and review to action—Maternal mortality review in the United States. *Seminars in Perinatology*, 36(1), 7–13. doi:10.1053/j.semperi.2011.09.003
- Canuso, R. (2008). Maternal depression: The “dual” diagnosis of mother and child. *Issues in Mental Health Nursing*, 29(7), 785–787. doi:10.1080/01612840802129319
- Council on Patient Safety in Women's Health Care. (2018). *Patient safety bundle maternal mental health: Perinatal depression and anxiety*. Retrieved from <https://safehealthcareforeverywoman.org/wp-content/uploads/2017/11/Maternal-Mental-Health-Bundle.pdf>
- Cox, J. L., Holden, J. M., & Sagovsky, R. (1987). Detection of postnatal depression. Development of the 10-item Edinburgh Postnatal Depression Scale. *British Journal of Psychiatry*, 150, 782–786.
- Dolbier, C. L., Rush, T. E., Sahadeo, L. S., Shaffer, M. L., & Thorp, J. (2013). Relationships of race and socioeconomic status to postpartum depressive symptoms in rural African American and non-

- Hispanic white women. *Maternal and Child Health Journal*, 17(7), 1277–1287. doi:10.1007/s10995-012-1123-7
- Hansotte, E., Payne, S. I., & Babich, S. M. (2017). Positive postpartum depression screening practices and subsequent mental health treatment for low-income women in Western countries: A systematic literature review. *Public Health Reviews*, 38, 3. doi:10.1186/s40985-017-0050-y
- Kendig, S., Keats, J. P., Hoffman, M. C., Kay, L. B., Miller, E. S., Moore Simas, T. A., ..., Lemieux, L. A. (2017). Consensus bundle on maternal mental health: Perinatal depression and anxiety. *Journal of Obstetric, Gynecologic, and Neonatal Nursing*, 46(2), 272–281. doi:10.1016/j.jogn.2017.01.001
- Kozhimannil, K. B., Adams, A. S., Soumerai, S. B., Busch, A. B., & Huskamp, H. A. (2011). New Jersey's efforts to improve postpartum depression care did not change treatment patterns for women on Medicaid. *Health Affairs*, 30(2), 293–301. doi:10.1377/hlthaff.2009.1075
- Kozhimannil, K. B., Trinacty, C. M., Busch, A. B., Huskamp, H. A., & Adams, A. S. (2011). Racial and ethnic disparities in postpartum depression care among low-income women. *Psychiatric Services*, 62(6), 619–625. doi:10.1176/ps.62.6.pss6206.0619
- Le, H. N., Perry, D. F., & Sheng, X. (2009). Using the internet to screen for postpartum depression. *Maternal and Child Health Journal*, 13(2), 213–221. doi:10.1007/s10995-008-0322-8
- Logsdon, M. C., Eckert, D., & Tomasulo, R. (2014). Screening mothers for postpartum depression: Policy and Procedure. Nursing Practice Guideline. In C. T. Beck (Ed.), *Postpartum mood and anxiety disorders: Case studies, research, and nursing care* (3rd ed.). Washington, DC: Association of Women's Health, Obstetrics, and Neonatal Nurses.
- Logsdon, M. C., Eckert, D., Tomasulo, R., & Myers, J. (2013). Self-efficacy and postpartum teaching: A replication study. *The Journal of Perinatal Education*, 22(3), 166–170. doi:10.1891/1058-1243.22.3.166
- Logsdon, M. C., Foltz, M. P., Scheetz, J., & Myers, J. A. (2010). Self-efficacy and postpartum depression teaching behaviors of hospital-based perinatal nurses. *The Journal of Perinatal Education*, 19(4), 10–16.
- Logsdon, M. C., Tomasulo, R., Eckert, D., Beck, C., & Dennis, C. L. (2012). Identification of mothers at risk for postpartum depression by hospital-based perinatal nurses. *MCN. The American Journal of Maternal Child Nursing*, 37(4), 218–225. doi:10.1097/NMC.0b013e318251078b
- McCabe-Beane, J., Segre, L., Perkhounkova, Y., Stuart, S., & O'Hara, M. (2016). The identification of severity ranges for the Edinburgh Postnatal Depression Scale. *Journal of Reproductive and Infant Psychology*, 34(3), 293–303. doi:10.1080/02646838.2016.1141346
- Neiman, S., Carter, S., Van Sell, S., & Kindred, C. (2010). Best practice guidelines for the nurse practitioner regarding screening, prevention, and management of postpartum depression. *Critical Care Nursing Quarterly*, 33(3), 212–218. doi:10.1097/CNQ.0b013e3181e65f86
- O'Hara, M. W., & Wisner, K. L. (2014). Perinatal mental illness: Definition, description and aetiology. *Best Practice & Research. Clinical Obstetrics & Gynaecology*, 28(1), 3–12. doi:10.1016/j.bpobgyn.2013.09.002
- Rush, P. (2012). The experience of maternal and child health nurses responding to women with postpartum depression. *Maternal and Child Health Journal*, 16(2), 322–327.
- Segre, L. S., O'Hara, M. W., Arndt, S., & Beck, C. T. (2010). Screening and counseling for postpartum depression by nurses: The women's views. *MCN. The American Journal of Maternal Child Nursing*, 35(5), 280–285. doi:10.1097/NMC.0b013e3181e62679
- Segre, L. S., Pollack, L. O., Brock, R. L., Andrew, J. R., & O'Hara, M. W. (2014). Depression screening on a maternity unit: A mixed-methods evaluation of nurses' views and implementation strategies. *Issues in Mental Health Nursing*, 35(6), 444–454. doi:10.3109/01612840.2013.87938
- Tucker, M. J., Berg, C. J., Callaghan, W. M., & Hsia, J. (2007). The Black-White disparity in pregnancy-related mortality from 5 conditions: Differences in prevalence and case-fatality rates. *American Journal of Public Health*, 97(2), 247–251.
- United States Preventive Services Task Force. (2016). Depression in adults: Screening. *Journal of the American Medical Association*, 315(4), 380–387. doi:10.1001/jama.2015.18392
- Van der Zee-van den Berg, A. I., Boere-Boonekamp, M. M., Ijzerman, M. J., Haasnoot-Smallegange, R. M., & Reijneveld, S. A. (2017). Screening for postpartum depression in well-baby care settings: A systematic review. *Maternal and Child Health Journal*, 21(1), 9–20. doi:10.1007/s10995-016-2088-8
- Wilkinson, A., Anderson, S., & Wheeler, S. B. (2017). Screening for and treating postpartum depression and psychosis: A cost-effectiveness analysis. *Maternal and Child Health Journal*, 21(4), 903–914. doi:10.1007/s10995-016-2192-9