


Self-Efficacy and Postpartum Depression Teaching by Perinatal Nurses in a Rural Setting: A Replication Study

Kimberly A. Link, DNP, APRN, PMHNP-BC

Rachel Tinius, PhD, EPC

Jill Maples, PhD, EPC 

M. Cynthia Logsdon, PhD, WHNP-BC, FAAN 

ABSTRACT

Perinatal nurses in rural hospitals can play an important role in providing postpartum depression education to new mothers. Guided by Self-Efficacy Theory, this replication study used a self-report instrument to survey perinatal nurses' self-efficacy in postpartum depression teaching, self-esteem, stigma and attitudes toward seeking help for mental illness. Thirty-eight perinatal nurses employed in a rural hospital participated in the study. The results indicated perinatal nurses' postpartum depression teaching behaviors were associated with: self-efficacy related to postpartum depression teaching; social persuasion by a supervisor; prior mastery of teaching on other postpartum care topics; and vicarious experiences of observing peers teach about postpartum depression. Perinatal nurses with positive attitudes toward receiving psychological help were more likely to provide postpartum depression education.

The Journal of Perinatal Education, 28(4), 190–198, <http://dx.doi.org/10.1891/1058-1243.28.4.190>

Keywords: postpartum depression, education, perinatal nurses, rural

Postpartum depression (PPD) affects one out of nine new mothers in the United States (Koy, Rockhill, Tong, Morrow, & Farr, 2017). Mothers with PPD experience feelings of sadness, anxiety, and/or fatigue, which can result in difficulty functioning during daily activities (Logsdon, Wisner, Sit, Luther, & Wisniewski, 2011). PPD has been associated with a number of unfavorable outcomes including, but not limited to, impaired bonding between mother and infant, lower rates of breastfeeding initiation, shorter

durations of breastfeeding, and developmental disorders among infants (Koy et al., 2017; Logsdon et al., 2015). Risk factors for the development of PPD include a history of depression during or before pregnancy, a nonexistent or inadequate support system, a lower socioeconomic status, a stressful event while pregnant, a premature baby, or a traumatic birth experience (Koy et al., 2017; Patel et al., 2012). New mothers may not be knowledgeable about PPD, may not understand available treatment options, and/or

they may fear being stigmatized by others (Logsdon, Hines Martin, & Rakestraw, 2009). Many mothers with PPD are not diagnosed and do not receive treatment, which can lead to adverse outcomes for both mother and infant (Patel et al., 2012). In addition, postpartum women are not in regular contact with health-care providers (i.e., most women have one follow-up appointment with an obstetrician, family physician, midwife, or women's health nurse practitioner at 6 weeks); therefore, being educated on the signs and symptoms of PPD immediately after giving birth is extremely important to assist postpartum women with recognizing the disorder and ways to seek appropriate care (Logsdon, Beck, Dennis, Eckert, & Tomasulo, 2012).

Research suggests rates of PPD may be higher in rural areas, with international rates ranging from 23% to 57.8% among rural women and rates within the United States ranging from 16.7% to 32.7% (Mollard, Hudson, Ford, & Pullen, 2016; Villegas, McKay, Dennis, & Ross, 2011). New mothers in rural areas may experience increased difficulty with accessing mental health services due to lower educational levels, limited access to mental health specialists, and limited resources (Mollard et al., 2016). Research with adolescent mothers in rural settings indicated attitudes toward receiving psychological help significantly impacted treatment-seeking behaviors (Carballo et al., 2016). New mothers in rural areas may also face increased stigma by others within their community for seeking treatment for PPD (Mollard et al., 2016). Negative attitudes toward receiving psychological help and fear of stigma from others may decrease the likelihood that mothers with PPD in rural areas will receive treatment. Perinatal nurses working in rural inpatient settings may play an important role in providing new mothers with education on PPD and the importance of seeking treatment, if indicated, posthospitalization. Due to a higher prevalence of PPD in rural settings (Mollard et al., 2016), it is crucial to examine variables associated with perinatal nurses' PPD teaching behaviors in rural inpatient settings.

LITERATURE REVIEW

Perinatal nurses working in hospital settings are in direct contact with new mothers and have the opportunity to provide education on the symptoms of PPD, along with education on seeking treatment for PPD posthospitalization (Logsdon, Eckert, Tomasulo, & Myers, 2013). Perinatal nurses are also in a position

to reach out to new mothers who may fear being stigmatized when seeking care for PPD symptoms (Logsdon, Pinto Foltz, Scheetz, & Myers, 2010). However, perinatal nurses may lack confidence in providing PPD education to new mothers. Evidence-based guidelines have been created to guide perinatal nurses on teaching new mothers about PPD, although a nurse's self-efficacy, or level of confidence, in providing this education may impact whether or not he or she uses these guidelines (Logsdon et al., 2013).

Self-Efficacy Theory suggests that an individual's belief in his or her ability to accomplish a specific task is predicted by mastery through prior experiences, social persuasion, vicarious experience, self-esteem, and attitudes (Bandura, Pastorelli, Barbaranelli, & Capara, 1999). Self-efficacy has been positively associated with work engagement, or extra role performance, among nurses (Garcia-Sierra, Fernandez-Castro, & Martinez-Zaragosa, 2016). Logsdon et al. (2010) examined the relationship between perinatal nurses' self-efficacy and PPD teaching behaviors in an urban community hospital. PPD teaching behaviors were associated with nurses' self-efficacy related to providing PPD education. Nursing supervisors telling staff they were capable of teaching new mothers about PPD, or social persuasion, was associated with increased PPD teaching behaviors (Logsdon et al., 2010). Research indicates support from supervisors is a predictor of work engagement and may result in extra role performance (Garcia-Sierra et al., 2016). Teaching new mothers about PPD was associated with perinatal nurses' self-esteem (Logsdon et al., 2010). Prior mastery, including the completion of continuing education units on PPD and experience with teaching episiotomy care, was also associated with increased PPD teaching behaviors. Observing other nurses provide PPD education, or vicarious experience, was associated with increased PPD teaching behaviors. Perinatal nurses' attitudes toward receiving psychological help and stigma toward mental illness were not associated with PPD teaching behaviors (Logsdon et al., 2010). This study was replicated in another urban setting (an academic health sciences center) with similar

PPD has been associated with a number of unfavorable outcomes including, but not limited to, impaired bonding between mother and infant, lower rates of breastfeeding initiation, shorter durations of breastfeeding, and developmental disorders among infants.

findings; however, self-esteem was not associated with perinatal nurses providing PPD education to new mothers in this study (Logsdon et al., 2013). Although these studies provide valuable information on variables associated with perinatal nurses' self-efficacy related to PPD teaching and PPD teaching behaviors in urban inpatient settings, the results may not be generalizable to perinatal nurses practicing in rural inpatient settings. Research conducted by Logsdon et al. (2010, 2013) needs to be replicated to determine if variables associated with perinatal nurses' self-efficacy related to PPD teaching and PPD teaching behaviors in urban inpatient settings are similar in rural inpatient settings. Therefore, the purpose of this replication study was to examine associations between perinatal nurses' self-efficacy and PPD teaching behaviors in a rural inpatient setting. The following research questions guided this study: What variables are associated with perinatal nurses' self-efficacy related to PPD teaching behaviors in a rural inpatient setting? What variables are associated with perinatal nurses' PPD teaching behaviors in a rural inpatient setting?

METHOD

Design

A cross-sectional, descriptive, correlational study design was used with perinatal nurses working in a public, rural hospital with approximately 2,500 births per year in the southeastern United States. This study design was based on previous research examining perinatal nurses' self-efficacy related to PPD teaching and PPD teaching behaviors in urban inpatient settings (Logsdon et al., 2010; Logsdon et al., 2013). Data were collected over a 2-week period during November of 2017 with a self-report survey. The survey measured perinatal nurses' self-efficacy related to PPD teaching, PPD teaching behaviors, self-esteem, and stigma and attitudes regarding seeking help for mental illness. The survey also measured participants' professional demographic data, including highest level of nursing education, years worked as a perinatal nurse, and perinatal nursing role. Pearson Product Moment Correlation coefficients were used to assess which variables were associated

with self-efficacy related to teaching new mothers about PPD, and which variables were associated with PPD teaching. Frequency of PPD education based on perinatal nursing roles was analyzed with chi-square analysis. Frequency data for nurses being told by a supervisor that they are capable of teaching new mothers about PPD were analyzed by using percentages of participants' responses. Mean scores, standard deviations (SD), and score ranges were analyzed for the following variables: self-efficacy related to teaching new mothers about PPD, self-esteem, attitudes, and stigma.

Instruments

The self-report survey was based upon variables measuring self-efficacy and PPD teaching behaviors and included the following: an instrument created by Logsdon et al. (2010) to measure self-efficacy related to PPD teaching, the Rosenberg (1965) Self-Esteem Scale, the Attitudes Toward Seeking Professional Psychological Help Scale (Fischer & Farina, 1995), and the Stigma Scale for Receiving Psychological Help (Komiya, Good, & Sherrod, 2000). The survey also included descriptive questions related to the Self-Efficacy Theory and perinatal nurses' personal experiences with PPD (Logsdon et al., 2010).

Logsdon et al. (2010) created a measure to assess perinatal nurses' self-efficacy related to providing PPD education to new mothers. The self-efficacy measure contains four questions in which perinatal nurses rate their confidence on the following: assessing a new mother's basic knowledge of PPD, assessing symptoms of PPD in a new mother, providing counseling about PPD to a new mother, and teaching a new mother about PPD. Items are scored from a range of 1 (never) to 5 (always), with total scores ranging from 4 to 20. Higher scores suggest higher self-efficacy related to PPD teaching. For the current study, the self-efficacy measure had an alpha coefficient of .93, which indicated good internal consistency. Prior internal consistency for this scale was .90 (Logsdon et al., 2010).

The Rosenberg (1965) Self-Esteem Scale contains 10 items to measure an individual's self-esteem. Each item is scored on a range from 0 (strongly disagree) to 3 (strongly agree), with total scores ranging from 0 to 30. Scores below 15 suggest an individual has low self-esteem. In the current study, the Rosenberg Self-Esteem scale had an alpha coefficient of .84, which indicated good internal consistency. In Rosenberg's (1965) original work with adolescents, the alpha coefficient of the scale ranged from .77 to .88.

Self-Efficacy Theory suggests that an individual's belief in his or her ability to accomplish a specific task is predicted by mastery through prior experiences, social persuasion, vicarious experience, self-esteem, and attitudes.

TABLE 1

Questions Assessing Perinatal Nurses' Experience With Postpartum Depression

Do you have a friend who has experienced postpartum depression?
 Do you have a personal history of postpartum depression?
 Do you have a family member who has experienced postpartum depression?

Note. Participants responded "yes" or "no."

The Attitudes Toward Seeking Professional Psychological Help Scale measures an individual's attitude toward seeking psychological assistance, and contains 10 items (Fischer & Farina, 1995). Each item is rated using a Likert scale format and includes the following responses: agree, partly agree, partly disagree, and disagree. Scores range from 0 to 30, with higher scores indicating a positive attitude toward seeking psychological help. The alpha coefficient for the Attitudes Toward Seeking Professional Psychological Help Scale in the current study was .75, which indicated good internal consistency. The alpha coefficient in the original study for this scale was .84 (Fischer & Farina, 1995).

The Stigma Scale for Receiving Psychological Help measures an individual's stigma toward receiving psychological treatment, and contains five items (Komiya et al., 2000). Each item is rated from 0 (strongly disagree) to 3 (strongly agree). Scores range from 0 to 15, in which higher scores indicate increased stigma. In the current study, the Stigma Scale for Receiving Psychological Help had good internal consistency with an alpha coefficient of .70. The alpha coefficient for this scale in the original study by Komiya et al. (2000) was .72.

Logsdon et al. (2010) created descriptive questions related to the Self-Efficacy Theory to measure perinatal nurses' mastery through prior experiences (teaching new mothers about episiotomy care, education on PPD in nursing school, and completing continuing education units on PPD), social persuasion (encouragement from supervisor to provide PPD education), and vicarious experience (observing nurses perform PPD education). Three additional questions created by Logsdon et al. (2010) ask perinatal nurses about personal experience, or a loved one's experience with PPD (see Table 1).

Procedures

With human studies approval from the University and participating hospital, an email was sent to all 112 perinatal nurses that worked on the maternal and newborn services unit, inviting them to participate in the study. This convenience sample included

nurses working in labor and birth, postpartum care, and the nursery/NICU. At the time of data collection, the unit consisted of staff members who were primarily Caucasian (99%) and all female. Inclusion criteria included being an employed perinatal nurse on the unit. Exclusion criteria included nursing supervisors who worked with the researchers on the development of this study. Perinatal nurses who chose to participate in the study signed an informed consent, which was kept separate from the survey. Participants placed completed surveys in sealed boxes located on each unit. A member of the research team collected these boxes after a 2-week period.

RESULTS

The sample included 38 perinatal nurses, which provided a response rate of 34% (see Table 2). A post hoc power analysis with 38 participants, an effect size of .76 (using a correlation coefficient of .58), and a *p* value of 0.05 afforded the current study 99.9% power. Therefore, the sample size for this study was adequate and the study was well powered to detect significant relationships between variables.

A chi-square analysis indicated no significant differences in the frequency of PPD education by participants based on perinatal nursing roles (see Table 3). Some participants (38%) reported rarely or never being told by their supervisor that they were capable of teaching new mothers about PPD (see Table 4). The mean score for perinatal nurses' self-efficacy related to teaching new mothers about PPD was 15.1 ($n = 38$; $SD = 3.62$), with a minimum score of 7 and a maximum score of 20 (total scores range from 4 to 20, with higher scores suggesting increased confidence). The mean score for perinatal nurses' self-esteem was 21.2 ($n = 38$; $SD = 5.05$), with a minimum score of 6 and a maximum score of 30 (total scores range from 0 to 30, with scores below 15 suggesting low self-esteem). The mean score for perinatal nurses' attitudes toward seeking psychological help was 21.5 ($n = 38$; $SD = 4.52$), with a minimum score of 12 and a maximum score of 30 (total scores range from 0 to 30, with higher scores suggesting a positive attitude

TABLE 2
Description of Study Sample (*n* = 38)

	<i>n</i>	%
Years in practice (≥ 15 years)	19	49.9
Education		
Associate's of Science in Nursing	21	55.3
Bachelor's of Science in Nursing	14	36.8
Master's of Science in Nursing	3	7.9
Education on PPD		
Educated in nursing school	34	89.5
Completed continuing education	19	50
Experience with PPD		
Personal history	6	15.8
Family member	10	26.3
Friend	19	50
Frequency of teaching new mothers about PPD		
Always	8	21.1
Most of the time	8	21.1
Occasionally	8	21.1
Rarely	8	21.1
Never	6	5.8

Note. PPD = postpartum depression.

TABLE 3
Frequency of Teaching New Mothers About Postpartum Depression by Perinatal Nursing Role (*n* = 38)

	Always	Most of the time	Occasionally	Rarely	Never
Labor and Birth (<i>n</i> = 16)	4	5	4	2	1
Postpartum (<i>n</i> = 12)	4	3	2	2	1
Nursery/NICU (<i>n</i> = 10)	0	0	2	4	4

TABLE 4
Frequency of Being Told by Supervisor that the Nurse is Capable of Educating a New Mother About Postpartum Depression (*n* = 37)

	Always	Most of the time	Occasionally	Rarely	Never
Labor and Birth (<i>n</i> = 15)	4	3	2	1	5
Postpartum (<i>n</i> = 12)	2	3	3	1	3
Nursery/NICU (<i>n</i> = 10)	1	2	2	3	2

toward seeking psychological help). The mean score for perinatal nurses' stigma towards receiving psychological help was 4.43 (*n* = 37; *SD* = 2.14), with a minimum score of 0 and a maximum score of 9 (total scores range from 0 to 15, with higher scores suggesting greater stigma).

The results indicated significant relationships between participants' self-efficacy related to postpartum depression (PPD) teaching behaviors and being told by a nursing supervisor that the nurse is capable of teaching new mothers about PPD (social persuasion; $r = .597$, $p < .001$), experience with teaching new mothers about other postpartum issues, such as episiotomy care (mastery; $r = .734$,

$p < .001$), and observing other nurses teach new mothers about PPD (vicarious experience; $r = .533$, $p = .001$; see Table 5). The results also suggested positive attitudes toward seeking professional psychological treatment were associated with increased self-efficacy related to PPD teaching ($r = .359$, $p = .027$; see Table 5).

Teaching new mothers about PPD was associated with self-efficacy related to PPD teaching ($r = .782$, $p < .001$), being told by a nursing supervisor that the nurse is capable of teaching new mothers about PPD (social persuasion; $r = .583$, $p < .001$), experience with teaching new mothers about other postpartum issues, such as episiotomy care (mastery;

TABLE 5

Variables Associated with Self-Efficacy Related to Postpartum Depression Teaching Behaviors

	<i>r</i>
Supervisor tells me I am capable of teaching about PPD	.597**
Teaching new mothers about episiotomy	.734**
Observing other nurses teach about PPD	.533**
Self-esteem	<i>ns</i>
Stigma toward mental illness	<i>ns</i>
Attitude toward psychological treatment	.359*
Personal experience with PPD	<i>ns</i>
Friend/Family member with PPD	<i>ns</i>
Nursing school education on PPD	<i>ns</i>
Continuing education on PPD	<i>ns</i>
Educational level	<i>ns</i>
Years of experience	<i>ns</i>

Note. PPD = postpartum depression.

* $p < .05$. ** $p < .01$, *ns* = not significant.

TABLE 6

Variables Associated With Postpartum Depression Teaching Behaviors

	<i>r</i>
Self-efficacy related to PPD teaching	.782**
Supervisor tells me I am capable of teaching about PPD	.583**
Teaching new mothers about episiotomy	.777**
Observing other nurses teach about PPD	.449**
Self-esteem	<i>ns</i>
Stigma toward mental illness	<i>ns</i>
Attitude toward psychological treatment	.400*
Personal experience with PPD	<i>ns</i>
Friend/Family member with PPD	<i>ns</i>
Nursing school education on PPD	<i>ns</i>
Continuing education on PPD	<i>ns</i>
Educational level	<i>ns</i>
Years of experience	<i>ns</i>

Note. PPD = postpartum depression.

* $p < .05$. ** $p < .01$, *ns* = not significant.

$r = .777$, $p < .001$), and observing other nurses teach new mothers about PPD (vicarious experience; $r = .449$, $p = .005$; see Table 6). The results from this study indicated positive attitudes toward psychological treatment were associated with increased PPD teaching behaviors by nurses in a rural inpatient setting ($r = .400$, $p = .013$; see Table 6).

DISCUSSION

The findings of this study support the Self-Efficacy Theory and found that perinatal nurses' PPD teaching behaviors were associated with self-efficacy related to PPD teaching.

The results were similar to findings from previous research by Logsdon et al. (2010, 2013). For all studies, including the present study, the following variables were associated with nurses' PPD teaching behaviors: nurses' self-efficacy related to PPD teaching, being told by a nursing supervisor that the nurse

is capable of teaching about PPD (social persuasion), teaching new mothers about episiotomy care (prior mastery), and observing other nurses teach about PPD (vicarious experience). Similar to the replication study by Logsdon and colleagues in 2013, self-esteem was not associated with PPD teaching behaviors in a rural inpatient setting. In contrast to the original studies, there was not a significant relationship between PPD teaching behaviors and nurses completing PPD continuing education units in a rural setting.

The results from this study indicated positive attitudes toward psychological treatment were associated with increased PPD teaching behaviors in a rural inpatient setting, which was not a significant finding in urban inpatient settings (Logsdon et al., 2010; Logsdon et al., 2013).

Mothers in rural settings may be more likely to experience PPD, and they may face more barriers

with seeking out and receiving mental health treatment (Mollard et al., 2016). These mothers may try to conceal their symptoms from others, due to their own negative attitudes toward receiving mental health services, and fear of being stigmatized by others within their community (Caraballo et al., 2016; Mollard et al., 2016). Perinatal nurses practicing in rural inpatient settings may be more likely to educate new mothers on symptoms of PPD and how to seek treatment posthospitalization if they maintain positive attitudes regarding mental health treatment, which may help to reduce stigma and improve patient outcomes in this vulnerable population.

This study further exemplifies the importance of the nursing supervisor's role in encouraging staff to provide PPD education to new mothers (Logsdon et al., 2010; Logsdon et al., 2013). By nursing supervisors supporting staff and telling them they are capable of providing PPD education, perinatal nurses are more likely to have increased self-efficacy in their ability to provide this education. Perinatal nurses with increased self-efficacy are more likely to be engaged in their work and are more likely to demonstrate extra role performance (Garcia-Sierra et al., 2016), including providing PPD education to new mothers.

A significant strength of this replication study is that it builds upon previous research by Logsdon et al. (2010, 2013), and supports several of their findings, while also providing additional data on perinatal nurses' PPD teaching behaviors in rural settings. This study also further enhances the validity of the instrument created to measure perinatal nurses' self-efficacy related to providing PPD education to new mothers (Logsdon et al., 2010; Logsdon et al., 2013). A limitation of this study was the use of a small convenience sample from one rural inpatient setting, which makes it difficult to generalize these results to similar settings. Another limitation of this study is the rate of response, in which there may have been significant differences between perinatal nurses who responded to the survey and those who did not respond. Future research should focus on replicating this study in other rural perinatal inpatient settings

and with larger samples in the United States and elsewhere.

IMPLICATIONS FOR CLINICAL PRACTICE

Supervisors in perinatal nursing inpatient units should set expectations that all new mothers will receive education on PPD symptoms prior to discharge. In this study, only 25% of labor and birth and 33% of postpartum nurses reported always teaching new mothers about PPD, while none of the nursery/NICU nurses reported always teaching new mothers about PPD. Labor and birth and postpartum nurses have a great deal of direct contact with new mothers and therefore, have more opportunities to provide PPD education. Even though the primary role of nursery/NICU nurses is to provide care to the infant, opportunities may arise for these nurses to provide PPD education when teaching the mother how to care for her infant.

To increase nurses' confidence levels, supervisors should provide support to staff and let them know they are capable of providing PPD education. In the present study, only 26.7% of labor and birth nurses, 16.7% of postpartum nurses, and 10% of nursery/NICU nurses reported a nursing supervisor always told them that they were capable of educating a new mother about PPD. Supervisors can use opportunities, such as staff meetings or training sessions, to discuss methods for providing PPD education to new mothers and to verbalize their belief that the nursing staff is capable of providing this education.

Nursing supervisors can also assist nurses with increasing their self-efficacy in providing PPD education by encouraging them to reflect on their mastery of teaching new mothers about other postpartum topics, such as episiotomy care. Supervisors should consider letting nurses shadow other nurses who have demonstrated expertise in providing PPD education to new mothers. Through this vicarious experience, nurses can increase their self-efficacy in providing the same education to new mothers. While this study did not find a significant relationship between the completion of continuing education units and PPD teaching behaviors in a rural inpatient setting, nursing supervisors in these settings might still want to encourage staff to attend continuing education activities to ensure they are up-to-date on current methods for PPD education and referral recommendations.

Due to higher rates of mental health stigma in rural areas, nursing supervisors working in these

The results from this study indicated positive attitudes toward psychological treatment were associated with increased PPD teaching behaviors in a rural inpatient setting, which was not a significant finding in urban inpatient settings.

settings should create an environment that fosters positive attitudes toward educating new mothers about PPD. Perinatal nurses in rural inpatient settings can play a critical role in teaching mothers about methods for seeking out care for PPD symptoms once they return home. Research indicates that providing women in rural areas with education on resources for PPD can lead to increased access to treatment (Dolbier et al., 2013; Kim & Dee, 2018). Early access to PPD treatment for mothers living in rural areas can lead to improved outcomes for the mother, the infant, and the family system (Villegas et al., 2011).

CONCLUSION

The current study adds to the growing body of knowledge regarding the nursing care of childbearing women. The results of this study are similar to previous research by Logsdon et al. (2010, 2013), and indicate perinatal nurses' PPD teaching behaviors are associated with confidence in providing PPD education. This study suggests that perinatal nurses' attitudes toward mental illness can play a significant role in providing PPD education to new mothers in rural inpatient settings.

REFERENCES

Bandura, A., Pastorelli, C., Barbaranelli, C., & Capara, G. V. (1999). Self-efficacy pathways to childhood depression. *Journal of Personality and Social Psychology, 76*(2), 258–269.

Caraballo, A., Myers, J., Baisch, K., Jones, K., Vogt, K., Evanow, K., & Logsdon, M. C. (2016). Mental health treatment in rural adolescent mothers. *Kentucky Nurse, 64*(3), 3–4.

Dolbier, C. L., Rush, T. E., Sahadeo, L. S., Shaffer, M. L., Thorp, J., & The Community Child Health Network Investigators. (2013). Relationships of race and socioeconomic status to postpartum depressive symptoms in rural African American and non-Hispanic white women. *The Community Child Health Network Investigators, 17*(7), 1277–1287. doi:10.1007/s10995-012-1123-7

Fischer, E. H., & Farina, A. (1995). Attitudes toward seeking professional psychological help: A shortened form and considerations for research. *Journal of College Student Development, 36*(4), 368–373.

Garcia-Sierra, R., Fernandez-Castro, J., & Martinez-Zaragoza, F. (2016). Work engagement in nursing: An integrative review of the literature. *Journal of Nursing Management, 24*(2), E101–E111. doi:10.1111/jonm.12312

Kim, Y., & Dee, V. (2018). Sociodemographic and obstetric factors related to symptoms of postpartum depression in Hispanic women in rural California. *Journal of*

Obstetric, Gynecologic, & Neonatal Nursing, 47(1), 23–31. doi:10.1016/j.jogn.2017.11.012

Komiya, N., Good, G. E., & Sherrod, N. B. (2000). Emotional openness as a predictor of college students' attitudes toward seeking psychological help. *Journal of Counseling Psychology, 47*(1), 138–143.

Koy, J. Y., Rockhill, K. M., Tong, V. T., Morrow, B., & Farr, S. L. (2017). Trends in postpartum depressive symptoms - 27 States, 2004, 2008, and 2012. *Morbidity and Mortality Weekly Report, 66*(6), 153–158. doi:10.15585/mmwr.mm6606a1

Logsdon, M. C., Beck, C. T., Dennis, C. L., Eckert, D., & Tomasulo, R. C. (2012). Identification of mothers at risk for postpartum depression by hospital-based perinatal nurses. *MCN: The American Journal of Maternal Child Nursing, 37*(4), 218–235. doi:10.1097/NMC.0b013e318251078b

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., Hines Martin, V. P., & Rakestraw, V. (2009). Barriers to depression treatment in low-income, unmarried, adolescent mothers in a southern, urban area of the United States. *Issues in Mental Health Nursing, 30*, 451–455. doi:10.1080/01612840902722187

Logsdon, M. C., Mittelberg, M., Jacob, A., Luther, J., Wisniewski, S., Confer, A., . . . Wisner, K. L. (2015). Maternal infant interaction in women with bipolar depression. *Applied Nursing Research, 38*, 381–383. doi:10.1016/j.apnr.2015.01.012

Logsdon, M. C., Pinto Foltz, M., Scheetz, J., & Myers, J. A. (2010). Self-efficacy and postpartum depression teaching behaviors of hospital-based nurses. *The Journal of Perinatal Education, 19*(4), 10–16. doi:10.1624/105812410X530884

Logsdon, M. C., Wisner, K. L., Sit, D., Luther, J., & Wisniewski, S. R. (2011). Depression treatment and maternal functioning. *Depression and Anxiety, 28*(11), 1020–1026. doi:10.1002/da.20892

Mollard, E., Hudson, D. B., Ford, A., & Pullen, C. (2016). An integrative review of postpartum depression in rural U.S. communities. *Archives of Psychiatric Nursing, 30*(3), 418–424. doi:10.1016/j.apnu.2015.12.003

Patel, M., Bailey, R. K., Jabeen, S., Ali, S., Barker, N. C., & Osiezagha, K. (2012). Postpartum depression: A review. *Journal of Healthcare for the Poor and Underserved, 23*(2), 534–542. doi:10.1353/hpu.2012.0037

Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.

Villegas, L., McKay, K., Dennis, C., & Ross, L. E. (2011). Postpartum depression among rural women from developed and developing countries: A systematic review. *The Journal of Rural Health, 27*(3), 278–288. doi:10.1111/j.1748-0361.2010.00339.x

DISCLOSURE

The authors have no relevant financial interest or affiliations with any commercial interests related to the subjects discussed within this article.

KIMBERLY LINK is an Assistant Professor of Nursing at Western Kentucky University, specializing in the study of mental health nursing, and is a Psychiatric Nurse Practitioner. RACHEL TINIUS is an Assistant Professor of Exercise Science at Western Kentucky University, specializing in the study of the effects of maternal exercise on infant outcomes. JILL MAPLES is a

Professor of Nursing at the University of Louisville, and is the Associate Chief of Nursing for Research, University of Louisville Hospital & Brown Cancer Center. M. CYNTHIA LOGSDON specializes in the study of postpartum women, and is a Women's Health Nurse Practitioner.