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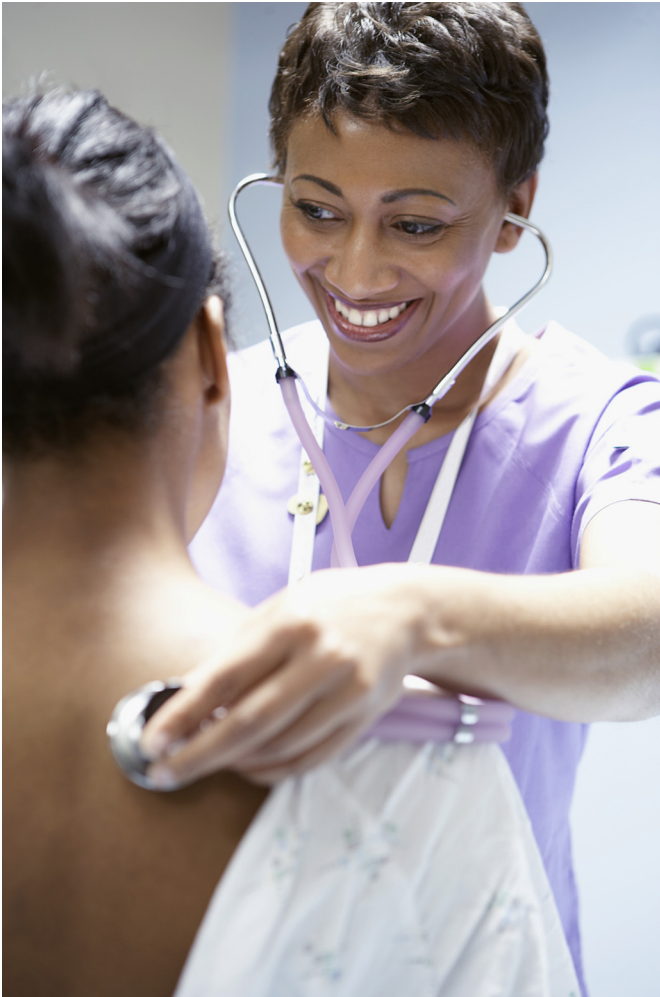
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A Project to Improve Postpartum Depression Screening Practices Among Providers in a Community Women's Health Care Clinic

Marcia A. Clevesy, Tricia K. Gatlin, Callie Cheese & Kord Strebel

ABSTRACT

Objective: The purpose of this project was to improve health care providers' postpartum depression (PPD) knowledge and screening practices with the implementation of a standardized screening tool.

Design: The plan–do–study–act model was used as a framework to measure and implement a practice change aimed at universal screening for PPD.

Setting/Local Problem: Health care providers' screening practices for PPD were inconsistent and lacked use of a standardized screening tool at a southwestern U.S. community women's health care clinic serving minority women of lower socioeconomic status.

Participants: Health care providers at a community women's health care clinic.

Intervention/Measurements: A single educational in-service was presented to health care providers regarding preventive PPD screening practices and documentation recommendations. Measurements included pre- and post-education questionnaire results and electronic health record chart reviews.

Results: PPD screening documentation rates increased from 56% to 92.7% ($p < .5$).

Conclusion: PPD screening education for health care providers and the addition of EPDS criteria to the electronic health record were associated with increased screening rates for PPD at a community women's health care clinic.

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KEYWORDS: community, Edinburgh Postnatal Depression Scale, education, intervention, postpartum depression, screening

Postpartum depression (PPD) is a disabling condition associated with depression episodes occurring after childbirth (O'Hara & McCabe, 2013). The National Institute for Health Care Management (NIHCM; 2010) has

reported that PPD is the most common complication after childbirth, with rates ranging from 8% to 20% and an overall prevalence of 11.5% in 2012 (Ko, Rockhill, Tong, Morrow, & Farr, 2017). However, PPD is frequently undiagnosed and,

CLINICAL IMPLICATIONS

- Postpartum depression (PPD) is a potentially serious condition that is frequently undiagnosed and untreated because routine screening for PPD is not a standard of practice among most health care providers.
- Women experiencing PPD will usually experience at least five out of nine symptoms associated with depression, which may include changes in appetite, moderate to significant anxiety symptoms, and sleep disturbances accompanied by somatic complaints such as fatigue, chest discomfort, or headaches occurring over a 2-week period.
- Universal screening for PPD with a standardized questionnaire such as the self-administered Edinburgh Postnatal Depression Scale (EPDS) may positively influence health care providers' compliance in providing recommended depression screening to all women during the postpartum period.
- Provider education and the addition of EPDS screening criteria to the electronic health record were associated with increased rates of screening for postpartum depression.
- All health care providers caring for women and their children play crucial roles in promoting comprehensive postpartum depression screening interventions for best practice.

subsequently, untreated because routine screening for PPD is not a standard of practice among most providers (NIHCM, 2010). Growing evidence suggests that PPD increases the risk for insecure maternal–newborn emotional and physical attachment leading to impaired emotional, cognitive, and language development in children (NIHCM, 2010).

Based on these significant findings, we implemented a project with the objective of improving PPD screening rates among health care providers in a community women's health care clinic. We conducted a needs assessment by analyzing PPD screening rates via an audit of electronic health record (EHR) charts. The results showed lack of use of a standardized PPD screening tool in the clinic. Based on these results, it was essential to establish and ensure recommended guidelines to promote early PPD recognition and treatment to support positive health outcomes among women and their children.

Available Knowledge

PPD is distinguished as an affective mood disorder with symptoms similar to those associated with postpartum blues; however, distinguishing symptoms associated with PPD persist beyond 2 weeks after childbirth (NIHCM, 2010). The definition of PPD differs from other types of depression

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PPD is frequently undiagnosed and, subsequently, untreated because routine screening for PPD is not a standard of practice among most providers

simply in terms of time frame. The *Diagnostic and Statistical Manual of Mental Disorders*, fifth edition, defines PPD as a depression disorder with the addition of a “peripartum onset” specifier to include the onset of a major depression episode occurring during pregnancy or within 4 weeks after birth (American Psychiatric Association [APA], 2013, p. 186).

PPD is commonly diagnosed within the first 6 to 12 weeks postpartum (Postmontier, 2008), with depression symptoms occurring up to 12 months after childbirth (Centers for Disease Control and Prevention [CDC], 2008). Women experiencing PPD will usually experience at least five out of nine symptoms associated with depression, which may include

changes in appetite, moderate to significant anxiety symptoms, and sleep disturbances accompanied by somatic complaints such as fatigue, chest discomfort, or headaches occurring over a 2-week period (APA, 2013; NIHCM, 2010). Other common PPD symptoms may also include emotional instability, guilt, dysphoria, confusion, and suicidal ideation (Dennis & Dowswell, 2013). Suicide is considered a leading cause of maternal death during the postpartum period (Pope, Xie, Sharma, & Campbell, 2013), exceeding hypertensive disorders and hemorrhage as a cause of maternal mortality (Palladino, Singh, Campbell, Flynn, & Gold, 2011). It is a leading cause of postpartum death within 6 months after birth, with severe depression accounting for 21% of the primary diagnoses, followed by 31% from substance abuse disorders, and 38% from psychosis (Cantwell et al., 2011). Thus, diagnosis and treatment of PPD are significant to the overall well-being of women during the postpartum period.

One out of 10 women in the United States experiences symptoms of depression with approximately one in nine experiencing symptoms of PPD (CDC, 2017). Using self-reported data from the 2012 Prenatal Risk Assessment and Monitoring System (PRAMS), the CDC also reports a greater prevalence of PPD among women of ethnic and racial minorities, including Black, non-Hispanic (10.8%), and Hispanic populations (10.5%), compared with White, non-Hispanic women (8.6%; Ko et al., 2017). However, low-income and ethnic/racial-minority women are less likely to be diagnosed or treated for PPD (Kozhimannil, Trinacty, Busch, Huskamp, & Adams, 2011). Risk factors with moderate to strong associations with PPD include postpartum blues, perinatal anxiety and depression, low self-esteem, and poor social support and marital relationships (O'Hara & McCabe, 2013; O'Hara & Wisner, 2014).

Rationale

Currently, there are no national PPD screening rates available. However, it is widely known that a problem exists with health care providers screening for PPD as a standard of care (NIHCM, 2010). In a survey of 400 members of the American College of Obstetricians and Gynecologists (ACOG), 36.8% of providers reported consistent use of a validated screening tool, whereas 50.6% reported that they had never used a validated screening tool to assess for maternal depression (Leddy, Haaga, Gray, & Schulkin, 2011). According to a study by Horowitz, Murphy, Gregory, and Wojcik (2009) in which the authors examined 4,419 women at 4 to 6 weeks postpartum, only 2,806 (63%) women reported that they had been asked by a clinician about their emotional state during the visit. In comparison, 1,613 women (37%) reported that their clinician did not ask about their emotional state during the postpartum visit.

One PPD program, however, the Translating Research into Practice for Postpartum Depression (TRIPPD) is the first effectiveness study in the United States to report improved process and maternal outcomes at 12 months (Yawn et al.,

2012). The TRIPPD study implemented PPD screening and follow-up care services from trained staff members, thereby reducing the need for women to seek evaluation and mental health care services outside of their primary care practice (Yawn et al., 2012).

Nonetheless, inconsistent PPD screening practices persist, regardless of well-documented evidence of impending negative consequences (Schaar & Hall, 2013) among women and their children (CDC, 2008; NIHCM, 2010; Wisner et al., 2013). Interventions combining PPD identification, initiation of care-seeking services, provider education, and system-level efforts to support management of care are critically needed to enhance outcomes associated with PPD (Sit et al., 2009).

In 2015, the Association of Women's Health, Obstetric, and Neonatal Nurses (AWHONN) issued a position statement supporting recommendations to screen all women for perinatal mood and anxiety disorders during the prenatal and postpartum period. Routine screening during the perinatal period can detect early signs of maternal depression, leading to improved management of perinatal mood and anxiety disorders, which aids in the promotion of health and well-being among women and their children (AWHONN, 2015; O'Hara & Wisner, 2014). Many health care facilities that provide care to perinatal and neonatal populations have developed policies and protocols to address education and screening for women and methods to train staff regarding depression disorders (AWHONN, 2015). Similarly, the Council on Patient Safety in Women's Healthcare (2016) developed a comprehensive *Maternal Safety Bundle* toolkit aimed at addressing maternal anxiety and depression. The maternal mental health safety bundle incorporates a standardization of health care processes reflective of emerging clinical, scientific, and patient safety advances that have shown improved quality of care and positive maternal outcomes (Council on Patient Safety in Women's Healthcare, 2016; Kendig et al., 2017). However, despite these efforts to take aggressive steps and make endorsements, there remains a significant problem in completing effective PPD screening services.

Project Aims

The purpose of this project was to establish a standard of care that providers could consistently use to improve the PPD screening process to promote early recognition of women's PPD symptoms. The recommended interventions were implemented to promote best practice recommendations in a community women's health care clinic where consistent PPD screening practices were not a standard of care. The specific aims of this project were (a) to improve providers' self-reported knowledge of the 2010 Patient Protection and Affordable Care Act (ACA) preventive perinatal care services specific to PPD and (b) to increase standardized PPD screening and documentation practices to enhance recognition of women's PPD symptoms. (Patient Protection and Affordable Care Act, 42 U.S.C. § 18001, 2010).



Methods

Ethical Considerations

Institutional review board approval was obtained under exempt status with minimal risk criteria in accordance with the project recommendations. The EHR chart audit identity and data confidentiality were maintained throughout the course of the project.

Context

The setting for the project was a local community women's health care clinic located in the southwestern United States. The key involved stakeholders of this quality project were the health care providers, who consisted of three obstetrician-gynecologists and three advanced practice registered nurses. This clinic provides care predominantly to minority women, consisting mainly of Hispanic and African American women of lower socioeconomic and uninsured status. The average birth rates per physician ranged from 40 to 45 births per month. The women's health care clinical practice also provides an active teaching setting for learning opportunities to obstetrician-gynecologists and family practice medical residents, medical students, and nurse practitioner students on a routine basis.

Evaluation of screening practices in the clinic showed a lack of standardized PPD screening among providers. Findings from the EHR chart audits ($n = 125$) performed by the project coordinator showed that 56% of the charts had documentation of PPD screening but without the use of a validated screening tool and that 44% of the charts had no documentation of PPD screening.

Interventions

Project preparation was established on completion of the initial EHR chart audit ($n = 125$) reviews. Project activities included administration of a provider pretest, development of the Edinburgh Postnatal Depression Scale (EPDS) dialog box with the flag in the EHR system, an educational in-service, and a provider posttest. Before the in-service, a pretest questionnaire was administered anonymously to health care providers to assess their self-reported knowledge of the 2010 ACA preventive perinatal care services specific to

PPD. The questionnaire was selected from the Agency for Healthcare Research and Quality (AHRQ; 2015) clinical guide for professionals and was modified to include the recommended ACA preventive PPD care services (see [Box 1](#)).

The CDC reports a greater prevalence of PPD among women of racial and ethnic minorities including Black, non-Hispanic (10.8%), and Hispanic populations (10.5%) compared with White, non-Hispanic women (8.6%), yet low-income and racial/ethnic-minority women are less likely to be diagnosed or treated for PPD

Immediately after the pretest, a 1-hour educational in-service was conducted with the providers at the clinic. During this in-service, the following were presented: an overview of the significance of PPD, consequences associated with PPD among women and their children, and instruction and directions regarding how to use the EPDS screening tool and how to document PPD screening in the EHR system. An outline of the project time line and objectives and a comprehensive white paper (Burson & Moran, 2017) supporting recommended PPD screening practices were also provided

BOX 1 ACA PREVENTIVE PPD SCREENING CLINICAL PRACTICE QUESTIONNAIRE

	Yes	No
1. Do you routinely screen for postpartum depression (PPD) on all of your patients?		
2. As a women's health care provider, are you aware of the Affordable Care Act (ACA) preventive services available for PPD during the perinatal period?		
3. As a women's health care provider, are you aware of your role in the provision of the ACA preventive perinatal PPD services during the perinatal period?		
4. Does the clinic have the resources required to implement the ACA preventive PPD services during the perinatal period?		
5. If a patient has a positive screen for PPD, does the clinic have established mental health care provider(s) to refer the patients to?		
5a. If yes, do you follow-up with the patient to confirm that she has seen the mental health care provider?		

Note. Adapted from the [Agency for Healthcare Research and Quality \(2015\)](#).

during this in-service. In addition, information on the 2010 ACA preventive PPD perinatal care services (Section 2952) was presented, supporting and promoting the development of improved PPD screening and diagnostic methods along with the provision of education for health care providers to increase knowledge of preventive PPD interventions. The [AHRQ \(2015\)](#) posttest was administered to the providers immediately after the in-service to reassess their self-reported knowledge of the ACA preventive PPD care services.

The EPDS ([Cox, Holden, & Henshaw, 2014](#); [Cox, Holden, & Sagovsky, 1987](#)) was recommended as the standardized screening tool to assess for PPD symptoms. The EPDS is a self-administered, 10-item questionnaire that has been established as easy to use and cost effective and is available in more than 35 languages ([Cox et al., 2014](#); [Cox et al., 1987](#)). Additionally, the EPDS has been widely supported as a validated screening instrument for detecting symptoms of depression during the postpartum period; the split-half reliability of the EPDS scale was found to be .88, with a standardized α -coefficient of .87 ([Cox et al., 1987, 2014](#)).

A dialog box in the clinic's EHR system was developed by the medical director and the project coordinator to include the EPDS criteria and the option to select the EPDS scores as less than or greater than 10 to promote efficient documentation of the implemented PPD screening process. Providers were responsible for calculating and documenting the EPDS scores in the EHR system and providing referral and treatment services for women with EPDS scores of 10 or greater. In addition, an individual flag was assigned in the EHR system as

an identifier for those women who had received the EPDS screening tool to readily detect for data audit collection. Several copies of the EPDS tool were also printed and laminated in English and Spanish for reuse with erasable markers to promote the efficiency and cost-effectiveness of the project. In addition, preparation of the PPD educational in-service presentation, lamination of the EPDS tools, and adaptation of the ACA preventive PPD screening pre- and post-education questionnaires administered to the providers were also completed.

Study of the Interventions

The plan-do-study-act (PDSA) model for improvement was applied as a framework to assist in promoting effectiveness of this project ([Gillam & Siriwardena, 2013](#); [Institute for Healthcare Improvement, n.d.](#)). The *plan* was to initiate a change in clinical practice with the project preparation to include provider education and a screening intervention. The *do* phase was the implementation of the educational in-service for the providers about the ACA preventive PPD care practices, including the EPDS tool and EHR documentation interventions. The *study* phase involved the data analysis and summary, which included the pre- and post-education questionnaire data from each provider's self-reported knowledge of the ACA preventive PPD perinatal services and the EHR chart audits. The final *act* phase involved planning the next cycle, with modifications as needed ([Gillam & Siriwardena, 2013](#)). The implemented project interventions were completed within a 3-month period, with weekly execution of the PDSA cycle to

BOX 2 POSTPARTUM DEPRESSION PROJECT TIME LINE

Time Line	PPD Project Intervention
Baseline data collection (September 1, 2016–December 30, 2016)	<ul style="list-style-type: none"> EHR chart audits ($n = 125$) IRB approval
Planning (January 1, 2017–February 1, 2017)	<ul style="list-style-type: none"> PPD project preparation Create EPDS template and flag in EHR Laminate EPDS tools
Intervention (February 2, 2017–May 1, 2017)	<ul style="list-style-type: none"> Provider pretest on ACA preventive perinatal PPD care PPD educational in-service presentation to providers Provider posttest on ACA preventive perinatal PPD care services EPDS tool administered Weekly PDSA cycles Weekly EHR chart audits ($n = 124$)
Results (May 2, 2017–May 31, 2017)	<ul style="list-style-type: none"> Quantitative descriptive data analysis Provider pre- and posttest results Pre- and post-project PPD screening with EPDS tool Disseminate project findings

Note. ACA = Affordable Care Act; EPDS = Edinburgh Postnatal Depression Scale; EHR = electronic health record; IRB = institutional review board; PDSA = plan–do–study–act; PPD = postpartum depression.

support project compliance and success. In addition, the providers were informed of the positive PPD screening results and were acknowledged for their supportive efforts during the project initiative. [Box 2](#) provides a time line.

Measures

Data Collection. Providers' documented PPD screening rates were collected from an audit of 125 EHR charts over a 3-month period. This sample size was based on approximately 25% of the providers' monthly birth rates in a 3-month time frame. A chart audit tool, adapted from the [AHRQ \(2013\)](#) office testing toolkit (see [Box 3](#)), was used to document the pre- and post-project PPD screening data. Pre-project data collection from the EHR included an anonymous assigned identification number and a *yes* or *no* response for documented provider screening for PPD. After the educational in-service, EHR audit data were collected from 124 charts over a 3-month period. Post-project data collection included an anonymous assigned identification number and a *yes* or *no* response for provider documentation of screening with the EPDS tool.

Analysis. Descriptive and nonparametric statistics were used to analyze the data collected from the pre- and post-intervention data tools. Data were examined with the use of SPSS version 24. Descriptive statistics were used to describe the sample of providers, the number and percentage of *yes* responses to the questions on the ACA Preventive PPD Screening Clinical Practice Questionnaire before and after the intervention, and the number and percentage of EHR charts that contained documentation of PPD screening before and after the intervention. Nonparametric statistics (chi-square) were used to determine if there was a significant change in PPD EHR documentation before and after the intervention.

Results

Six providers in the women's health care practice agreed to participate in the implementation of the PPD project intervention. The composition of the providers were three obstetrician-gynecologist physicians and three advanced practice registered nurses comprising two men and four women, with an average of 10.7 years of combined experience.

BOX 3 AGENCY FOR HEALTHCARE RESEARCH AND QUALITY CHART AUDIT TOOL

Instructions: Enter all available information about the specific intervention from each medical record.

Pre-Project PPD Screening	Date of Audit _____	
Patient ID initials	Type of Screening Intervention: PPD screening	
	Yes	No
1. Was PPD screening performed?		
2. Positive PPD screening		
Post-Project EDPS Screening	Date of Audit _____	
	Yes	No
1. Was EPDS screening performed?		
2. Was the EPDS score documented?		
3. EPDS Score:		

Note. Adapted from the [Agency for Healthcare Research and Quality \(2013\)](#). EPDS = Edinburgh Postnatal Depression Scale; ID = identification; PPD = postpartum depression.

On the pre-education ACA Preventive PPD Screening Clinical Practice Questionnaire of self-reported knowledge, four out of six (66.7%) providers responded that they screened all postpartum women for PPD, one (16.7%) had self-reported knowledge of available ACA preventive PPD services, two (33.3%) were aware of their role in the delivery of ACA preventive PPD screening services, three (50%) had awareness of clinical resources for implementing the ACA preventive PPD screening care services in the clinic, and one (16.7%) had awareness of local mental health resources for women with positive PPD screening results. The last question on the questionnaire referred to provider follow-up regarding PPD after mental health referral, and only two (33.3%) providers reported doing this (see [Table 1](#)). The pre-intervention EHR chart audit ($n = 125$) showed that 70 charts (56%) contained documentation of screening for PPD during a 3-month period.

On the post-education ACA Preventive PPD Screening Clinical Practice Questionnaire of self-reported knowledge of the clinical practice, five out of six (83.3%) providers had self-reported knowledge of available ACA preventive PPD services, six (100%) were aware of their role in the delivery of ACA preventive PPD screening services, six (100%) had increased awareness of clinical resources for implementing the ACA preventive PPD screening care services in the clinic, and six (100%) had increased awareness of local mental health resources for women with positive PPD screening results. The last question on the questionnaire referred to provider follow-up regarding PPD after mental health referral, and five (83.3%) providers reported they would be offering this provision following the PPD in-service (see [Table 1](#)). The post-intervention EHR chart audit ($n = 124$) showed that 115 charts (92.7%) contained documentation of screening for PPD

TABLE 1 ACA PREVENTIVE POSTPARTUM DEPRESSION SCREENING CLINICAL PRACTICE QUESTIONNAIRE: PROVIDER RESPONSE RESULTS

Questionnaire	Pretest, % ($n = 6$)	Posttest, % ($n = 6$)
2. Awareness of Affordable Care Act (ACA) preventive PPD services	16.7	83.3
3. Awareness of role in providing ACA preventive PPD services	33.3	100
4. Awareness of clinic resources to implement ACA preventive PPD services	50	100
5. Awareness of local mental health care providers for PPD referral	16.7	100
5a. Provider follow-up for PPD after referral	33.3	83.3

Note. Question 1 is omitted deliberately because provider responses were the same, and this question was not specific to the educational in-service. PPD = postpartum depression.

during a 3-month post-education follow-up period. A chi-square test indicated there was a significant difference in the number of EHR charts with PPD documentation in the post-education sample (92.7%) compared with the 56% that was obtained in the pre-intervention chart audit, $\chi^2(1) = 44, p < .05$.

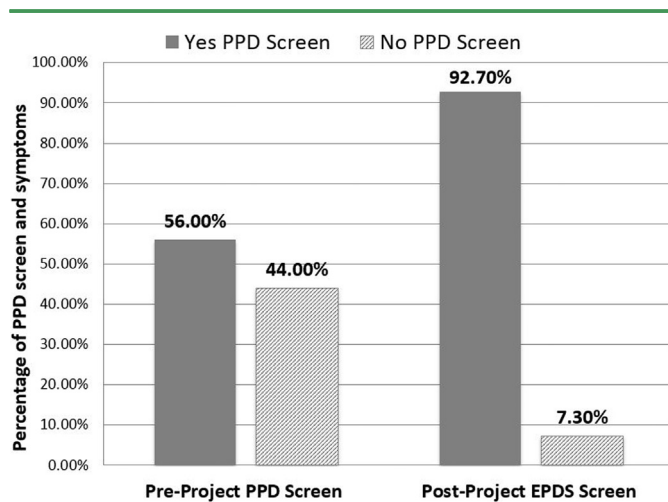
Discussion

Summary

The project outcomes identified greatly improved provider self-reported knowledge of the ACA preventive PPD perinatal care services and increases in provider-documented screening rates with implementation of the EPDS tool. Of the 124 EHR charts audited after the project intervention, 115 charts had documentation of EPDS screening. The data analysis showed a significant improvement in PPD screening rates from 56% before the project to 92.7% after the project intervention (see Figure 1). These considerable changes more than met the expected outcomes of the project initiative.

This project initiative was an important opportunity to promote health care providers' awareness of the need to provide effective PPD screening measures with the use of a standardized screening tool. ACOG and NIHCM have acknowledged PPD screening to be a valuable element of postpartum care and recommend universal screening with a standardized screening tool during the perinatal period to promote early identification and treatment of maternal depression (ACOG, 2015; NIHCM, 2010). Simple interventions, including PPD screening and education, may have a significant effect on the degree of recognition and detection of PPD, which could help prevent further complications and needless costs (ACOG, 2015; NIHCM, 2010; Schaar & Hall, 2013).

FIGURE 1 PPD SCREENING RATES BEFORE AND AFTER PROJECT IMPLEMENTATION



Note. EPDS = Edinburgh Postnatal Depression Scale; PPD = postpartum depression.

Universal screening in the detection of PPD has been recommended and is currently mandated in several states (APA Public Interest Government Relations Office, n.d.; NIHCM, 2010; Postpartum Support International, n.d.; Wisner et al., 2013). Current proposals for mandatory depression screening for women in the perinatal and postpartum periods have been supported by many professional organizations, including ACOG, the American Academy of Pediatrics, the U.S. Preventive Services Task Force, and most recently the American Medical Association (Postpartum Support International, n.d.). Moreover, legislation has been approved at the national level and by many states to improve education, screening, and treatment services for maternal PPD symptoms (NIHCM, 2010).

Interpretation

Analysis of the project outcomes showed improved PPD screening practices among the providers with the implementation of a standardized screening tool and development of the EPDS criteria in the EHR system. These outcomes were consistent with literature findings that support provider education (Schaar & Hall, 2013), inclusive of training at each clinical site regarding when to administer screening tools and how to conduct PPD screening effectively (Kendig et al., 2017). Universal depression screening practices with a standardized screening tool and referral for appropriate evaluation, diagnosis, and treatment with a mental health provider are best practices for mental health care for women and their children (ACOG, 2015; AWHONN, 2015; Kendig et al., 2017; NIHCM, 2010; Siu et al., 2016). Furthermore, Siu et al. (2016) and ACOG (2015) have reported evidence that screening enhances recognition of depression among pregnant and postpartum women to improve outcomes. In addition to depression screening, recommendations to ensure adequate support systems are in place have shown improved clinical outcomes. Provision of adequate support systems include trained clinical staff to ensure that women are screened, medically treated, and referred to appropriate behavioral resources as needed if depression is diagnosed (ACOG, 2015; Siu et al., 2016). Therefore, each clinical site should establish systems to ensure that consistent and effective mental health screening be completed among the perinatal population. In addition, health care providers should be properly trained on how and when to conduct maternal depression screening with a standardized screening instrument and how to facilitate effective referral and follow-up services in their clinical practice settings. These recommendations ensure that all providers caring for women and their children play a crucial role in providing comprehensive PPD screening practices that support underpinnings for best practice for improved health outcomes (Kendig et al., 2017; Schaar & Hall, 2013).

Limitations

There are several limitations to this project. First, there is a lack of generalizability beyond the population studied.

Second, we assessed providers' self-reported knowledge of preventive PPD interventions rather than actual knowledge; this was done in an effort to use the least invasive measure, given the new change in clinical practice. Finally, the absence of behavioral health services specifically present in the clinic is a limitation, because the potential effectiveness of PPD screening appears to be correlated with the direct availability of systems to ensure the satisfactory follow-up of women with PPD symptoms (Kendig et al., 2017).

Implications for Nursing Practice

Items that we believe contributed to the success of this project include (a) creation of the dialog box incorporating the EPDS criteria and scoring data into the EHR system, (b) addition of the flag in the EHR system to identify women screened with the EPDS, and (c) laminated copies of the EPDS in English and Spanish. These were cost effective and accessible resources for improved provider PPD screening and documentation practices. Implementation of universal screening for PPD with a standardized questionnaire such as the self-administered EPDS has the ability to positively influence provider compliance in providing recommended depression screening for all women during the postpartum period.

Recommendations for best practice include educational preparation of women to self-monitor for perinatal depression symptoms (AWHONN, 2015), universal screening for maternal depression with a standardized screening tool during the perinatal period, and referral for appropriate evaluation, diagnosis, and treatment by a mental health provider (ACOG, 2015; AWHONN, 2015; Kendig et al., 2017; NIHCM, 2010; Siu et al., 2016). Moreover, consistent screening practices promote early detection of maternal depression symptoms (AHWONN, 2015) and enhance overall health and well-being among women and their children (O'Hara & Wisner, 2014).

We used a quality improvement process of weekly PDSA cycles to enhance project compliance. Obtaining stakeholder buy-in from the providers was instrumental in achieving project success. Routine follow-up of provider PPD documentation with the EPDS has been supported to ensure sustainability of the project initiative. In addition, an accessible referral system was established that included a hospital facility located near the clinic that provides mental health services for women identified with PPD symptoms.

Conclusion

PPD poses a serious problem with significant consequences for women and their children. Research has shown that PPD screening performed with the use of a standardized screening tool allows for early recognition and intervention. Despite recommendations by professional organizations to promote universal perinatal depression screening, more efforts are needed to increase PPD screening and treatment interventions. In this project, development and implementation of a charting tool in the EHR system and a simple educational in-service were associated with improved provider PPD

screening and documentation compliance. Moreover, implementation of a standardized screening instrument such as the EPDS in the clinical setting was shown to be a beneficial intervention in promoting early recognition and treatment of maternal PPD symptoms, which can, in turn, promote optimal health outcomes among women and their children. **NWH**

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