



## Original article

## Examining the Screening Practices of Physicians for Postpartum Depression: Implications for Improving Health Outcomes



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### A B S T R A C T

**Purpose:** Postpartum depression (PPD), the most common complication of childbirth, remains largely undetected by providers. Pediatricians, obstetricians/gynecologists, and family practitioners have a responsibility to identify PPD as the condition has long-term adverse effects on their patients.

**Methods:** Using PubMed and Psycinfo databases, this review explores and summarizes studies on the screening practices of physicians.

**Findings:** The prevalence and method of screening their patients for PPD was low and variable among the three types of physicians. Pediatricians were the least likely to screen compared with obstetricians/gynecologists and family practitioners. However, the majority of all physicians felt it was within their professional purview to screen for PPD and were willing to learn more about PPD detection.

**Conclusions:** Screening rates can increase if physicians are educated about PPD and trained on the ease of routinely using a validated tool to identify PPD. This is critical, because more detection can lead to improved access to treatment, and the long-term detrimental impact that untreated PPD has on a mother and her children might be mitigated.

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Postpartum depression (PPD) is an affective mood disorder occurring within the first year after childbirth (Santoro & Peabody, 2010). PPD, the most common complication of childbearing, is problematic because it impedes maternal–infant interactions, leading to weak attachment, developmental issues, and poor socialization in affected children with effects lasting into their early adulthood (Boyd, Zayas, & McKee, 2006; Field, 2010; Santoro & Peabody, 2010; Tandon, Cluxton-Keller, Leis, Le, & Perry, 2012; Vigod, Villegas, Dennis, & Ross, 2010; Zimmer & Minkovitz, 2003). PPD also puts the mother at greater risk for

suicide and recurrent depressive episodes (Santoro & Peabody, 2010; Tandon et al., 2012; Vigod et al., 2010). Once recognized, the deleterious effects of PPD can be mitigated with pharmaceutical and/or specific types of psychotherapy that reduce parenting stress and improve the mother–infant interaction, such as child–parent psychotherapy and home-based early intervention programs, have demonstrated positive outcomes (Earls, 2010; Field, 2010; Horowitz & Goodman, 2005).

Although exact estimates of prevalence are unknown, it is generally accepted that 10% to 20% of women develop depressive symptoms after childbirth (Santoro & Peabody, 2010). Prevalence rates of postpartum depressive symptoms have been found to be higher among women who are low-income, African American, Hispanic, first-time mothers, teenage mothers, and/or experienced a high-risk birth (e.g., low birthweight or preterm birth), with rates ranging from 21% to 60% (Table 1).

The strongest predictors of, and also risk factors for, PPD are having previously experienced PPD, having anxiety or depression before or during pregnancy, and being low income (Beeghly

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**Table 1**  
Postpartum Depression Prevalence Data by Race, Ethnicity, and Income

Population with Postpartum Depressive Symptoms	Rate (%)	Sources
National estimate	10–20	Santoro & Peabody, 2010
National sample; predominately well-educated, partnered, high SES	16.1	Goodman & Tyer-Viola, 2010
Nationally representative sample	9.5	Witt et al., 2011
Subpopulation data		
Low-income and teenage mothers	40–60	Earls, 2010
Urban, poor, predominately Black or Hispanic	27–56	Chaudron, 2004; Chaudron, 2010
Low-income mothers	28–51	Boury et al., 2004; Segre et al., 2007
Experienced a high-risk birth	23–48	Northrup et al., 2013; Vigod et al., 2010
Low-income African American	39.1	Tandon et al., 2012
Primarily White and on Medicaid	35.4	Evins, Theofrastous, & Galvin, 2000
Low-income, predominantly Hispanic	35	Gress-Smith et al., 2012
African Americans	20–35	Beeghly et al., 2003; Segre et al., 2007; Tandon et al., 2012
Tri-racial, bi-ethnic sample (52% Native Americans, 24% African Americans, 14% Hispanic, 9% White, 1% other)	25*	Wei et al., 2008

\* Racial differences existed, but were not significant.

et al., 2003; Boyd et al. 2006; Northrup, Evans, & Stotts, 2013; Santoro & Peabody, 2010; Segre, O'Hara, Arndt, & Stuart, 2007; Vigod et al., 2010; Wei et al., 2008; Witt et al., 2011). Other risk factors and predictors of PPD include a family history of depression, substance abuse, adolescence, lacking social support, race (African Americans and Hispanics), and experiencing stressful life events that impact caregiving, such as living in a crime-ridden neighborhood (Beeghly et al., 2003; Boury, Larkin, & Krummel, 2004; Boyd et al., 2006; Chaudron, Szilagyi, Kitzman, Wakins, & Conwell, 2004; Chaudron et al., 2010; Earls, 2010; Gold, Singh, Marcus, & Palladino, 2012; Gress-Smith, Luecken, Lemery-Chalfant, & Howe, 2012; Northrup et al., 2013; Santoro & Peabody, 2010; Segre et al., 2007; Tandon et al., 2012; Vigod et al., 2010; Witt et al., 2011).

Precise screening rates for PPD are unknown. Tandon et al. (2012) estimate that only a small percentage of perinatal women are screened, whereas others (Gjerdingen & Yawn, 2007; Thurgood, Avery, & Williamson, 2010) estimate that less than one-half of all cases of PPD are identified. With more than 400,000 infants born annually to mothers who are depressed, Earls (2010, p. 1032) calls perinatal depression “the most underdiagnosed obstetric complication in America.”

Several screening tools have been developed to aid in the detection of PPD in which a positive screen warrants a more in-depth evaluation of PPD (Liberto, 2012). Table 2 is from the American College of Obstetricians and Gynecologists (ACOG) committee opinion number 630 on screening for depression during and after pregnancy and summarizes the different PPD screening tools available (ACOG, 2015). The Edinburgh Postnatal Depression Scale (EPDS; Cox, Holden, & Sagovsky, 1987) and the Postpartum Depression Screening Scale (PDSS; Beck & Gable, 2000) were developed specifically for detecting depression in the postpartum period, whereas the other tools measure depressive symptoms in the general population (Boyd, Le, & Somberg, 2005). The EPDS, PDSS, and Beck Depression Inventory II traditional cut-off scores can accurately identify PPD in urban, low-income women, but the optimal score for PPD detection is slightly different and should be noted when using these tools in this particular patient population (Chaudron et al., 2010).

The postpartum period is a vulnerable time for mental illness to develop, but also presents a time of increased interaction with health care providers through an uptake in health services primarily via postpartum and well-child visits (ACOG, 2015; Boyd et al., 2006; Horwitz et al., 2007; Kozhimannil, Trinacty, Busch,

Huskamp, & Adam, 2011; Leddy, Haaga, Gray, & Schulkin, 2011; Leiferman, Dauber, Heisler, & Paulson, 2008, 2010). Most women have at least eight interactions with their child's pediatrician during the child's first 2 years of life (Liberto, 2012), and it falls within pediatricians' professional purview to screen for PPD because of the long-lasting adverse effects PPD has on children (Zimmer & Minkovitz, 2003). Obstetricians/gynecologists (OB/GYNs) and family practitioners also have a vested interest in their postpartum patients' mental well-being (ACOG, 2015; Santoro & Peabody, 2010; Tandon et al., 2012; Vigod et al., 2010).

Screening rates may be low for several reasons. The signs and symptoms PPD are similar to other phenomenon that can occur during the postpartum period, making diagnosing and treating PPD difficult (Leddy et al., 2011). Maternity blues (or the “baby blues”), affecting 50% to 80% of new mothers, are the normal hormonal and physical changes that occur during and after pregnancy, resulting in the mother acting and feeling differently than she usually does but subsides within 2 weeks postpartum without causing debilitating functional impairment (Earls, 2010; Santoro & Peabody, 2010). PPD, however, with symptoms similar to the “baby blues,” has an onset that can occur immediately after childbirth and throughout the first postpartum year (Santoro & Peabody, 2010). Furthermore, the specialty and general guidelines for screening are conflicting or relatively new (Gjerdingen & Yawn, 2007; Tandon et al., 2012). Whereas the ACOG Committee on Obstetric Practice (2010) and the American Board of Family Medicine fail to give definitive recommendations for universal screening for PPD (Gjerdingen & Yawn, 2007; Tandon et al., 2012), the American Academy of Pediatrics in 2010 recommended routine universal screening for maternal depression (Earls, 2010; Tandon et al., 2012). Although it did not specify postpartum women, the U.S. Preventive Services Task Force (USPSTF) in 2009 recommended routine depression screening in nonpregnant adults if staff could assure accurate diagnosis, treatment, and follow-up (USPSTF, 2009). However, in July 2015, the USPSTF drafted an updated recommendation that included pregnant and postpartum women (USPSTF, 2015). Similarly, it was not until May 2015 that the ACOG withdrew its committee opinion from 2010 and replaced it with universal screening recommendations during the perinatal period and added that OB/GYN clinical staff is also responsible for follow-up and treatment for patients (ACOG, 2015).

PPD is common, detectable, and treatable. However, the estimated low screening rates are worrisome given the long-

**Table 2**  
ACOG Depression Screening Tools

Screening Tool	Number of Items	Time to Complete (Minutes)	Sensitivity and Specificity	Spanish Available
Edinburgh Postnatal Depression Scale	10	Less than 5	Sensitivity 59–100% Specificity 49–100%	Yes
Postpartum Depression Screening Scale	35	5–10	Sensitivity 91–94% Specificity 72–98%	Yes
Patient Health Questionnaire 9	9	Less than 5	Sensitivity 75% Specificity 90%	Yes
Beck Depression Inventory	21	5–10	Sensitivity 47.6–82% Specificity 85.9–89%	Yes
Beck Depression Inventory–II	21	5–10	Sensitivity 56–57% Specificity 97–100%	Yes
Center for Epidemiologic Studies Depression Scale	20	5–10	Sensitivity 60% Specificity 92%	Yes
Zung Self-Rating Depression Scale	20	5–10	Sensitivity 45–89% Specificity 77–88%	No

Note. This table originally appeared as Table 1 in the American College of Obstetricians and Gynecologists (ACOG), Committee on Obstetric Practice. (2015). Screening for perinatal depression. Committee Opinion No. 630. American College of Obstetricians and Gynecologists. *Obstetrics & Gynecology*, 125, 1270. Reprinted with permission from Wolters Kluwer Health, Inc.

term impact that untreated PPD has on a mother and her children. The objectives of this literature review are to determine what, exactly, are the PPD screening practices of physicians who are in frequent contact with postpartum mothers and examine why providers are not routinely screening their patients for PPD. Given the similarities between symptoms of PPD and those that normally occur during the immediate postpartum period and without uniform screening guidelines, it is hypothesized that screening rates will be low among all types of providers. It is further hypothesized that screening rates will be the lowest among pediatricians because of the latent impact PPD will have on their infant patients.

## Methods

This literature review was conducted using PubMed and PsycInfo searches for articles published between 2003 and 2013 with the following key words: attitude, beliefs, clinic, depression, family, identify, maternal, obstetric, pediatric, physician, postpartum, practice, primary care, provider, recognition, routine, and screening. The resulting 169 studies were further narrowed down to 90 by limiting the results to research carried out within the United States.

### Inclusion and Exclusion Criteria

The 11 research studies in this review were selected because they specifically involved the screening practices of pediatricians, OB/GYNs, and family practitioners. These three specialties were chosen because they all share some responsibility and have the opportunity to detect PPD. Results were excluded if the main subject of the PPD-related research was about anything other than screening practices (e.g., treatment) and if they were specific to the screening practices of health care providers other than physicians (e.g., nurses). Other provider types were considered but ultimately excluded owing to a lack of available literature. However, although the study by [Connelly, Baker, Hazen, and Mueggenborg \(2007\)](#) examines the responses of both physicians and a subset of advanced practice nurses, it was included in the final selection because physicians comprise the majority (81%) of the study sample.

Both maternal depression and PPD were used in the inclusion criteria given the overlap between their definitional windows for diagnostic opportunities. Maternal depression covers the spectrum of depressive conditions affecting mothers: 1) prenatal depression, affecting 10% to 20% of pregnant women, beginning in pregnancy and lasts up to the first 6 months postpartum; 2) PPD, with onset within the first year after birth; and 3) postpartum psychosis, affecting 1 to 2 per 1,000 new mothers, a rare but serious condition with a rapid onset within the first few days after birth ([Santoro & Peabody, 2010](#)). For the sake of concordance between similar findings, PPD is the default term used in this literature review.

### Selection and Characteristics of the 11 Studies Used in Literature Review

Of the 11 studies in the final selection for this literature review, six were specific to PPD and five were about maternal depression ([Table 3](#)). Surveys were used in every study to measure some combination of physician screening practices, training, education, treatment, beliefs, and attitudes toward screening. One study was conducted in an academic medical center, five were national surveys, and five were state surveys. Four research articles surveyed only pediatricians, two were specific to OB/GYNs, one surveyed family practitioners only, another examined the practices of OB/GYNs and family practitioners, and the remaining three studies simultaneously investigated the screening practices of all three specialties.

## Results

There was little consistency in how the various surveys measured similar outcomes, but some results, when appropriate, were merged. For example, if three different studies ask quantitatively how often the provider screens for PPD, the average of those results are presented.

### Physician Demographics

The mean age of study participants was 45 years old, with an average of 13 years in practice ([Chadha-Hooks, Park, Hilty, & Seritan, 2010](#); [Heneghan et al., 2007](#); [Horwitz et al., 2007](#);

**Table 3**  
Articles Included in Literature Review

Authors and Date	Measure	Sample Description	Purpose	Main Findings
Chadha-Hooks et al. (2010)	10-question survey, PPD	N = 131, US Academic Medical Center, 43% Peds, 37% OB/GYN, 20% FP	Evaluate strategies for PPD screening	Screen using variety of methods; most preferred was symptom review; most were unfamiliar with screening tools; Peds least familiar
Connelly et al. (2007)	48-question survey, maternal depression	N = 98, Southern California, 81% Peds, 19% advanced practice nurses	Recognition and treatment practices	Majority agreed it was their responsibility to screen but half felt confident doing so; <10% used tool
Heneghan, et al. (2007)	8-page survey, maternal depression	N = 662 active members of the American Academy of Pediatrics	Characteristics of identification and management	Positive associations: older, MH services on site, mostly White patients, use multiple methods, agree its their responsibility
Horwitz, et al. (2007)	8-page survey, maternal depression	N = 687 active members of the American Academy of Pediatrics	Determine barriers to identification and management	Lack of training and lack of time to treat; few use screening tool
Leddy et al. (2012)	Questionnaire <20 min, PPD	N = 176, active members of American College of Obstetricians and Gynecologists	Compared diagnostic knowledge, attitudes, and practices between CME takers and non-takers	CME takers screened more often and more likely to use screening tool
Leddy et al. (2011)	Questionnaire <20 min, PPD	N = 176, active members of American College of Obstetricians and Gynecologists	Assess diagnostic knowledge, attitudes, and practices	~3/4 routinely screen; barriers: time constraints, lack of knowledge and training
Leiferman et al. (2008)	60-question survey, maternal depression	N = 217, Southeast VA, 37% Peds, 23% OB/GYN, 40% FP	Examine PCPs' practices and beliefs, knowledge, self-efficacy, and perceived barriers to management	>90% all reported it was their responsibility to recognize, but 40% never/rarely assessed and one-third did not provide referral
Leiferman et al. (2010)	60-question survey, maternal depression	N = 217, Southeast VA, 37% Peds, 23% OB/GYN, 40% FP	Examine predictors of management in primary care practices	Positive predictors: comfort, confidence, and perceived responsibility
Seehusen et al. (2005)	25-question survey, PPD	N = 298, Washington State, FP	Determine frequency and methods of PPD detection	70% always/often screen at postpartum gynecologic examinations and 46% at well-child visits, of which 30% use tool; training and responsibility associated
Sleath et al. (2007)	Survey, PPD	N = 228, NC, 84% OB/GYN, 16% FP	Examine frequency of discussing PPD and if differences between specialty and gender	43% asked about depression during postpartum visits, 79% did not use tool; OB/GYN more likely ask about symptoms and use tool than FP
Wiley et al. (2004)	2-page survey, PPD	N = 311, national, pediatric members of American Medical Association	Assess knowledge and views about PPD	Half had little or no education about PPD; half underestimated prevalence nationally and in their practice; few confident to identify; rarely familiar with tools

Abbreviations: CME, continuing medical education; FP, family practitioners; MH, mental health; OB/GYN, obstetrician/gynecologist; PCP, primary care provider; Peds, pediatricians; PPD, postpartum depression.

Leddy et al., 2011; Leddy, Farrow, Joseph, & Schulkin, 2012; Leiferman et al., 2008, 2010; Seehusen, Baldwin, Runkle, & Clark, 2005; Sleath, Thomas, Jackson, West, & Gaynes, 2007; Wiley, Burke, Gill, & Law, 2004). On average from the 10 studies (except Chadha-Hooks et al., 2010) that gathered gender data, males (49%) and females (51%) were nearly equally represented as survey respondents. A total of 3,261 physician responses were included in the studies used in this literature review, with sample sizes ranging from 98 to 687 and averaging 296 responses per study.

### *Routine Screening*

More than one-half (55%) of all specialties responded that they ever, sometimes, often, or always assess for PPD, with pediatricians being the least likely to assess (Connelly et al., 2007; Heneghan et al., 2007; Horwitz et al., 2007; Leddy et al., 2011; Leiferman et al., 2008; Seehusen et al., 2005; Wiley et al., 2004). Three in 10 physicians rarely or never assess for PPD (Leiferman et al., 2008; Seehusen et al., 2005).

### *Methods of Assessment*

#### *Clinical judgment*

The most common method of assessment reported was the physician relying on their own clinical judgment to detect PPD, with pediatricians being more likely (80%) to use this method (Connelly et al., 2007; Heneghan et al., 2007; Wiley et al., 2004), compared with 65% of OB/GYNs and all three specialties (Chadha-Hooks et al., 2010; Leddy et al., 2011).

#### *Symptom review*

Quantitatively, more than one-half (55%) of physicians conduct a symptom review to detect PPD (Chadha-Hooks et al., 2010; Heneghan et al., 2007; Sleath et al., 2007). Qualitatively, pediatricians were the least likely to do a symptom review to assess for PPD with the mothers of their patients (Connelly et al., 2007; Heneghan et al., 2007; Leiferman et al., 2008).

Of the symptoms reviewed, pediatricians were less likely than OB/GYNs (53% vs. 83%) to take into account psychiatric history (Heneghan et al., 2007; Leddy et al., 2011). More than one-quarter (27%) of OB/GYNs and family practitioners inquired about functional impairment and loss of interest in usual activities (Sleath et al., 2007). One in five OB/GYNs and family practitioners asked about partner relationships (Sleath et al., 2007), and 1 in 10 pediatricians asked about availability of social support (Connelly et al., 2007). Somatic sources for PPD symptoms were investigated by 10% of pediatricians and 43% of OB/GYNs and family practitioners (Connelly et al., 2007; Sleath et al., 2007). Some pediatricians (11%) were prompted to ask about PPD only if the mother first volunteered information related to her depressive symptoms (Connelly et al., 2007; Heneghan et al., 2007).

#### *Screening tool use*

Overall, one in four physicians responded yes to routinely or ever using a screening tool, with pediatricians being the least likely to use screening tools (7%) compared with family practitioners (31%) and OB/GYNs (36%; Connelly et al., 2007; Heneghan et al., 2007; Horwitz et al., 2007; Leddy et al., 2011; Leiferman et al., 2008; Seehusen et al., 2005; Sleath et al., 2007; Wiley et al., 2004).

### *Mother initiated*

An average of 11% of pediatricians were prompted to ask about PPD only if the mother first volunteered information related to her depressive symptoms (Connelly et al., 2007; Heneghan et al., 2007).

### *Physician Beliefs*

#### *Perceived role*

A responsibility to identify PPD was felt by the majority of pediatricians (>75%), OB/GYNs (87%), and family practitioners (>90%; Connelly et al., 2007; Heneghan et al., 2007; Leddy et al., 2011; Sleath et al., 2007; Wiley et al., 2004).

#### *Perceived confidence*

Although the majority of physicians were not confident in their skills to recognize PPD, pediatricians were the least confident and OB/GYNs were the most confident of the three specialties (Connelly et al., 2007; Leddy et al., 2011; Leiferman et al., 2008; Wiley et al., 2004).

#### *Perceived barriers*

Nearly two-thirds (63%) of all specialties, two-thirds of pediatricians, and more than one-quarter (28%) of family practitioners found it too difficult to screen, mostly owing to time constraints (Connelly et al., 2007; Horwitz et al., 2007; Leiferman et al., 2008; Seehusen et al., 2005; Wiley et al., 2004). Inadequate training, skills, or knowledge needed to screen for PPD were reported as barriers to PPD screening by one in three physicians from all specialties, with pediatricians (60%) being the most likely to report such barriers (Connelly et al., 2007; Horwitz et al., 2007; Leddy et al., 2011; Leiferman et al., 2008). Other cited perceived barriers to screening included inadequate mental health services, liability issues, financial disincentives, perceived treatment as ineffective, and perceived the mother did not want to discuss PPD symptoms with them (Connelly et al., 2007; Horwitz et al., 2007; Leiferman et al., 2008; Wiley et al., 2004).

### *Physician Attitudes*

Although the majority of all physician types were open to improving their PPD detection skills, OB/GYNs were the most inclined to do so (Leiferman et al., 2008). Most respondents (62%) reported they would be willing to use screening tools more often, with pediatricians being the least likely to agree to do so (Connelly et al., 2007; Leiferman et al., 2008; Wiley et al., 2004).

### *Treatment Practices*

Screening and transition to proper assessment and treatment, when indicated, is quality practice. Although treatment was not the focus of this practice examination nor are the findings on treatment practices in this set of studies representative of all studies on treatment, they are at least worth mention. To that end, family practitioners were predominantly (70%) found to treat PPD themselves, compared with 45% of OB/GYNs (Leiferman et al., 2008) and 4% to 36% of pediatricians (Connelly et al., 2007; Heneghan et al., 2007; Horwitz et al., 2007; Leiferman et al., 2008). The majority of family practitioners (92%) and OB/GYNs (86%) were likely to prescribe an antidepressant as part of their PPD treatment, whereas no pediatricians reported doing so (Leiferman et al., 2008). Pediatricians were more likely (24%) to



report not treating PPD at all, compared with family practitioners (10%) and OB/GYNs (4%; [Leiferman et al., 2008](#)). The majority of OB/GYNs (81%) gave a referral to a mental health provider whereas only one-third of family practitioners did ([Leiferman et al., 2008](#)). Although [Leiferman et al. \(2008\)](#) found that fewer than 10% of pediatricians were likely to refer to a mental health provider, [Connelly et al. \(2007\)](#) and [Heneghan et al. \(2007\)](#) found that 80% and 82%, respectively, did so.

## Discussion

This study's hypotheses were found to be true with the majority of physician groups reporting low use of screening instruments for PPD, and the lowest rate of screening being among pediatricians. Although the majority of physicians in all three specialties consistently reported throughout the studies that they feel responsible for recognizing PPD, their screening practices were largely contradictory to their beliefs. This paradox between beliefs and behaviors could be owing to many physicians lacking the knowledge and skills necessary to screen and/or owing to their perceived barriers for routinely screening for PPD. Furthermore, barriers to screening ranged from those with complex solutions (e.g., the inadequate mental health services reported by nearly all physicians) to those (e.g., the difficulty of universal screening) that could be relieved with adequate training on the need and ease of screening.

Given that pediatricians have the most interactions with a postpartum mother and given the evidence of long-term effects that PPD has on children, pediatricians play as significant a part in recognizing PPD as do the providers who directly care for the mother. Although the majority of pediatricians believed it was their role to recognize PPD, they were least likely to have confidence to do so. Although also being the least likely to report having received education about PPD management, it is disconcerting that pediatricians are the most likely specialty to rely on their own clinical judgment for PPD detection and least likely to conduct a symptom review. The lack of training in PPD detection may also explain why pediatricians were the most likely to cite barriers to PPD identification but were the least likely to use a screening tool that could efficiently and effectively help them to detect PPD.

In May 2015, ACOG announced its recommendation that all pregnant and postpartum women be screened for depression and anxiety using a standardized, validated tool at least once during their pregnancy or in the first 12 months postpartum. Furthermore, in recognition that screening alone would be futile for improving clinical outcomes, ACOG also recommends that OB/GYN clinicians have follow-up and treatment procedures in place when needed ([ACOG, 2015](#)). To complement the screening discoveries from this review, a literature review on treatment practices would yield a more complete picture of PPD management by physicians.

The postpartum period is an ideal time to screen, identify, and treat women with depressive symptoms because of their frequent interactions with health care providers. This opportunity for detection is especially critical for low-income women, particularly for African American and Latina women, who are less likely to receive postpartum mental health management ([Kozhimannil et al., 2011](#)) but have the highest rates of and are at greatest risk for developing PPD. Management of PPD is crucial for improving the well-being of a mother and her family for many years to come.

## Limitations

The major limitation of this literature review was the variation in which comparable results were reported. Converging the data was difficult at times because the surveys asked similar questions either quantitatively, qualitatively, or both. Although all of the studies focused on screening practices, some investigated attitudes and perceptions, whereas others surveyed more tangible practices (e.g., which specific screening tools were used) related to screening behaviors. Further limitations of this literature review results from the cross-sectional nature of the surveys, self-reported data, and the low sample size present in several studies that reduced the generalizability of their findings. All of the studies were at risk for potentially skewed results owing to varying degrees of response bias, nonresponse bias, and self-selection bias.

## Implications for Practice and/or Policy

Assessing for depression is a critical element of postpartum care ([ACOG, 2015](#); [Beeghly et al., 2003](#); [Sit & Wisner, 2009](#)). PPD screening should be incorporated into the standard of care for postpartum patients and at well-child pediatric visits, particularly at the first visit when the prevalence of maternal depression is the greatest ([ACOG, 2015](#); [Sit & Wisner, 2009](#); [Zimmer & Minkovitz, 2003](#)). These changes in practice occur during the physician and patient interaction, but would not be possible without the support and cultural shifts necessary in their health care teams, clinics and hospitals, health care organizations, health care systems, and policies. Clinical protocols for the routine screening of PPD in postpartum patients should be developed and should include referral and follow-up procedures for patients with a positive PPD screening.

A clinical performance measure for screening could be implemented by creating an annual goal to screen a certain percentage of patients at risk for PPD. Not all women who develop PPD have a history of depression; however, providers should ask their patients about their mood ([ACOG, 2015](#)), symptoms and risk factors for PPD, focusing on stressful life events ([Vigod et al., 2010](#)) and should consider using a brief depression screening tool ([ACOG, 2015](#); [Sleath et al., 2007](#)). [Sit and Wisner \(2009\)](#) recommend that EPDS be incorporated into well-child visits because 85% of women who completed the EPDS during pediatric visits had high rates of acceptability and willingness to complete the screening tool. Alternatively, the mother could complete EPDS while she is waiting to be seen ([Liberto, 2012](#)).

Efforts to increase routine screening and decrease the burden some physicians feel toward routine screening should be synchronized with efforts to improve physician training and education with regard to the management of PPD. Targeted educational interventions like continuing medical education (CME) and residency training could improve screening rates among providers. CMEs are more effective at changing physician knowledge, performance, and patient outcomes when the teaching methods are active and interactive, rather than passive, and are delivered to smaller groups of the same discipline with multiple exposures ([Mansouri & Lockyer, 2007](#)).

Furthermore, professional health organizations, like ACOG did in 2015, should endorse universal screening and emphasize the ease of administering a brief assessment tool ([Leddy et al., 2011](#)). Also, familiarity with the mental health services available in their communities would assist physicians with making referrals and could be accomplished, for instance, by creating

and maintaining a mental health resources list (ACOG, 2015). If referrals for treatment are made, mental health providers should know that the DSM (American Psychiatric Association [APA], 2000) changes the PPD diagnosis to a peripartum onset period that includes mood symptoms experienced during pregnancy and in the 4 weeks after delivery (APA, 2013).

Federal and state governments are raising awareness and implementing screening and treatment guidelines regarding PPD (Santoro & Peabody, 2010). The Affordable Care Act requires insurers to cover costs of PPD screening and provides grants to offset some of the costs related to PPD management (Santoro & Peabody, 2010). When the Illinois Medicaid system began reimbursing clinicians for depression screenings in 2004, perinatal screenings increased (Santoro & Peabody, 2010). Future research should include measuring the use of reimbursed screens, their impact on improving the identification of PPD and how patients are linked to follow-up services including the level of mental health services uptake.

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