

ENHANCING POSTPARTUM MENTAL HEALTH SUPPORT THROUGH FAMILY
MEDICINE INTERVENTIONS

Ruaa Ghanim Khaleel*, Suha Salim Issa Al-Dulaimi and Hanan Husam Hashim

¹Ministry of Health - Nineveh Health Directorate, High Diploma in Family Medicine, Right Sector Primary Health Care, Al Yarmook Primary Health Care Center.²Ministry of Health - Nineveh Health Directorate, Higher Diploma in Family Medicine, Left Sector Primary Health Care, AL-Zahraa Primary Health Care Center.³Ministry of Health - Nineveh Health Directorate, Primary Health Care Sector/Right Side, Primary Health Care Center/Al Zanjeely.

*Corresponding Author: Ruaa Ghanim Khaleel

Ministry of Health - Nineveh Health Directorate, High Diploma in Family Medicine, Right Sector Primary Health Care, Al Yarmook Primary Health Care Center.

Article Received on 12/01/2025

Article Revised on 02/02/2025

Article Published on 23/02/2025

ABSTRACT

Background: Postpartum depression (PPD) is a significant mental health concern affecting maternal well-being and child development. Despite its widespread prevalence, many cases remain undiagnosed and untreated. Primary care physicians (PCPs), including family practitioners and pediatricians, play a crucial role in identifying and managing PPD. However, their attitudes and practices regarding screening and intervention remain inconsistent. This study examines PCPs' perspectives on PPD recognition, screening, and management, with a focus on enhancing postpartum mental health support through family medicine interventions. **Methods:** A cross-sectional survey was conducted among 525 primary care physicians, including 280 pediatricians and 245 family practitioners. The questionnaire assessed their attitudes toward PPD recognition, preferred management approaches, and willingness to implement standardized screening tools. Data were analyzed using chi-square tests, with statistical significance set at $P < .05$. **Results:** Most participants (98.0%) acknowledged the importance of recognizing PPD, though only a minority of family practitioners (2.9%) expressed willingness to treat affected mothers directly. The majority (89.8%) preferred referring patients to mental health specialists rather than initiating treatment. A significant disparity was found in screening practices, with 91.2% of family practitioners expressing willingness to use a screening questionnaire compared to 64.6% of pediatricians ($P < .0001$). Key barriers to screening included time constraints, lack of formal training, and uncertainty regarding referral pathways. **Conclusion:** While PCPs recognize the importance of PPD identification, significant gaps remain in their screening and management practices. Family practitioners are more inclined to engage in screening and intervention compared to pediatricians. Strengthening medical education, implementing standardized screening protocols, and fostering interdisciplinary collaboration can improve early detection and support for postpartum women. Integrating mental health care into routine family medicine practice is essential for addressing PPD and enhancing maternal and child health outcomes.

INTRODUCTION

Maternal mental health is a critical component of overall well-being, influencing not only the mother but also the health and development of her child. The World Health Organization emphasizes its importance in achieving global health objectives, particularly in relation to women's and children's health outcomes.^[1] Postpartum depression (PPD) has been widely recognized as a significant concern due to its detrimental effects on maternal functioning and child development, affecting cognitive, emotional, and physical growth.^[2-6] Early motherhood is a crucial period in which infants rely on their primary caregiver for emotional and social development, making maternal mental health support an essential aspect of healthcare.^[7,8]

PPD is classified as a major depressive disorder occurring during pregnancy or within the first month postpartum. It is characterized by persistent low mood and a loss of interest or pleasure in daily activities, along with at least four additional symptoms such as appetite disturbances, sleep irregularities, fatigue unrelated to childcare, psychomotor agitation or retardation, feelings of worthlessness or guilt, impaired concentration, and recurrent suicidal thoughts.^[9] The impact of PPD extends beyond the mother, as children of affected mothers are at a significantly higher risk of developing emotional and behavioral issues. Research indicates that children of depressed mothers are three times more likely to experience serious emotional difficulties, which often remain undiagnosed and untreated in primary care

settings.^[10]

The prevalence of PPD varies across populations, with reported rates generally ranging between 10% and 20% in multiple regions worldwide.^[11,12] Studies have found rates of 15.3% in Turkey^[13], 12.9% in Tunisia^[14], 14.3% in Malaysia^[15], 18% in Dubai^[16], and 16.9% in Japan.^[17] Other research highlights significant disparities in prevalence due to factors such as cultural influences, measurement tools, and the timing of assessment.^[18-22] Despite the substantial burden of PPD, many cases remain undiagnosed and untreated, highlighting a critical gap in healthcare interventions.^[7,23-25]

Recognizing the urgent need for improved maternal mental health care, various health organizations advocate for integrating PPD screening into primary care.^[2,26,27] Family medicine plays a pivotal role in addressing postpartum mental health, as family practitioners have the advantage of viewing maternal health in a broader context rather than solely in relation to the child. Unlike pediatricians, who primarily focus on the infant, family physicians are well-positioned to assess and support the mother's overall well-being. Research suggests that postpartum women frequently engage with primary care providers and generally respond positively to mental health screenings conducted during these visits.^[30,31] Studies have demonstrated that screening for PPD in primary care settings is both feasible and beneficial in early identification and intervention.^[32-34] However, despite these recommendations, many healthcare providers still fail to implement screening and treatment strategies for PPD effectively.^[35]

Raising awareness about the consequences of PPD and equipping family medicine practitioners with the necessary knowledge and tools to recognize its signs are crucial steps toward enhancing postpartum mental health support. This study aims to explore family physicians' perspectives and practices regarding maternal mental health, emphasizing the need for greater integration of mental health care into family medicine to ensure early intervention and comprehensive support for postpartum women.

Data and Methods

This study employed a cross-sectional design to assess primary care physicians' approaches to postpartum mental health support. An online survey was distributed to 525 family physicians and pediatricians affiliated with

a major healthcare organization that operates under a national health insurance system. This system ensures universal healthcare access through non-profit health maintenance organizations (HMOs) (36). Of those invited, 65% responded, resulting in a final sample of 341 physicians.

The survey was designed to evaluate physicians' attitudes, screening practices, and management strategies for postpartum depression (PPD). It included sections on:

- Physicians' perceptions of maternal mental health and their role in supporting postpartum women.
- Current practices for identifying and addressing PPD.
- Level of training and confidence in managing maternal mental health concerns.
- Approaches to addressing behavioral and emotional challenges in postpartum women.
- Three specific questions assessing their knowledge of PPD and its management.

To ensure clarity, the survey defined PPD as a condition characterized by moderate to severe depressive symptoms lasting at least two weeks, explicitly differentiating it from transient "postpartum blues."

Data Analysis

Statistical analysis was performed using SAS v9.2 software. Categorical variables were analyzed using chi-square tests, with statistical significance set at $P < .05$.

Ethical Considerations

This study was exempt from institutional review board approval as it was conducted as an internal quality assessment initiative among primary care physicians. To maintain confidentiality, all responses were anonymous, and no personally identifiable information was collected.

RESULTS

Participants

The study included 525 healthcare professionals, comprising 280 pediatricians and 245 family practitioners (Table 1). The majority were male (57.9%), with over half (51.0%) aged 51 years or older. A significant portion completed their medical education outside their country of practice, though most finalized their specialization within the same healthcare system. Additionally, 18.4% reported working in private practice alongside their primary institutional roles.

Table 1: Descriptive Characteristics of Respondents (N = 525).

Characteristic	Total, n (%)
Specialization	
Pediatrics	280 (53.3)
Family Medicine	245 (46.7)
Gender	
Male	304 (57.9)
Female	221 (42.1)
Age, years	

≤40	81 (15.4)
41-50	176 (33.6)
≥51	268 (51.0)
Private Practice (in addition to primary role)	
Yes	97 (18.4)
No	428 (81.6)

Recognition of Postpartum Depression (PPD)

A vast majority (98.0%) of participants believed it was crucial for primary care physicians to recognize signs of PPD (Table 2). This consensus was consistent across family practitioners, those trained outside their country of practice, and individuals working in private practice. No significant variations were noted based on institutional affiliation, gender, or specialty.

Response to Identified Cases of PPD

Most respondents (89.8%) reported they would engage with PPD cases by assessing the situation, monitoring the mother's condition, consulting colleagues, or referring the case to a specialist. A small subset of family

practitioners (2.9%) stated they would personally manage treatment. Physicians trained outside their current healthcare system were more likely to avoid involvement compared to those trained within it.

Use of Screening Questionnaires

When asked about utilizing a brief questionnaire to screen for PPD, 76.5% of participants expressed willingness to do so. Family practitioners were significantly more inclined to adopt this tool than pediatricians (91.2% vs. 64.6%, $P < .0001$). No significant differences were observed based on institutional affiliation, gender, or specialty.

Table 2: Responses to Questions Regarding Postpartum Depression (PPD).

Question	Responding "Yes" n (%)	P
Do you think it is important that primary care physicians recognize the signs of PPD? (N = 510)	500 (98.0)	-
How do you respond if you identify a case of PPD? (N = 515)		
No or minimal involvement	37 (7.3)	-
Clarify, consult, and/or refer	463 (89.8)	-
Treat the mother	15 (2.9)	.01
Would you use a brief questionnaire to identify PPD? (N = 510)	390 (76.5)	< .0001

DISCUSSION

This study explores the perspectives and practices of primary care physicians (PCPs) regarding the recognition of postpartum depression (PPD) symptoms in mothers of children under their care. Prior research indicates that PCPs generally acknowledge their responsibility in identifying PPD symptoms.^[37-40] Consistent with these findings, most respondents in the present study recognized the importance of detecting PPD signs, with no significant differences observed between family practitioners and pediatricians. This aligns with findings by Leiferman et al.^[38], who reported a 90% acknowledgment rate among both groups. However, in contrast to the present study, they found that family practitioners were more likely to consider themselves responsible for identifying maternal depression and felt more confident in discussing and treating it. Heneghan et al.^[41] found that pediatricians agreed it was appropriate to inquire about maternal well-being, though many preferred to rely on observational cues such as tearfulness rather than directly questioning mothers about depression. While most pediatricians believed that mothers would respond positively to such discussions, 39% expressed concern that pediatric visits might not be an ideal setting due to distractions, including the child's presence. Other studies also reported varying levels of perceived responsibility among pediatricians for

identifying maternal depression.^[40,42]

Recognizing PPD symptoms and taking action are two distinct aspects of care. In this study, most respondents, regardless of specialty, indicated that they would refer mothers experiencing depressive symptoms to mental health professionals. However, only family practitioners—though a minority—stated that they would take an active role in treating maternal depression. Park et al.^[40] similarly found that while most pediatricians believed they should refer cases to specialists, few saw themselves as responsible for providing treatment. Olson et al.^[42] reported that only 7% of pediatricians considered themselves responsible for treatment, while Leiferman et al.^[38] noted that 40% of family practitioners referred mothers for depression treatment, compared to fewer than 10% of pediatricians. Heneghan et al.^[43] identified factors influencing pediatricians' involvement, including age, workplace collaboration with mental health providers, and recognition of the impact of maternal depression on child health. In the present study, pediatricians largely indicated a willingness to engage in some capacity—whether through clarification, consultation, or referral—but none expressed willingness to initiate treatment.

A significant proportion of respondents—about three-

quarters—were open to screening for PPD, with family practitioners demonstrating a greater inclination than pediatricians, whose willingness rate was lower than two-thirds. In clinical practice, compliance with PPD screening programs varies. Wichman *et al.*^[44] found similar screening rates among pediatricians and family practitioners in a multispecialty setting. In another study, Wiley *et al.*^[45] reported that half of pediatricians found PPD screening feasible, and 58% were willing to use a short screening tool. However, only 7% were familiar with such tools, and most reported having limited knowledge about PPD. Additional studies suggest that while pediatricians often recognize the need to identify PPD, they tend to rely on nonverbal cues rather than formal screening tools.^[41,45]

Differences in attitudes between family practitioners and pediatricians have been observed in multiple studies. Leiferman *et al.*^[38] reported that 70% of family practitioners actively assessed women for PPD, compared to only 30% of pediatricians. The distinction between these specialties may stem from differing patient priorities, as pediatricians focus primarily on child health, whereas family practitioners provide broader care, including maternal well-being. Thomas *et al.*^[46] found that 97% of family practitioners and obstetricians/gynecologists felt responsible for diagnosing PPD, and 88% considered treatment their duty. Supporting this perspective, Seehusen *et al.*^[39] reported that family practitioners generally viewed PPD as a significant condition that warranted screening at every postpartum or well-child visit. However, they noted that screening during well-child visits—where the infant is the primary focus—posed challenges, while postpartum visits provided a more practical opportunity. Evidence suggests that postpartum women experiencing PPD tend to seek medical attention more frequently than those without PPD.^[47] Given their role in postpartum care, family practitioners are well-positioned to conduct screenings and provide support. While family practitioners naturally play a critical role in maternal mental health, pediatricians also have significant opportunities for engagement, as mothers frequently visit them for well-baby checkups and acute care visits. Research has shown that mothers report higher satisfaction with their child's primary care provider when their own emotional well-being is addressed during pediatric visits.^[48]

While not the primary focus of this study, obstetricians and gynecologists also have a key role in maternal mental health. Professional organizations have advocated for the integration of perinatal depression screening into routine care, emphasizing the importance of structured follow-up and referral systems.^[49] Effective screening and intervention require a multidisciplinary approach, ensuring that women receive appropriate care from various healthcare providers.

Several barriers to PPD screening and management

persist across different healthcare settings, including time constraints, insufficient training in recognizing and discussing emotional well-being, and limited knowledge of referral resources.^[41,42,45,50] Although this study did not find a significant correlation between provider age and willingness to address PPD, Head *et al.*^[51] reported that pediatricians with more years in practice perceived greater obstacles to managing maternal depression than residents. This trend suggests that newer generations of physicians may benefit from increased awareness and training in mental health, fostering a more holistic approach to patient care.

This study has some limitations, including the brevity of the questionnaire and the potential for response bias. Participants with a greater interest in maternal mental health may have been more likely to respond, leading to a ceiling effect in the reported importance of recognizing PPD symptoms. Despite assurances of anonymity, social desirability bias could have influenced responses, particularly given the increasing recognition of maternal mental health as a critical issue. However, the responses were not entirely uniform, particularly regarding actual screening practices and willingness to intervene. Future research should aim to mitigate these limitations and explore ways to enhance the integration of PPD screening into routine care.

A key strength of this study is the nearly equal participation of pediatricians and family practitioners, allowing for a balanced comparison of attitudes across both specialties. The good response rate further enhances the reliability of the findings.^[52] Additionally, as primary care providers play a leading role in shaping healthcare policies, their perspectives on PPD screening and intervention can significantly impact clinical practice.

The findings suggest that family practitioners exhibit a more proactive stance toward PPD screening compared to pediatricians, yet screening in pediatric settings remains essential. The American Academy of Pediatrics emphasizes that pediatric practices can implement postpartum depression screening and facilitate referrals and support for affected mothers.^[2] Ensuring that PCPs routinely screen for PPD and take appropriate action requires a comprehensive understanding of their attitudes toward maternal mental health.^[40]

While the present study reflects broader global trends, continued research is needed to guide medical education and health policy, promoting early identification and intervention for postpartum depression. Strengthening collaboration between family practitioners, pediatricians, and obstetricians/gynecologists can enhance maternal and child well-being, leading to improved outcomes for families affected by PPD.

REFERENCES

1. World Health Organization. Knowledge Summary 31—women's & children's health: maternal mental

- health: why it matters and what countries with limited resources can do. <http://www.who.int/pmnch/knowledge/publications/summaries/ks31.pdf?ua=1>. Updated 2014. Accessed March 10, 2015.
2. Earls M. Clinical report—incorporating recognition and management of perinatal and postpartum depression into pediatric practice. *Pediatrics*, 2010; 126: 1032-1039.
 3. Kingston D, Tough S. Prenatal and postnatal maternal mental health and school-age child development: a systematic review. *Matern Child Health J.*, 2014; 18: 1728-1741.
 4. Balbierz A, Bodnar-Deren S, Wang JJ, Howell EA. Maternal depressive symptoms and parenting practices 3 months postpartum. *Matern Child Health J.*, 2015; 19: 1212-1219.
 5. Wang L, Anderson JL, Dalton Iii WT, et al. Maternal depressive symptoms and the risk of overweight in their children. *Matern Child Health J.*, 2013; 17: 940-948.
 6. Currie ML, Rademacher R. The pediatrician's role in recognizing and intervening in postpartum depression. *Pediatr Clin North Am.*, 2004; 51: 785-801, xi.
 7. Center on the Developing Child at Harvard University. Maternal depression can undermine the development of young children (Working Paper 8). http://developingchild.harvard.edu/resources/reports_and_working_papers/working_papers/wp8/. Updated 2009. Accessed March 9, 2015.
 8. Chaudron LH. Postpartum depression: what pediatricians need to know. *Pediatr Rev.*, 2003; 24: 154-161.
 9. American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders. 5th ed. Washington, DC: American Psychiatric Publishing, 2013.
 10. Weissman MM, Feder A, Pilowsky DJ, et al. Depressed mothers coming to primary care: maternal reports of problems with their children. *J Affect Disord*, 2004; 78: 93-100.
 11. O'Hara MW, Swain AM. Rates and risk of postpartum depression—a meta-analysis. *Int Rev Psychiatry*, 1996; 8: 37-54.
 12. Gavin NI, Gaynes BN, Lohr KN, Meltzer-Brody S, Gartlehner G, Swinson T. Perinatal depression: a systematic review of prevalence and incidence. *Obstet Gynecol*, 2005; 106(5 pt 1): 1071-1083.
 13. Turkcapar AF, Kadioğlu N, Aslan E, Tunc S, Zayıfoğlu M, Mollamahmutoğlu L. Sociodemographic and clinical features of postpartum depression among Turkish women: a prospective study. *BMC Pregnancy Childbirth*, 2015; 15: 108.
 14. Masmoudi J, Charfeddine F, Trabelsi S, et al. Postpartum depression: prevalence and risk factors. A prospective study concerning 302 Tunisian parturients [in French]. *Tunis Med.*, 2014; 92: 615-621.
 15. Mohamad Yusuff AS, Tang L, Binns CW, Lee AH. Prevalence and risk factors for postnatal depression in Sabah, Malaysia: a cohort study. *Women Birth*, 2015; 28: 25-29.
 16. Abou-Saleh MT, Ghubash R. The prevalence of early postpartum psychiatric morbidity in dubai: a transcultural perspective. *Acta Psychiatr Scand*, 1997; 95: 428-432.
 17. Shimizu A, Nishiumi H, Okumura Y, Watanabe K. Depressive symptoms and changes in physiological and social factors 1 week to 4 months postpartum in Japan. *J Affect Disord*, 2015; 179: 175-182.
 18. Glasser S. Postpartum depression: early identification in Israeli primary health services. In: Sarid O, Segal-Englechin D, Cwikel J, eds. *Mind Body Mosaic: Women's Health in Israel* [in Hebrew]. Beer Sheva, Israel: Ben Gurion University of the Negev Press, 2010; 89-101.
 19. Glasser S, Tanous M, Shihab S, Goldman N, Ziv A, Kaplan G. Perinatal depressive symptoms among Arab women in northern Israel. *Matern Child Health J.*, 2012; 16: 1197-1205.
 20. Alfayumi-Zeadna S, Kaufman-Shriqui V, Zeadna A, Lauden A, Shoham-Vardi I. The association between sociodemographic characteristics and postpartum depression symptoms among Arab-Bedouin women in southern Israel. *Depress Anxiety*, 2015; 32: 120-128.
 21. Glasser S, Stoski E, Knelser V, Magnezi R. Postpartum depression among Israeli Bedouin women. *Arch Womens Ment Health*, 2011; 14: 203-208.
 22. Halbreich U, Karkun S. Cross-cultural and social diversity of prevalence of postpartum depression and depressive symptoms. *J Affect Disord*, 2006; 91: 97-111.
 23. Horowitz JA, Cousins A. Postpartum depression treatment rates for at-risk women. *Nurs Res.*, 2006; 55(2): S23-S27.
 24. Abrams LS, Dornig K, Curran L. Barriers to service use for postpartum depression symptoms among low-income ethnic minority mothers in the United States. *Qual Health Res.*, 2009; 19: 535-551.
 25. Bina R. Seeking help for postpartum depression in the israeli jewish orthodox community: factors associated with use of professional and informal help. *Women Health*, 2014; 54: 455-473.
 26. Umboh SJ, How CH, Chen H. Postnatal depression: a family medicine perspective. *Singapore Med J.*, 2013; 54: 477-479.
 27. Matijasevich A, Munhoz TN, Tavares BF, et al. Validation of the Edinburgh Postnatal Depression Scale (EPDS) for screening of major depressive episode among adults from the general population. *BMC Psychiatry*, 2014; 14: 284.
 28. Glasser S. Postpartum depression: a chronicle of health policy development. *Isr J Psychiatry Relat Sci.*, 2010; 47: 254-259.
 29. Israel Ministry of Health. Directive regarding identification of perinatal depression

- symptoms. http://www.health.gov.il/hozer/bz03_2014.pdf. Updated 2014. Accessed October 28, 2014.
30. Walker LO, Im EO, Tyler DO. Maternal health needs and interest in screening for depression and health behaviors during pediatric visits. *J Pediatr Health Care*, 2013; 27: 267-277.
 31. Buist A, Condon J, Brooks J, et al. Acceptability of routine screening for perinatal depression. *J Affect Disord*, 2006; 93: 233-237.
 32. Chaudron LH, Szilagyi PG, Kitzman HJ, Wadkins HI, Conwell Y. Detection of postpartum depressive symptoms by screening at well-child visits. *Pediatrics*, 2004; 113(3 pt 1): 551-558.
 33. Liberto TL. Screening for depression and help-seeking in postpartum women during well-baby pediatric visits: an integrated review. *J Pediatr Health Care*, 2012; 26: 109-117.
 34. Olson AL, Dietrich AJ, Prazar G, Hurley J. Brief maternal depression screening at well-child visits. *Pediatrics*, 2006; 118: 207-216.
 35. Driscoll JW. Postpartum depression: the state of the science. *J Perinat Neonatal Nurs.*, 2006; 20: 40-42.
 36. Rosen B, Merkur S. Israel: health system review. *Health Systems in Transition*, 2009; 11(2): 1-226. http://brookdale.jdc.org.il/_Uploads/Publication sFiles/Health-Systems-in-Transition-2009.pdf. Accessed August 6, 2015.
 37. Chew-Graham C, Chamberlain E, Turner K, Folkes L, Caulfield L, Sharp D. GPs' and health visitors' views on the diagnosis and management of postnatal depression: a qualitative study. *Br J Gen Pract*, 2008; 58: 169-176.
 38. Leiferman JA, Dauber SE, Heisler K, Paulson JF. Primary care physicians' beliefs and practices toward maternal depression. *J Womens Health (Larchmt)*, 2008; 17: 1143-1150.
 39. Seehusen DA, Baldwin LM, Runkle GP, Clark G. Are family physicians appropriately screening for postpartum depression? *J Am Board Fam Pract*, 2005; 18: 104-112.
 40. Park ER, Storfer-Isser A, Kelleher KJ, et al. In the moment: attitudinal measure of pediatrician management of maternal depression. *Ambul Pediatr*, 2007; 7: 239-246.
 41. Heneghan AM, Morton S, DeLeone NL. Paediatricians' attitudes about discussing maternal depression during a paediatric primary care visit. *Child Care Health Dev.*, 2006; 33: 333-339.
 42. Olson AL, Kemper KJ, Kelleher KJ, Hammond CS, Zuckerman BS, Dietrich AJ. Primary care pediatricians' roles and perceived responsibilities in the identification and management of maternal depression. *Pediatrics*, 2002; 110: 1169-1176.
 43. Heneghan AM, Chaudron LH, Storfer-Isser A, et al. Factors associated with identification and management of maternal depression by pediatricians. *Pediatrics*, 2007; 119: 444-454.
 44. Wichman CL, Angstman KB, Lynch B, Whalen D, Jacobson N. Postpartum depression screening: initial implementation in a multispecialty practice with collaborative care managers. *J Prim Care Community Health*, 2010; 1: 158-163.
 45. Wiley CC, Burke GS, Gill PA, Law NE. Pediatricians' views of postpartum depression: a self-administered survey. *Arch Womens Ment Health*, 2004; 7: 231-236.
 46. Thomas N, Sleath BL, Jackson E, West S, Gaynes B. Survey of characteristics and treatment preferences for physicians treating postpartum depression in the general medical setting. *Community Ment Health J.*, 2008; 44: 47-56.
 47. Dennis CL. Influence of depressive symptomatology on maternal health service utilization and general health. *Arch Womens Ment Health*, 2004; 7: 183-191.
 48. Brown JD, Wissow LS. Discussion of maternal stress during pediatric primary care visits. *Ambul Pediatr*, 2008; 8: 368-374.
 49. Committee on Obstetric Practice. The American College of Obstetricians and Gynecologists Committee Opinion no. 630. Screening for perinatal depression. *Obstet Gynecol*, 2015; 125: 1268-1271.
 50. Horwitz SM, Kelleher KJ, Stein RE, et al. Barriers to the identification and management of psychosocial issues in children and maternal depression. *Pediatrics*, 2007; 119: e208-e218.
 51. Head JG, Storfer-Isser A, O'Connor KG, et al. Does education influence pediatricians' perceptions of physician-specific barriers for maternal depression? *Clin Pediatr (Phila)*, 2008; 47: 670-678.
 52. Nulty DD. The adequacy of response rates to online and paper surveys: what can be done? *Assess Eval Higher Educ.*, 2008; 33: 301-314.