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# Assessment of the knowledge, attitude, and practices of OB-GYN consultants and residents on the screening of postpartum depression

Cristyne G. Loquero<sup>1</sup>, Pherdes E. Galbo<sup>1</sup>

## Abstract:

**INTRODUCTION:** Postpartum depression (PPD) is a major health concern for child-bearing women and has its effects on her children. Advocacies for mental health have paved way for more awareness of conditions such as PPD. Currently, there is no particular screening protocol employed by attending physicians of these women. There is also a lack of data that determines the practices of obstetricians when dealing with patients with PPD or those at risk of developing it.

**OBJECTIVE:** This descriptive study evaluated the knowledge, attitudes, and practices of OB-GYN consultants and residents on the screening of PPD.

**MATERIALS AND METHODS:** A validated questionnaire was utilized with some modifications made to tailor fit the targeted population. All affiliated consultants and residents of the Philippine Obstetrical and Gynecological Society-accredited training hospitals in a Region VII were included while those retired were excluded. The Google Form link of the questionnaire was disseminated to the different institutions who gave approval to conduct the study. Anonymity and confidentiality of data acquired were maintained throughout the study.

**RESULTS:** A total of 110 responses were received. The key findings of the study showed that the respondents have above average knowledge on PPD including its risk factors, symptoms, complications, and treatments. They generally have positive beliefs toward their role in the screening and management of PPD. Moreover, majority of them have already tried screening for PPD although not routinely.

**CONCLUSION:** There is a significant relationship between the knowledge, attitude, and practices of the consultants and residents on the screening of PPD. Systems should be put in place to ensure effective treatment and follow-up of patients and thus impact good clinical outcomes.

## Keywords:

Depression, postpartum, screening

## Introduction

### Background

Pregnancy can be a particularly stressful time for a woman. Biochemical

factors and life stressors can have great effects on one's mental health during the perinatal period. Intuitively, pregnancy can precipitate or exacerbate some coexisting psychological disorders. Women respond in various ways to stressors of pregnancy, and some express persistent concerns regarding fetal health, child care, lifestyle changes, or fear of childbirth pain. Anxiety, sleep disorders, and functional impairment are common.<sup>[1]</sup> Up to 70% of pregnant women report symptoms of depression during their

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<sup>1</sup>Department of Obstetrics & Gynecology, Cebu Velez General Hospital, Cebu City, Cebu, Philippines

### Address for correspondence:

Cristyne G. Loquero, MD  
Department of Obstetrics & Gynecology, Cebu Velez General Hospital, Cebu City, Cebu, Philippines.  
E-mail: [cristyneloquero@cim.edu.ph](mailto:cristyneloquero@cim.edu.ph)

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pregnancy with 10%–16% fulfilling the criteria for major depression.<sup>[2,3]</sup>

Depression is a disorder generally characterized by a sustained depressed mood or loss of interest or pleasure for at least 2 weeks. The latest edition of the Diagnostic and Statistical Manual of Mental Disorders 5 further specifies the criteria for the diagnosis of a major depressive disorder. These include a decrease or increase in appetite, insomnia or hypersomnia, psychomotor retardation or agitation, feeling of worthlessness or excessive guilt, indecisiveness, and recurrent thoughts of death. The more commonly referred to as Postpartum Depression (PPD) falls under this category with the specifier “with peripartum onset” applied, indicating that the major depressive episode occurred during pregnancy or in the 4 weeks following delivery.<sup>[4]</sup> Depressive disorders rank among the leading causes of disability worldwide and PPD is becoming one of the world’s increasing epidemics affecting approximately 11%–42% of postpartum women globally. This shows that PPD is a major public health concern for childbearing women.<sup>[5]</sup>

Both the American College of Obstetricians and Gynecologists and the United States Preventative Services Task Force recommend screening at least once during the perinatal period for depression and anxiety.<sup>[6,7]</sup> One study reported that obstetricians and gynecologists failed to identify 60% of depressed women in clinical practice.<sup>[8]</sup> Several screening instruments are available and have been validated for use during pregnancy and the puerperium. Use of one of these screening tools is encouraged because symptom- or risk-based screening alone may be insufficient.<sup>[6]</sup>

Advocacies and campaigns for mental health have become more prominent in the recent years. This has led to more awareness of such conditions including PPD. The prevalence of PPD has been documented by several studies done locally in tertiary hospitals as well as in some rural maternal facilities. Patients were screened postpartum using the Edinburgh Postnatal Depression Scale (EPDS) and the reported prevalence of PPD range from 16% to 26% (Sacris A, 2019, unpublished data).<sup>[9,10]</sup> Another local study also reported that EPDS may be used to screen for PPD as early as 2 days postpartum for early detection and prompt management of those at risk (Hamoy LJ, 2020, unpublished data).

Currently, there have been no general recommendations made to address a particular screening protocol for pregnant or postpartum mothers in our locality. Most studies tackled on the prevalence of PPD, identifying its risks and symptomatology, and even about management. All these target the patient as the population. On the other hand, there is a lack of data that determines the practices

of healthcare providers, obstetrician-gynecologists in particular, when dealing with patients with PPD or those at risk of developing the condition. Understanding their levels of knowledge and beliefs will enable a more efficient process of awareness creation and will help guide in the formulation of tailor-fit programs for this set of patients. The results of this research would help healthcare providers be more aware of this condition and ultimately improve the quality of life of those affected.

## Objectives

This study aims to assess the knowledge, attitude, and practices of OB- GYN consultants and residents on the screening of PPD.

## Specifically the study aims to

1. Describe the demographic profile of the respondents to include age, gender, religion, marital status, years of clinical practice, and personal/family history
2. Determine the relationship of the respondents’ knowledge on PPD and their attitude towards it
3. Determine the relationship of the respondents’ knowledge on PPD and the practice of screening for it
4. Determine the relationship of the respondents’ attitude on PPD and the practice of screening for it.

## Materials and Methods

### Research design

This study utilized a descriptive cross-sectional research design.

### Setting and participants

Included in this study were all affiliated consultants and residents of the different accredited training hospitals of the Philippine Obstetrical and Gynecological Society (POGS) in a Region VII. Retired obstetrician gynecologists and those not anymore in active clinical practice were excluded.

### Data collection

The study utilized a validated questionnaire mostly based on the one developed by Kang *et al.* with some modifications to tailor fit the targeted population. It consisted of sociodemographic characteristics, 24 items on knowledge (general information, risk factors, symptoms, complications and treatments), 12 items on beliefs (sociocultural beliefs, importance of screening, self-perceived responsibility, and confidence level) and 11 items on practice (having ever performed PPD screening and screening tool awareness and utilization).<sup>[11]</sup> The modified questionnaire was pilot tested on 10 consultants and residents. The Google Forms link was sent out to the different POGS-affiliated consultants and residents.

### Data analysis

The data gathered from the study were presented in tabular forms. These served as the basis for presenting the results of the analysis. In addition, the researcher used appropriate statistical treatments to analyze the data.

For this study, frequency and percentage distribution were used to describe the respondents' demographic profiles. Mean and standard deviation were also utilized to assess the knowledge, attitude, and practices of the respondents on the Screening of PPD. Meanwhile, Pearson-r determined the relationship between respondents' knowledge of PPD and the practice of screening as well as their attitude on PPD and their practice of screening for it. In all computations, the software Statistical Package for the Social Sciences in Windows and Microsoft Excel Analysis tool pack were used.

### Ethical considerations

Respective Institutional Review Board approvals were sought in the different hospitals prior to including their participants in the study. No respondent identifiers were included in the collection of the data to maintain anonymity and confidentiality of data acquired. Respondents had the option to refuse or to withdraw from the research at any time without any consequences. No monetary or material goods were provided in return for their participation.

## Results

A total of 110 responses were recorded among the nine institutions who were able to give approval to conduct the study within the data collection period.

Table 1 shows the profile of the respondents, including their age, gender, religion, marital status, number of children, training background, years in clinical practice, and experience with PPD. Most of the respondents are in the 25–34-year-old age group, female, Catholic and are married. The years in clinical practice are spread out since about 40% of respondents comprised of residents who are still in training. Of note, 14 respondents have family members or relatives with a history of PPD and 9 respondents experienced PPD before.

The level of knowledge of the respondents about PPD is reflected in Table 2. Each item was scored based on correctly identifying it as a true or false statement. The highest possible score in the questionnaire is 24, and the respondents' mean score is 19.87 interpreted as high while the standard deviation is 1.89 meaning, the respondents' answers vary or spread out.

**Table 1: Profile of the respondents (n=110)**

|  | Frequency (%) |
|--|---------------|
| Age  |               |
| 25-34  | 43 (39.1)     |
| 35-44  | 28 (25.5)     |
| 45-54  | 21 (19.1)     |
| 55-64  | 13 (11.8)     |
| 65 and above   | 5 (4.5)       |
| Gender   |               |
| Female   | 105 (95.5)    |
| Male   | 5 (4.5)       |
| Religion   |               |
| Catholic   | 92 (83.6)     |
| Noncatholic  | 18 (16.4)     |
| Marital status   |               |
| Married  | 62 (56.4)     |
| Separated  | 2 (1.8)       |
| Single   | 43 (39.1)     |
| Widowed  | 3 (2.7)       |
| Number of children                                     |               |
| None   | 47 (42.73)    |
| 1-2  | 41 (37.3)     |
| 3-4  | 22 (20.0)     |
| Training background                                    |               |
| Consultant (general OB-GYN)                            | 39 (35.5)     |
| Resident in training                                   | 44 (40.0)     |
| Subspecialist  | 27 (24.5)     |
| Years in clinical practice                             |               |
| 1-5  | 22 (20.0)     |
| 6-10   | 11 (10.0)     |
| 11-15  | 13 (11.8)     |
| 15-20  | 8 (7.3)       |
| >20  | 23 (20.9)     |
| Have family members or relatives with a history of PPD | 14 (12.7)     |
| Experienced PPD before                                 | 9 (8.2)       |

PPD: Postpartum depression, OB-GYN: Obstetricians and gynecologists

Table 3 presents the attitude of the respondents about PPD. Majority of the respondents strongly agree that screening for PPD is necessary and it is the obstetrician's responsibility to screen as well as to give counseling to mothers with PPD. Furthermore, the respondents believe that they should also refer the said patients for further treatment. The grand weighted mean of the respondents from attitude questionnaire is 3.97 interpreted as high.

Table 4 presents the practices of the respondents on the screening for PPD. Of the 110 respondents, 89 (80.9%) of them had ever conducted PPD screening albeit rarely. Majority do screening in the postpartum period, mostly weeks after delivery and some do it in the immediate postpartum a few days after delivery. However, only 38 (34.5%) of them are aware of the availability of PPD screening tools and only 26 (23.6%) of them use it in their clinical practice. The most commonly used screening tool was the EPDS. There were 70 (63.6%) respondents who

**Table 2: Knowledge of respondents on postpartum depression**

| Item  | Frequency (%) |
|---|---------------|
| PPD can occur any time during the 1 <sup>st</sup> year postdelivery                   | 103 (92.79)   |
| PPD only affects females, not males   | 57 (51.82)    |
| PPD affects 10%-20% of the mothers  | 84 (75.68)    |
| Depression in postpartum blues lasts >2 weeks after delivery                          | 26 (23.42)    |
| PPD most commonly occurs during 1 <sup>st</sup> -3 <sup>rd</sup> month after delivery | 100 (90.09)   |
| These are the risk factors for PPD  |               |
| Primigravida  | 103 (93.64)   |
| Planned pregnancy   | 100 (90.09)   |
| Taking methyl dopa  | 70 (63.06)    |
| Family history of psychiatric illness   | 107 (96.40)   |
| History of PPD in previous pregnancy  | 108 (97.30)   |
| These are the symptoms of PPD   |               |
| Difficulty in sleeping  | 107 (96.40)   |
| Self-blaming when things went wrong   | 109 (98.20)   |
| Weight loss   | 97 (87.39)    |
| Suicidal thought  | 107 (96.40)   |
| Tired or no energy  | 109 (98.20)   |
| Anxious or worried for no good reason   | 110 (99.10)   |
| PPD is one of the leading causes of infanticide                                       | 87 (78.38)    |
| Mothers with PPD may default their infants' follow-up for vaccination                 | 98 (88.29)    |
| PPD affects the child's physical and mental development                               | 103 (92.79)   |
| Untreated PPD mother may remain depressed after 1 year                                | 104 (93.69)   |
| All mothers with PPD need antidepressants   | 92 (82.88)    |
| Antidepressant is contraindicated for breastfeeding mother                            | 59 (53.15)    |
| Electroconvulsive therapy can be used in treating PPD                                 | 38 (34.23)    |
| Supportive counseling is recommended for mild postpartum depression                   | 108 (97.30)   |

PPD: Postpartum depression

**Table 3: Attitude of respondents on the screening of postpartum depression**

| Item  | Mean | SD   | Interpretation |
|---|------|------|----------------|
| PPD is a social stigma  | 3.62 | 1.38 | High           |
| It is our culture that mothers do not discuss their depression with their attending | 3.67 | 1.13 | High           |
| Mothers with PPD prefer to seek alternative treatment for their depression          | 3.88 | 0.93 | High           |
| Screening for PPD is necessary  | 4.65 | 0.69 | Very high      |
| Screening for PPD takes too much of time  | 3.01 | 1.20 | Neutral        |
| Screening for PPD is my responsibility  | 4.55 | 0.58 | Very high      |
| Giving counseling to mothers with PPD is my responsibility                          | 4.50 | 0.70 | Very high      |
| Referring mothers with PPD for further treatment is my responsibility               | 4.77 | 0.46 | Very high      |
| It is rewarding to care for mothers with PPD  | 4.28 | 0.90 | High           |
| I am comfortable in talking with postpartum mothers about depression                | 3.95 | 1.00 | High           |
| I am confident in recognizing PPD   | 3.37 | 0.95 | Neutral        |
| I am confident in giving counseling to mothers with PPD                             | 3.40 | 1.08 | Neutral        |

SD: Standard deviation, PPD: Postpartum depression

were able to identify a woman with PPD although not all of them employed the use of screening tools.

The respondents already had background knowledge on PPD mostly learned in medical school and supplemented by attending continuing medical education (CME) lectures and webinars. However, they also agree that their knowledge may not be enough and are interested to undergo more training with regards to screening for PPD as shown in Table 5. CME lectures and webinars are platforms for disseminating information to which the respondents are amenable.

Calculating the different correlation coefficient among the different domains of knowledge, attitudes, and practices of screening for PPD all indicate positive correlations as seen in Table 6. Furthermore, there is a noted significant relationship between the knowledge of the respondents and both their attitude towards PPD ( $P = 0.008$ ) and the practice of screening it ( $P = 0.028$ ). Likewise, the attitude of the respondents on PPD also does affect their practice of screening and vice versa ( $P = 0.000$ ).

**Table 4: Practice of respondents on screening for postpartum depression**

| Items  | Frequency (%) |
|--|---------------|
| How many postpartum mothers do you see in your practice in a week? |               |
| 0-10   | 105 (95.5)    |
| 11-20  | 2 (1.8)       |
| 21-30  | 0             |
| 31-40  | 1 (0.9)       |
| >40  | 2 (1.8)       |
| When do you usually screen mothers for PPD?                        |               |
| Antepartum   | 11 (10.0)     |
| Intrapartum  | 1 (0.9)       |
| Immediate postpartum (days after delivery)                         | 28 (25.5)     |
| Postpartum (weeks after delivery)                                  | 52 (47.3)     |
| >6-8 weeks after delivery  | 2 (1.8)       |
| Are you aware of any screening tools available for PPD?            |               |
| No   | 72 (65.5)     |
| Yes  | 38 (34.5)     |
| Have you ever identified a woman with PPD?                         |               |
| No   | 40 (36.4)     |
| Yes  | 70 (63.6)     |

| Items  | Mean | SD   | Interpretation |
|--|------|------|----------------|
| How often do you screen postpartum mothers for depression?                       | 2.48 | 1.09 | Rarely         |
| How often do you screen for PPD when risk factors are present?                   | 4.01 | 1.06 | Often          |
| How frequent do you use the available screening tools for PPD?                   | 1.96 | 1.34 | Rarely         |
| When a woman is identified to have PPD, how frequent do you give her counseling? | 3.79 | 1.10 | Often          |
| When a woman is identified to have PPD, do you refer her for further treatment?  | 4.53 | 0.83 | Always         |

SD: Standard deviation, PPD: Postpartum depression

**Table 5: Future practice and training for postpartum depression**

| Item   | Mean | SD   | Description    |
|--|------|------|----------------|
| I am willing to use postpartum screening tool in my practice | 4.52 | 0.70 | Agree          |
| I need more training on PPD                                  | 4.69 | 0.48 | Strongly agree |
| I am interested in further training in PPD                   | 4.46 | 0.71 | Strongly agree |

SD: Standard deviation, PPD: Postpartum depression

**Table 6: Relationships of the respondents' knowledge, attitude, and practice on postpartum depression**

| Variables                     | r     | P     | Interpretation | Decision  |
|-------------------------------|-------|-------|----------------|-----------|
| Knowledge and attitude on PPD | 0.253 | 0.008 | Significant    | Reject ho |
| Knowledge and practice on PPD | 0.210 | 0.028 | Significant    | Reject ho |
| Attitude and practice on PPD  | 0.369 | 0.000 | Significant    | Reject ho |

PPD: Postpartum depression

## Discussion

PPD has been described as a condition that affects the love and happiness mothers expect to feel towards their newborn babies.<sup>[12]</sup> Research has shown that experiencing symptoms of PPD can have immediate ill effects on the offspring as well as adverse long-term effects. For the mother, the episode can be the precursor for her to develop chronic recurrent depression. For her children, this can contribute to emotional, behavioral, cognitive, and interpersonal problems in later life.<sup>[13]</sup> Early detection and prompt management of risk factors can decrease the negative effects on the mothers as well as their children.

Risk factors of PPD include prenatal depression, prenatal anxiety, poor social support, and a history of previous depression.<sup>[14]</sup> Other factors such as childcare stress, low self-esteem, infant temperament, poor relationship of partner, obstetric and pregnancy complications, negative cognitive attributions have also been shown to predict development of PPD to varying degrees.<sup>[12]</sup> If PPD is to be prevented by clinical or public health intervention, its symptoms and risk factors need to be reliably identified. In this study, most of the respondents have identified the common risk factors for developing PPD and that they would also oftentimes screen for PPD in the presence of such conditions.

Obstetrician gynecologists may not be skilled enough to provide definitive management for patients diagnosed with PPD. They are not very much familiar with the available pharmacologic agents or other interventions that may be employed in the treatment of PPD. Evidently, a significant number of the respondents were not able to correctly identify that antidepressants are not contraindicated for breastfeeding mothers and that electroconvulsive therapy can be used in treating PPD. Initial steps, however, such as counseling may be done and most of the respondents agree that they should do it. In spite of this, results of the study also showed they are not confident enough in recognizing PPD and in giving counseling advice to these mothers.

Evidences suggest that PPD is often overlooked and misdiagnosed and most vulnerable women are rarely recognized during pregnancy or after delivery, thus do not always receive the necessary care.<sup>[15]</sup> This is especially common in developing countries where mental health is generally ignored.<sup>[16]</sup> Unfortunately, in most developing countries, mental health is often neglected during pregnancy and postpartum period, hence PPD is not given any priority and routine screening is not conducted for it.<sup>[17]</sup> Accordingly, in this study the respondents agree that PPD is a social stigma and it is inherent in our culture that these mothers do not discuss their depression with their attending physician. These may contribute to the failure of mothers to seek professional help and may in turn resort to unfavorable outcomes due to lack of intervention.

One study showed that despite novel programs instituted to ensure universal screening, majority of the providers are unable to do so.<sup>[18]</sup> In this study, respondents also rarely screen for PPD among their patients. Only a minority are aware of the available screening tools that can be utilized. Most of the respondents have learned about PPD but admittedly, there has been no formal training for obstetrician-gynecologists to manage or at least identify this particular condition.

To date, no regulation has been implemented on the universal screening for PPD here in the Philippines. As primary care providers for women over the life cycle, obstetricians-gynecologists are often the first and most frequent person they seek consult with. It is then prudent that they be able to assess their own capabilities for screening such population in order to promote awareness and deliver appropriate management. Systems should be put in place to ensure effective treatment and follow-up of patients and thus impact good clinical outcomes.

## Conclusion

The key findings of the study showed that the respondents have above average knowledge on PPD including its risk

factors, symptoms, complications, and treatments. They generally have positive beliefs toward their role in the screening and management of PPD. And majority of them have already tried screening for PPD although not routinely.

Most of the respondents in this study are in the 25–34-year-old age group, female, Catholic and are married. Majority of the respondents include residents in training and consultants who have been in practice for more than 20 years. About 13% have family members or relatives with a history of PPD and 8% of the respondents have experienced PPD before.

The health-care provider's knowledge on PPD can affect his/her attitudes and beliefs about it although there was a low correlation. However, more importantly, both the knowledge and attitude on PPD can affect one's practice of screening for it.

## Limitations

Data gathered in this study were limited to the study population covered and to the responses received within the study period. The questionnaire used in this study might also not encompass all the needed information with regard to PPD and also considering there might be different cultural beliefs about it.

## Recommendations

Health care providers should strengthen the implementation of early PPD screening and health education of different mental health issues that may occur after childbirth as part of the perinatal services offered in hospitals and other health care facilities. The researcher also recommends to expand the gathering of data to other localities so we can determine the extent needed for the implementation of screening protocols. Further studies may also be made to evaluate and address the possible barriers to the implementation of such screening programs. It would also be worth exploring other mental health issues that may occur in the peripartum period.

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## Conflicts of interest

There are no conflicts of interest.

## References

1. Cunningham FG, Leveno K, Bloom S, Dashe J, Hoffman B, Casey B, *et al.* Williams Obstetrics. 25<sup>th</sup> ed. New York: McGraw-Hill Education; 2018.
2. ACOG Committee on Practice Bulletins--Obstetrics. ACOG practice bulletin: Clinical management guidelines for obstetrician-gynecologists number 92, April 2008 (replaces

- practice bulletin number 87, November 2007). Use of psychiatric medications during pregnancy and lactation. *Obstet Gynecol* 2008;111:1001-20.
- Gentile S. Use of contemporary antidepressants during breastfeeding: A proposal for a specific safety index. *Drug Saf* 2007;30:107-21.
  - American Psychiatric Association: The Diagnostic and Statistical Manual of Mental Disorders. 5<sup>th</sup> ed. Arlington: American Psychiatric Publishing; 2013.
  - Stewart DE, Robertson E, Dennis C-L, Grace SL, Wallington T. Postpartum Depression: Literature Review of Risk Factors and Interventions; 2003.
  - The American college of obstetricians and gynecologists committee opinion no. 630. Screening for perinatal depression. *Obstet Gynecol* 2015;125:1268-71.
  - Siu AL, US Preventive Services Task Force (USPSTF), Bibbins-Domingo K, Grossman DC, Baumann LC, Davidson KW, *et al*. Screening for depression in adults: US preventive services task force recommendation statement. *JAMA* 2016;315:380-7.
  - Cerimele JM, Vanderlip ER, Croicu CA, Melville JL, Russo J, Reed SD, *et al*. Presenting symptoms of women with depression in an obstetrics and gynecology setting. *Obstet Gynecol* 2013;122 2 Pt 1:313.
  - Labrague LJ, McEnroe-Petitte D, Tsaras K, Yboa BC, Rosales RA, Tizon MM, *et al*. Predictors of postpartum depression and the utilization of postpartum depression services in rural areas in the Philippines. *Perspect Psychiatr Care* 2020;56:308-15.
  - de Chavez MD, Marian CD. Prevalence of postpartum depression among mothers who delivered in a tertiary hospital. *Philippine J Obstet Gynecol* 2014;38:15021.
  - Kang PS, Mohazmi M, Ng YM, Liew SM. Letter-to-editor: Nurses' knowledge, beliefs and practices regarding the screening and treatment of postpartum depression in maternal and child health clinics: A cross-sectional survey. *Malays Fam Physician* 2019;14:18-25.
  - Beck CT, Indman P. The many faces of postpartum depression. *J Obstet Gynecol Neonatal Nurs* 2005;34:569-76.
  - Kavanaugh M, Halterman JS, Montes G, Epstein M, Hightower AD, Weitzman M. Maternal depressive symptoms are adversely associated with prevention practices and parenting behaviors for preschool children. *Ambul Pediatr* 2006;6:32-7.
  - Stern TA, Rosenbaum JF, Fava M, Biederman J, Rauch SL. Massachusetts General Hospital Comprehensive Clinical Psychiatry. New York: Mosby, Elsevier; 2008.
  - Afolayan JA, Onasoga OA, Rejuaro FM, Yusuf A-RG, Onuabueke C. Knowledge of postpartum depression and its associated risk factors among nurse-midwives in a Nigerian tertiary hospital. *Sierra Leone J Biomed Res* 2016;8:2.
  - Babatunde T. An Exploration of Perception of Postnatal Depression in African Women in Greenwich Community Health Care. The Mary Seacole Project, Lead Public Health Community Nurse; 2010. p. 67-70.
  - Seda N, Naile B. Postnatal depression: Midwives and nurses knowledge and practice. *Erciyes Med J* 2010;32:265-74.
  - Delatte R, Cao H. Universal screening for postpartum depression: An inquiry into provider attitudes and practice. *Am J Obstet Gynecol* 2009;200:e63-4.

