Knowledge, attitude and practices of obstetrician-gynecologists in screening for postpartum depression and psychosis in a private tertiary hospital*

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ABSTRACT

Background: Postpartum Depression (PPD) and psychosis (PPP) are diseases that have detrimental impact to the patient and their family. Prenatal and postpartum screening are important to decrease its morbidity, hence obstetricians and gynaecologists' (OBGYN) role in the diagnosis is vital. However, studies showed that the screening rate of PPD and PPP are low, which may be caused by several barriers.

Objective: This study aims to describe the knowledge, attitude and practices of the OBGYN's practicing in a local tertiary hospital using a survey created by Leddy et al. in 2011.

Methodology: This survey is a 5-section questionnaire that tackled the clinical practice, knowledge, beliefs and attitudes of the subjects. It was given to 160 consultants with a response rate of 40% (n=64) during the time period of May 17, 2018 to June 27, 2018.

Results: The results showed that most OBGYN do not routinely screen for PPD and PPP (54.69%), which is analogous to literature but contrary to the original study. Most OBGYN agree that all the specified barriers to screening were limiting, the most cited among of which were their limited knowledge in the diagnostic criteria (PPD: 79.69%, PPP: 79.56%) and treatment options (PPD: 76.56%; PPP: 78.13%) and their lack in training in postpartum mental illnesses (PPD: 78.13%; PPP: 84.38%). These barriers were paralleled by the low scores in the knowledge section, despite the higher accuracy in diagnosing patients in the clinical cases. However, there was a low frequency screening rate among OBGYN's with recent and personal experience with the disease.

Conclusion: This gap in knowledge can be addressed by organizing events for continuing medical education, focusing on peripartum mental health illnesses, creating avenues for research to increase knowledge among residents-in-training and fellows of the local organizing body, and establishing clear guidelines to incorporate screening in local practice during prenatal and postpartum care.

Keywords: Depression, Gynaecologists, Obstetricians, Postpartum, Psychosis

INTRODUCTION

Background: Pregnancy is established as a vulnerable state where mental wellness can be affected. Postpartum Depression (PPD) has wide prevalence rates of 10-25% worldwide[1-5]. One study described the prevalence of PPD ranged from 10-20% of American women[3,4]. Another reported that postpartum depression affects one out of eight women, with a recurrence rate of 25%[6]. One meta-analysis, which is consisted of 59 studies, suggests a prevalence rate of 13%[7]. In the Philippines, based on a statistical extrapolation used in the Postpartum Depression Research Bill led by Senator Defensor-Santiago, an estimate of 126,826 cases were diagnosed with PPD in 2004[8]. Furthermore, a local study done reported a prevalence rate of 22.61% in a local tertiary hospital and was determined using Edinburgh Postnatal Depression Scale (EPDS)[9].

Its deleterious effects have already been established with suggestive evidences, which include destructive interpersonal and family relationships, expression of negative emotions, impaired maternal-child interactions, poor infant growth and development[2]. At the end of the spectrum, postpartum psychosis (PPP), which is the more debilitating condition, has a prevalence of less than 1%, but with equal importance due to its consequential effects

*Finalist, Philippine Obstetrical and Gynecological Society (Foundation), Inc. (POGS) Research Paper Contest, October 18, 2018, 3rd Floor Assembly Hall, POGS Building

to the infant and family[5].

PPD, using the DSM-IV criteria, is defined as a major depressive disorder that occurs during the postpartum period[5,10]. However, peripartum depression is suggested to be the more appropriate terminology, proposed by the new DSM-V criteria, which is more inclusive of the pregnancy period. Several studies and professional opinions are suggesting to further increase the time period from 4 weeks to 6 months, even up to 1 year since the occurrence of depressive symptoms is more apparent during the first year after pregnancy[10]. Postpartum psychosis is described as a severely depressed mood associated with hallucinations, delusions and psychotic thoughts[5,11]. Despite the importance of detection of these conditions, PPD is still considered as an underdiagnosed disease.

Generally, obstetrician-gynecologists (OBGYN) can be considered as primary care physicians of most women. This provides a good opportunity for OBGYNs to detect mood and mental disturbances, which increases their detection rate, hence timely treatment and referral can be offered. This gives emphasis to the importance that OBGYNs should be familiar with PPD and PPP[3,4]. However, these are still considered underdiagnosed, with an estimate of 50% to 80% of PPD cases go unrecognized. Furthermore, despite the recommendations made by the American College of Obstetricians and Gynecologists (ACOG) where they highly recommend screening every trimester and during postpartum[6], our local society has not established guidelines for screening at the time of writing. Moreover, there is prevalence of the stigma caused by mental illnesses among Asian cultures[2]. Most women do not voluntarily seek help due to cultural, social and even healthcare factors[7]. Hence, they try to keep and do not recognize these symptoms as depression until they demonstrate worsened mental presentation[3,4,12].

The rate of screening of primary healthcare professionals are generally low, which was below 50%[12]. There is no local data that document the screening rate among primary health care workers, which include OBGYN. Screening for these diseases is hindered by several factors. Most primary care providers mistake depressive symptoms as complaints of a relatively unremarkable pregnancy[3,11,13]. Leddy et al 2011 added the inadequate training on the diagnosis and management, lack of experience with PPD, and time constraints as barriers to screening[3,4].

One study that focused on OBGYNs was done using a survey, which was a 5-section questionnaire that tackled the practice, knowledge, beliefs and attitudes of the subjects on screening PPD and PPP[3,4]. Remarkably, the study showed that most subjects involved often screen for postpartum depression (72.4%). These findings were markedly different from other literature in the level of screening of depression. On the other hand, the study agrees with literature that most rely on clinical judgment in screening and diagnosing patients. Lastly, study participants also agree that their training did not provide adequate training in managing PPD and PPP. This research would be using this questionnaire since the survey was validated and pilot-tested, catered to obstetricians and gynecologists[3,4].

Scientific Significance

Local research regarding PPD is limited at the time of writing, and focus on the use of the EPDS and its validity[14]. One local study showed prevalence of PPD; however, it was only based on a limited setting, which may not reflect the general population[9]. The lack of an accurate nationwide prevalence rate, basing on "statistical extrapolation rather than an actual count", reflects the poor collection of local data.

Similar to the study done by Leddy et al established in ACOG, the result of this study would describe the screening practices of local OBGYN towards PPD and PPP. This would also help increase in awareness to the importance of screening for PPD and PPP to the welfare of the patient, infant and her family.

Research Questions

Most OBGYN are hesitant in screening patients who present with mental problems. Moreover, the cultural obstacle in identifying patients with mental illness further adds to the difficulty in detecting patients at risk for postpartum mental illness. In this regard, this paper simply attempts to answer the question "Among obstetricians and gynaecologists, is postpartum depression and psychosis routinely screened in their clinical practice?"

Research Hypothesis

Following the study of Leddy and colleagues in 2011, the study would have these following research hypotheses:

1. This study hypothesized that few (less than 25%, Leddy et al 2011) OBGYN do routine screening for postpartum depression and psychosis
2. This study hypothesized that, similarly with literature, barriers to screening for PPD and PPP are time constraint, lack of training and knowledge, and low prevalence of the disease
3. The study hypothesized that recent, or personal experiences with the diseases increase the frequency of OBGYN to screen patients for PPD and PPP

OBJECTIVES

General Objectives: This study aimed to describe the knowledge, attitude and practices of the obstetricians-

gynecologists practicing in a local tertiary hospital using a survey created by Leddy and colleagues in 2011.

Specific Objectives

- Describe the background and knowledge of obstetricians-gynecologists on postpartum depression or postpartum psychosis
- Determine the practices of obstetricians-gynecologists in screening postpartum depression or postpartum psychosis
- Describe the barriers and opinions of obstetricians-gynecologists in screening postpartum depression or postpartum psychosis
- Determine the proportion of obstetricians-gynecologists who routinely screen postpartum depression or postpartum psychosis

METHODOLOGY

Sample Population: The target population were the OBGYN in a private tertiary hospital both practicing and fellows-in-training who were diplomates of Philippine Obstetrical and Gynecological Society (POGS). As of February 2018, there was a total of 154 consultants, 57 were regular consultants and 97 were visiting consultants, and 6 fellows-in-training. A minimum of 108 subjects were required for this study based on a level of significance of 5%, a prevalence of 70.2%[4] with a desired width of confidence interval of 10%, as noted from the reference article by Seehusen[15].

Legend:

n = minimum sample size

P = prevalence of physicians who always or often screen for PPD at postpartum gynecologic examinations = 70.21

d = desired width of confidence interval (+ 0.05) = 0.10

Zα = 1.96

Sample size formula[16]:

$$n \geq \frac{Z^2_{\alpha} \times 4 \times P \times (1-P)}{d^2}$$

$$n \geq \frac{1.96^2_{\alpha} \times 4 \times 0.702 \times (1-0.702)}{0.10^2}$$

$$n \geq 321.46 \approx 322$$

$$N_{adjusted} = \frac{\text{Computed Sample}}{1 + \frac{\text{Computed Sample-1}}{\text{Population}}}$$

$$N_{adjusted} = \frac{322}{1 + \frac{322\text{-}1}{160}}$$

$$N_{adjusted} = 107.11 \approx 108$$

For each type of consultants/fellows, the number of participants was computed using the formula below:

Stratified Random Sampling

$$n_i = n\frac{N_i}{N}$$

$$n_i = 108 \times \frac{N_i}{160}$$

Where

n_i = sample size for stratum h

n = total sample size

N_i = population size of the strata

N = total population size

Stratification per consultant/fellow

Consultant/Fellow	N	Number of samples
Regular	57	38
Visiting	97	65
Fellow	6	5
Grand total	160	108

Consultants who were on leave from May to June 2018 were excluded from the study. Moreover, consultants who did not respond or return the questionnaire were also excluded.

RESEARCH DESIGN

Study treatments: The survey tool used for this study was a 5-part questionnaire designed by Leddy and colleagues in 2011, assessing the knowledge, attitudes and practices of OBGYNs who were part of the collaborative ambulatory network of ACOG. The survey was pilot-studied and reviewed by the said study. Several items were removed / modified from the original survey to tailor fit our local setting (i.e. race, ethnicity) and was passed to the tertiary hospital's Clinical Translational Research Institute (CTRI) for validity.

Study procedures: The survey was given to the subjects both via electronic mails and postage especially for consultants who have clinics situated in the tertiary hospital. Consultants and fellows who were also on duty in the premises of the hospital was also given the survey.

Data collection and monitoring: The study was conducted in the Delivery Suite, in the Women's Health Care Center, and the clinics of the local tertiary hospital. Subjects' inclusion in the study were anonymous to maintain confidentiality. Answered surveys were collected either by responses sent through electronic mails or personally dropped by the department office or collected by the

primary investigator. Follow-up notices were done via SMS weekly to monitor and collect surveys from subjects.

All data were collated by the Primary Investigator and stored in his personal portable computer only for confidentiality purposes. Subjects were identified using their randomized number. Data were inputted in Microsoft Excel for ease of analysis.

Statistical analysis

Univariate analysis: Descriptive statistics were used to summarize the general and clinical characteristics of the participants. Frequency and proportion were used for nominal variables, median and range for ordinal variables, and mean and standard deviation for interval/ratio variables.

All valid data was included in the analysis. Missing variables were neither replaced nor estimated. Null hypothesis was rejected at 0.05α-level of significance. STATA 15.0 was used for data analysis.

Institutional Review Board compliance

The study had undergone the processes imposed by the CTRI and the hospital's Institution Review Board (IRB) which included approval.

RESULTS

Out of the 160 consultants, only 64 (40%) submitted completed surveys from May 18 to June 27, 2018, short of the targeted sample of 108 (59%). Non-respondents were either unavailable or unable to submit the surveys completely filled and submitted during the specified time of collection. The demographic profile is presented in Tables 1 and 2.

Clinical Practice

Results of clinical practice section are presented in Table 2. Among the respondents, they see most of their patients within 4 weeks of delivery, both post-vaginal (mean of 95%) and post-cesarean (mean of 99%). When asked how frequently they assess patients, mostly answered never (PPD: 21.88%; PPP: 32.81%) and rarely (PPD and PPP: 32.81%).

Most use clinical judgment (84.38%) on assessing mothers for PPD. Unfortunately, only 3.13% routinely provide mental health questionnaires, and strikingly, only 1.56% routinely use a validated questionnaire. Previous personal experience to postpartum psychiatric illness had no association to the use of routine mental health questionnaire. Moreover, 15.63% simply used validated assessment tools to rule out or confirm diagnosis. Only 12.50% of the respondents use DSM IV or V in assessing patients with probable postpartum psychiatric illness.

A mean of 1 (range of 0 – 15) patient was seen by the respondents who were diagnosed with PPD, and only a mean of 0 (range of 0 – 5) patient diagnosed with PPP.

Seven respondents with personal experience with PPD rarely (28.57%), occasionally (47.14%) and often (14.29%) screen for PPD (Table 3.1). On the other hand, three respondents with personal encounters with PPP occasionally (66.67%) and often (33.33%) screen patients for PPP (Table 3.2). Mann-Whitney U was used to determine the difference of median between the groups, both showing no significance with a p-value of 0.192 (Tables 4.1 and 4.2)

Knowledge

Table 4 presented the responses in the clinical vignettes while answers to knowledge-related questions are shown in Table 5. Only 1 (1.56%) subject had continuing medical education regarding mental health screening. Among the cases, majority were able to identify cases that presented with PPD (75%) and PPP (73.44%). Clinical vignettes that were non-PPD and non-criteria were accurately identified by 50% and 7.8%, respectively.

Almost half of the respondents (48.44%) were able to answer the time period of 4 weeks postpartum in diagnosing postpartum illnesses. When asked which diagnoses can be added with a peripartum specifier, Table 5 shows the accuracy of the respondents. Participants provided a mean estimate prevalence of 20% and 9.79% for PPD and PPP, respectively, with 45.31% accurately estimated the range of 10% - 25% based on the original study's estimated prevalence of PPD and adding the result of the local study of 22.61%. Conversely, only 1.59% accurately estimated prevalence of PPP based on the prevalence rate in the original study of 0.1-0.2%, since no study has established its prevalence rate in the Philippines.

Attitudes

Most of the subjects responded that their residency training had inadequate (PPD: 37.50 %, PPP: 42.19%) and even non-existent (PPD: 20.31%, PPP: 20.31%) opportunities to prepare them in assessing postpartum mental illness. This is in contrast to two-thirds (70.31%) of the participants agreed that diagnosing postpartum psychiatric disorders is within their bounds of responsibility. Respondents had mostly neutral response as to how accurate they can diagnose postpartum illnesses (48.44%) and only 17.19% agreed they can accurately diagnose these diseases. Almost all of the participants agree that postpartum psychiatric illness can have a negative impact both to children (92.19%) and to spouses (87.5%).

Majority of the respondents agree that their limited knowledge in the diagnostic criteria (79.69%) and treatment options (76.56%) as well as their lack in training

Table 1. Demographic characteristics of participants (n = 64)

	Frequency (%); Mean ± SD; Median (Range)
Age (years)	50.69 ± 10.93
Sex	
Male	4 (6.25)
Female	60 (93.75)
Number of years in practice in post-residency	18 (1 – 45)
Primary practice	
Obstetrics and Gynecology	51 (79.69)
Obstetrics only	1 (1.56)
Gynecology only	0
Maternal/Fetal Medicine	6 (9.38)
Urogynecology	1 (1.56)
Gynecologic Oncology	2 (3.13)
Reproductive Endocrinology	2 (3.13)
Others	1 (1.56)
Practice Structure	
Solo private practice	50 (78.13)
University full-time faculty and practice	1 (1.56)
HMO (staff model)	2 (3.13)
Multi-specialty group	6 (9.38)
Military/Government	0
Ob/Gyn partnership/group	3 (4.69)
Others	2 (3.13)
Location	
Urban, inner city	54 (84.38)
Urban, non – inner city	9 (14.06)
Municipality	1 (1.56)
Consider Self	
Mostly primary care provider	3 (4.69)
Mostly specialist	31 (48.44)
Both primary care provider and specialist	30 (46.88)
With personal experience for postpartum depression	7 (10.94)
With personal experience for postpartum psychosis	3 (4.79)

Table 2. Clinical Practice Related Questions

	Frequency (%); Median (Range)
1. In the past 5 years have you completed any CME courses on mental health screening and/or diagnosis that encompassed postpartum psychosis or depression?	
No	63 (98.44)
Yes	1 (1.56)
2. What percent of cesarean delivery patients do you see within 4 weeks of delivery?	99 (0 – 100)
3. What percent of vaginal delivery patients do you see within 4 weeks of delivery?	95 (0 – 100)
4. How frequently do you assess (i.e. someone in your office asks patient or patient fills out questionnaire) recently-delivered mothers for postpartum depression	
Always	2 (3.13)
Often	9 (14.06)
Occasionally	18 (28.13)
Rarely	21 (32.81)
Never	14 (21.88)

Table 2 continued on next page

Table 2. Clinical Practice Related Questions

	Frequency (%); Median (Range)
5. How frequently do you assess (i.e. someone in your office asks patient or patient fills out questionnaire) recently-delivered mothers for postpartum psychosis?	
Always	2 (3.13)
Often	6 (9.38)
Occasionally	14 (21.88)
Rarely	21 (32.81)
Never	21 (32.81)
6. Which of the following do you use to assess for or diagnose postpartum psychological disorders?	
DSM-IV or V	8 (12.50)
Own judgment	54 (84.38)
Validated questionnaires	1 (1.56)
Edinburgh Postnatal Depression Scale	
Measure created by you/hospital	1 (1.56)
Other – Referral to psych	1 (1.56)
7. In what cases of recently-delivered mothers do you assess for postpartum psychiatric disorders?	
a. I routinely ask all recently-delivered mothers about depressive/psychotic symptoms	22 (34.38)
b. I routinely provide a mental health questionnaire to all recently-delivered mothers	2 (3.13)
c. I assess for postpartum mental illness if the patient appears depressed or psychotic	57 (89.06)
d. I assess for postpartum mental illness if the patient has a history of psychiatric illness	56 (87.50)
e. I assess for postpartum mental illness if the patient has a specific medical condition	27 (42.19)
Depression	3 (11.11)
Anxiety	2 (7.41)
Sleep disorder	1 (3.70)
Mental illness	2 (7.41)
Complicated pregnancy	4 (14.81)
Cancer	2 (7.41)
Hypertension	2 (7.41)
GDM	1 (3.70)
Other, medical	3 (11.11)
…Unspecified	7 (25.93)
8. How many patients have you have ever diagnosed with postpartum depression?	1 (1 – 15)
9. How many patients have you ever diagnosed with postpartum psychosis?	0 (0 – 5)
10. How many patients have you diagnosed with postpartum depression in the past six months?	0 (0 – 3)
11. How many patients have you diagnosed with postpartum psychosis in the past six months?	0 (0 – 1)
12. Do you track/flag women with psychiatric histories in order to assess their postpartum mental health?	
No	27 (42.19)
Yes	37 (57.81)
13. How often do you use a structured, validated assessment tool to diagnose postpartum depression?	
Routinely	0
To rule out other diagnoses/To confirm diagnosis	10 (15.63)
Never	54 (84.38)

Table 3.1. Frequency of screening for PPD

	Without personal experience in PPD (n = 57)	With personal experience in PPD (n = 7)
Never	14 (24.56)	0
Rarely	19 (33.33)	2 (28.57)
Occasionally	14 (24.56)	4 (47.14)
Often	8 (14.04)	1 (14.29)
Always	2 (3.51)	0

Table 3.2. Frequency of screening for psychosis

	Without personal experience in psychosis (n = 61)	With personal experience in psychosis (n = 3)
Never	21 (34.43)	0
Rarely	21 (34.43)	0
Occasionally	12 (19.67)	2 (66.67)
Often	5 (8.20)	1 (33.33)
Always	2 (3.28)	0

Table 3.3. Experience with PPD and frequency of screening

	Without personal experience in PPD (n = 57)	With personal experience in PPD (n = 7)	p - value
Frequency of screening	1 (0 – 4)	2 (1 – 3)	0.192

Table 3.4. Experience with psychosis and frequency of screening

	Without personal experience in psychosis (n = 61)	With personal experience in psychosis (n = 3)	p - value
Frequency of screening	1 (0 – 4)	2 (2 – 3)	0.192

Table 4.1. Clinical case vignettes

	Postpartum Psychosis	Postpartum Depression	Non – post partum psychosis	Non – post partum depression	Does not meet criteria for diagnosis	Others
	Frequency (%)					
Question 1	0	33 (51.56)	1 (1.56)	25 (39.06)	**3 (4.69)**	2 (3.13)
Question 2	**48 (75)**	2 (3.13)	8 (12.50)	1 (1.56)	4 (6.25)	1 (1.56)
Question 3	4 (6.25)	**47 (73.44)**	1 (1.56)	4 (6.25)	6 (9.38)	2 (3.13)
Question 4	22 (24.48)	5 (7.81)	**32 (50)**	3 (4.69)	2 (3.13)	0

Table 4.2. Outcomes of clinical case vignettes (Section II) (n=64)

	Correct Response	Frequency (%)
Vignette 1	Does not meet criteria for any	3 (4.69)
Vignette 2	Postpartum psychosis	48 (75)
Vignette 3	Postpartum depression	47 (73.44)
Vignette 4	Non-postpartum psychosis	32 (50)

Table 5. Knowledge – related survey questions

	Correct Response	Frequency (%)
A postpartum mental illness can be diagnosed as long as its onset is within […]	4 weeks after delivery	31 (48.44)
According to DSM-IV, which of the following disorders can be considered a postpartum diagnosis? (Choose all that apply)		
Adjustment disorder	No	20 (31.25)
Bipolar I disorder	Yes	17 (26.56)
Bipolar II disorder	Yes	12 (18.75)
Brief psychotic disorder	Yes	45 (70.31)
Generalized anxiety disorder	No	35 (45.31)
Major depressive disorder	Yes	32 (50)
Panic disorder	No	39 (60.94)
Schizophrenia	No	52 (81.25)
Estimate the prevalence of postpartum depression in the Philippines: ___ %	11 – 25%	12 (18.75) 15 (0-70)
Estimate the prevalence of postpartum psychosis in the Philippines: ___%	0.1 – 0.2%	1 (1.56) 8.5 (0-40)

Table 6.1. Beliefs and Attitudes

	Frequency(%)
Rating of residency training in recognizing and diagnosing PPD	
Comprehensive	0
Adequate	8 (12.50)
Barely Adequate	19 (29.69)
Inadequate	24 (37.50)
Nonexistent	13 (20.31)
Rating of residency training in recognizing and diagnosing PPP	
Comprehensive	1 (1.56)
Adequate	7 (10.94)
Barely Adequate	16 (25)
Inadequate	27 (42.19)
Nonexistent	13 (20.31)

Table 6.2. Beliefs and Attitudes

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
	Frequency (%)				
Question 3. Please identify how strongly you feel regarding each of the statements below					
Diagnosing postpartum psychiatric illness is my responsibility	28 (43.75)	17 (26.56)	15 (23.44)	2 (3.13)	2 (3.13)
Treating postpartum psychiatric illness is my responsibility	0	9 (14.06)	23 (35.94)	15 (23.44)	17 (26.56)
I can accurately diagnose postpartum psychiatric illness	0	11 (17.19)	31 (48.44)	10 (15.63)	12 (18.75)
Postpartum psychiatric illness can negatively impact children	43 (67.19)	16 (25)	3 (4.69)	0	2 (3.13)
Postpartum psychiatric illness can negatively impact spouses	39 (60.94)	17 (26.56)	5 (7.81)	1 (1.56)	2 (3.13)

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Question 4. Identify how strongly each of the following LIMIT your ability/ willingness to screen for postpartum psychosis.					
Low prevalence rates	17 (26.56)	20 (31.25)	20 (31.25)	3 (4.69)	4 (6.25)
Lack of training in mental health	26 (40.63)	24 (37.50)	10 (15.63)	3 (4.69)	1 (1.56)
My knowledge of diagnostic criteria	21 (32.81)	30 (46.88)	12 (18.75)	1 (1.56)	0
My knowledge of treatment options	23 (35.94)	26 (40.63)	12 (18.75)	2 (3.13)	1 (1.56)
Time constrains in consultations	15 (23.44)	24 (37.50)	12 (18.75)	7 (10.94)	6 (9.38)
Patient level of willingness to accept diagnosis	14 (21.88)	31 (48.44)	15 (23.44)	3 (4.69)	1 (1.56)
Patient level of willingness to take medication	13 (20.31)	31 (48.44)	14 (21.88)	4 (6.25)	2 (3.13)
Patient level of willingness to receive counselling	15 (23.44)	32 (50)	11 (17.19)	5 (7.81)	1 (1.56)
Question 5. Identify how strongly each of the following LIMIT your ability/ willingness to screen for postpartum depression.					
Low prevalence rates	17 (26.56)	23 (35.94)	16 (25)	6 (9.38)	2 (3.13)
Lack of training in mental health	22 (34.38)	32 (50)	8 (12.50)	2 (3.13)	0
My knowledge of diagnostic criteria	21 (32.81)	28 (43.75)	13 (20.31)	2 (3.13)	0
My knowledge of treatment options	20 (31.25)	30 (46.88)	10 (15.63)	3 (4.79)	1 (1.56)
Time constraints in consultations	14 (21.88)	26 (40.63)	14 (21.88)	7 (10.94)	3 (4.69)
Patient level of willingness to accept diagnosis	12 (18.75)	32 (50)	15 (23.44)	4 (6.25)	1 (1.56)
Patient level of willingness to take medication	14 (21.88)	31 (48.44)	13 (20.31)	4 (6.25)	2 (3.13)
Patient level of willingness to receive counselling	12 (18.75)	36 (56.25)	11 (17.19)	4 (6.25)	1 (1.56)

(78.13%) served as top hindrances in their screening of PPD. Similar reasons— limited knowledge in the diagnostic criteria (79.56%) and treatment options (78.13%) as well as their lack in training (84.38%)—were also identified as the most limiting factors in screening for PPP.

DISCUSSION

The results of Leddy et al 2011 study is in contrary to most found in literature, which revealed a high percentage of respondents who always and often screen PPD (72.4%) and PPP (30.5%). Nevertheless, this study is in congruence to what was already established in literature, and supports the hypothesis, in which most OBGYN do not routinely screen for PPD and PPP, as shown in Table 3.

Contributing to the state of underdiagnoses and screening of PPD and PPP is the lack of use of validated screening tools[17], which is evident in this study (1.56%). Most OBGYN's rely on the basis of clinical judgment, which decrease the detection rate of these diseases. Established validated screening tools being used in detecting depression among patients were already studied to be effective[17]. EPDS is a commonly used 10-item questionnaire in screening patients during prenatal and postnatal period, and the most commonly tested screening tool used in researches for its sensitivity and specificity[3,13,14,18,19].

All the factors that serve as barriers to screening were also acknowledged in this study, who more than 50% agreed that they are obstacles to routine screening. In contrast, most respondents in the original study answered in neutral, where the range of who agreed to the factors was from 10.20% to 64.70%. Nevertheless, the most cited factors among the respondents of this study were limited knowledge in the diagnostic criteria and treatment options as well as their lack in training, which was almost similar to the original study, except for the factor of constraints in time.

These limiting factors can be collectively identified as most OBGYN's minimal knowledge on postpartum illness. This is further affirmed by the low percentage of subjects receiving recent continuing medical education (CME) on mental illness (1.56%). This is supported by most respondents' perception of their residency training's inadequacy in providing proper preparation in assessing postpartum mental health illnesses. This is further validated that their lack of training provided mostly neutral responses as to how accurate they can diagnose postpartum illnesses, hence resulting to the lower rates of screening and the lack of use of validated tools. Despite this, majority were able to correctly identify most of the cases among the clinical vignettes. However, the bias of priming may probably contribute to the higher accuracy of most respondents, which can also explain why most failed to identify the case that did not meet any of the criteria for diagnosis. The informed consent included in the survey was able to convey that the study was focused on postpartum psychiatric illnesses, hence the probability of the respondents of choosing psychiatric diagnosis is high. Similar findings were also noted by the original study[3,4].

The results in this study do not support that more recent or personal experience with the disease has an association with the increase in frequency of screening. This is in contrary to the results presented in the original study, where more respondents were screening patients because of their more recent or personal encounters. Barely a quarter of the respondents have answered that they often screen patients for postpartum depression (17.19%) and psychosis (12.51%). Furthermore, among the consultants who had higher frequency of screening patients, only 36% have recent experience with the disease and 9% only have personal experience. On the other hand, among the participants with recent experiences with postpartum psychiatric diseases, only 33.33% often screen patients with PPD and PPP. Lastly, only 14.29% of participants with personal encounters with postpartum psychiatric diseases often do routine screening.

LIMITATIONS

This study has several limitations. The inclusion of case vignettes may serve as a tool to determine the scope of knowledge of the participants regarding PPD and PPP. However, due to the presence of provided information in the informed consent and introduction of the survey, the likelihood of choosing positive choices (PPD and PPP) is increased, hence the bias of priming. Nevertheless, it is still deemed necessary, that the use of clinical cases vignettes is to ascertain the OBGYN's accuracy and knowledge in diagnosing postpartum psychiatric illness[3,4].

The low sample size gathered and the inability to achieve the targeted sample size in this study is also another limiting factor. This also decreases the statistical power of the results shown, especially if such results could be significant. Furthermore, any findings of the study, despite it mirroring established evidences, have a diminished probability that these reflect actual events[20], in this case the knowledge, attitude and practices of the majority of the OBGYN locally. The problem of reflecting true values of the general population is also generated by the chosen target population of the study. Several factors from the target population may have contributed to the results produced, such as the urban location of their practice, and the average to high level in the social stratification where most of their patient belongs to, among others.

CONCLUSION AND RECOMMENDATIONS

Participants of this study are not confident with their training and knowledge in assessing and diagnosing postpartum psychiatric illnesses. This gap in knowledge has to be addressed to increase the frequency of screening patients using appropriate tools validated by multiple studies[3,13,14,17-19], to decrease the morbidities caused by these illnesses.

Local organizing bodies can provide avenues of CME, focusing on mental health, in assessing, diagnosing and managing peripartum psychiatric diseases. Partnering with appropriate institutions, disseminating information can be offered during post-graduate courses and other sponsored events where open discussion on the effects of psychiatric illness antenatally or postnatally can be performed. This may provide relevant outcomes that can be more tailored to local practices. More specifically, topics regarding local studies on the use of validated screening tools can be emphasized, including its availability, local validity and ease of use[14].

Encouraging more avenues for research can also increase awareness among OBGYN. These researches can be opportunities for residents-in-training in enhancing their experience in peripartum and postpartum care. It can also aid in establishing local clinical practice guidelines, focusing in screening and diagnosing psychiatric illnesses, as well as constructing referral systems to appropriate specialists and specialized institutions. Possible topics of research include a) identification of several risk factors tailored to the local population, b) reflection of true local prevalence of postpartum psychiatric illnesses, entailing a more systematic tally among tertiary hospitals and health institutions, both private and government, from the different regions of the country, c) and lastly, a larger scope of targeted population of OBGYN in assessing their knowledge, attitudes and practices of screening to establish a more representative baseline as to how wide

the gap in knowledge, and to determine a true reflection of barriers to screening, that are needed to be addressed.

A study done demonstrated a positive correlation between who screened positive for depression prenatally and eventually screened positive 6-weeks postpartum[17]. This supports the ACOG recommendation of screening of PPD prenatally for early treatment and referral, hence the local organizing body can adopt such practice[16]. A systematic review also recommends a more inclusive management of PPD by facilitating treatment, collaborating referral to mental health providers and follow-up[12]. A local unpublished randomized controlled trial on the prevention of PPD and PPP by using EPDS as screening tool antenatally was done (De Chavez M, 2016, unpublished). The results showed that the patients who underwent antenatal psychiatric referral had a significant decrease in their EPDS scores postpartum compared to patients who received routine prenatal care.

Mental health illnesses are debilitating diseases that needs to be addressed. OBGYNs are vital in the detecting and diagnosing these diseases due to the increased opportunity of encounters with patients antenatally and postnatally. Addressing the gaps in knowledge and practices by creating and enforcing guidelines, incorporating such guidelines to practices, and establishing systems of referral to appropriate mental health institutions will help decrease the morbidity caused by these treatable diseases. ■

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