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# Improving Postpartum Depression Screening and Treatment Referral Rates in an Ob-Gyn Clinic

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IMPROVING POSTPARTUM DEPRESSION SCREENING AND TREATMENT REFERRAL  
RATES IN AN OB-GYN CLINIC

by

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Ciddet R. Abrahams Jr.

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## Abstract

**Background:** Up to 25% of adult women are diagnosed with postpartum depression. This diagnosis may also lead to poor health outcomes for the mother and the infant. Four out of five women with a positive screening for postpartum depression do not receive care from a mental health provider.

**Purpose:** The purpose of the project was to improve postpartum depression screening and follow-up care to mental health services in a clinic providing obstetrical and gynecological care in the central Texas area.

**Objectives:** The primary objective of the project was to increase postpartum depression screening rates. The second objective was to improve postpartum depression treatment referral rates to mental health services.

**Planned Interventions:** Key activities included educating the clinic staff on the importance of screening for postpartum depression and implementation of screening and referral of patients with a positive screen on the Edinburgh Postnatal Depression Scale. Patients with a score of 10 or greater on the Edinburgh Postnatal Depression Scale were educated by the provider and referred to mental health services for follow-up.

**Results:** The postpartum depression screening rate increased by 15% and treatment referral rate to a mental health provider increased by 22% ( $p < .05$ ).

**Implications for practice:** Although the practice was following the recommendations of the ACOG and USPSTF for depression screening, no formal practice policy for screening was in place. Swift identification and treatment of postpartum depression can lead to improved health care outcomes for mothers and their infants.

*Keywords:* Postpartum depression, Clinical guidelines, Postpartum depression treatment

### **Postpartum Depression**

According to the World Health Organization, 10% of pregnant women and 13 % of new mothers experience some type of mental disorder (2017). Up to 25% of adult women experience postpartum depression which can lead to poor health outcomes for the mother and the infant (Field, 2017). Postpartum depression can disrupt the mother-child bonding, alter feeding and sleeping patterns and lead to an infant's failure to thrive (Kurtz, Levine, & Safyer, 2017).

Postpartum depression often goes undiagnosed because some of the symptoms such as fatigue, changes in appetite and sleep patterns are part of the postpartum experience for the mother. The purpose of this doctoral quality improvement (QI) project was to improve the rate of screening for postpartum depression in mothers during their postpartum period. The Edinburgh Postnatal Depression Scale (EDPS) was used as the screening tool. Mothers with positive screening results for depression were referred to mental health services for treatment. Additionally, a mental health services referral list was developed to show treatment resources in the local and surrounding area.

It has been shown that four out of five women with a positive screening for postpartum depression do not receive care from a mental health provider (Venkatesh et al., 2016). About half of all cases of postpartum depression go undiagnosed because of obstacles caused by the actions of the patients and the clinicians (Loudon, Nentin, & Silverman, 2016). The obstacles include patients failing to attend postpartum visits and lack of postpartum depression screening and use of standardized screening tools (Loudon et al.). Screening and referral to mental health care are associated with reduction in depressive symptoms and improved outcomes for both the mother and infant (Siu et al., 2016).

### **Statement of the Problem**

Addressing the consequences of postpartum depression calls for standardized screening and more importantly follow-up care for the patients identified as positive for depression. Half of all cases of postpartum depression go undiagnosed (Loudon et al., 2016). Additionally, standardized screening for postpartum depression is not the standard of care (Loudon et al.). The site chosen for this Doctor of nursing practice (DNP) project is an Obstetrics and Gynecology (OB-GYN) clinic in the central Texas area. This clinic does not have an established process in place for standardized screening and referral to mental health services for women identified as having postpartum depression. Untreated postpartum depression can lead to poor outcomes for the mother and infant.

### **Background and Significance**

The U.S. Preventative Service Task Force (USPSTF) recommends screening for depression with systems in place for diagnosis, treatment, and proper follow-up care (Siu, 2016). The American College of Obstetrics and Gynecology (ACOG) recommends screening for postpartum depression. The recommendations include screening patients at least once, closely monitoring those with a history of mental illness and referring those who are positive for depression (ACOG, 2015).

While screening for depression is important, it is vital the patient receives the appropriate follow-up care which can improve patient outcomes and help to reduce the disease burden (O'Connor, Rossom, Henninger, Groom, & Burda, 2016). The Agency for Healthcare Research and Quality (AHRQ) stated that depression is a leading cause of disability among women with annual expenditures in the billions for medical care and loss of productivity (2016). Untreated postpartum depression can lead to long-term difficulties for the mother and the infant such as

feeding, sleeping and growth problems (DelRosario, Chang, & Lee, 2013). Other long-term difficulties for the child include poor emotional and cognitive skills (Sampson, Duron, Mauldin, Kao, & Davidson, 2017). Untreated postpartum depression may lead to worsening of symptoms in the mother resulting in neglect of the infant, mood swings, paranoia or delusions (DelRosario et al.). The symptoms of postpartum depression can also result in the mother having suicidal ideation and behaviors (Hansotte, Payne, & Babich, 2017).

About 520,000 mothers report postpartum depression symptoms annually (Loudon et al., 2016). The Center for Disease Control and Prevention's paper titled Depression Among Women reports that one in nine women experience postpartum depression (2017). The Pregnancy Risk Assessment Monitoring System which obtains its reports from the National Center for Chronic Disease Prevention and Health Promotion reports that between the years 2009 and 2011, about 10% of women experienced postpartum depression symptoms (2017). According to a report on the 2015 legislature session on postpartum depression among women in Texas on Medicaid, 12.2% of women reported postpartum depression. A 2012 national study showed about 65% of women experiencing depression went undiagnosed (AHRQ, 2016).

### **Assessment**

The DNP project was implemented at a clinic providing obstetrical and gynecological services in the central Texas area. The practice delivers about 200 to 250 babies every month. After delivery, mothers whose infants were delivered by cesarean section return to the clinic in two-weeks for a follow-up appointment. A mother experiencing uncomplicated natural delivery returns for their postpartum follow-up visit at four weeks or six weeks after delivery.

The clinic uses the EPDS to screen patients for postpartum depression. The EPDS is a 10-question self-report screening tool with a high sensitivity (59-100%) and specificity (49-100%)

for identifying patients with perinatal depression (ACOG, 2015). The EPDS is a validated tool that was developed in the 1980s during studies in Africa and Europe (Cox & Holden, 2003).

According to ACOG's Committee Opinion (2015), it is recommended that patients be screened at least once during the perinatal period by a clinician. Currently, the Obstetrics and Gynecology (OB-GYN) clinic patients are screened at their first visit after delivery. During the first visit to the clinic after birth the clinician documents the postpartum visit in the electronic medical record (EMR). The EMR has the EPDS built into the assessment, so the medical assistant is prompted to have the patient answer the 10-question screening measure.

In order to complete a needs assessment, aggregate data was collected with staff assistance. The data revealed that from July 1, 2017, to September 25, 2017, 200 patients presented for their four-week postpartum visit. Eighty-four percent of the 200 patients were screened for postpartum depression. Twenty-five patients (12.5 %) had a positive score for postpartum depression which is consistent with the Center for Disease Control and Prevention's finding of 8 to 19% of women reporting frequent postpartum depression symptoms (AHRQ, 2016). Of the twenty-five patients identified as positive, only one patient was referred to mental health services.

### **Organization's Readiness for Change**

The Practice Improvement Capacity Rating Scale was used to assess the readiness of the local OB-GYN practice. The Practice Improvement Rating Scale is a compilation of questions that address the areas needed to successfully execute a QI project (Aligning Force for Quality, 2014). The OB-GYN clinic scored 250 points out of 320 points. A score of 250 suggests the clinic is ready to implement the QI project (Aligning Force for Quality, 2014). The strength, weakness, opportunity, threat analysis was conducted at the OB/GYN practice. Strengths

identified included: (a) 84% of the patients were screened for postpartum depression after delivery, (b) most patients receive a packet with information about postpartum depression and how to seek help, and (c) monthly QI meetings were held to address identified issues.

The weaknesses identified in the OB-GYN practice included the lack of follow-up care for patients identified as positive for postpartum depression, lack of consistency among providers in administering the screen and the failure to implement an Arabic version of the EPDS despite having a significant number of Arabic patients.

One potential opportunity for the OB-GYN clinic involved the implementation of depression screening during pregnancy which has been shown to improve mother and infant outcomes (O'Connor, Rossom, Henninger, Groom, & Burda, 2016). Another potential opportunity included the establishment of a practice policy regarding the screening and treatment of postpartum depression. Additionally, increasing the number of women referred for postpartum depression to mental health services after a positive screening was an opportunity for the practice.

Concerns identified by the stakeholders include the safety of their patients and the potential liability of providing mental health care. The lead physician on this QI project was very engaged in looking at the practice as a whole and examining how to improve the processes for the patients and the practice. The practice manager and the policy person were both members of the QI team and were very engaged in the QI project.

### **Project Identification**

#### **Purpose**

The purpose of the study was to improve postpartum depression screening and follow-up care to mental health services in a clinic providing obstetrical and gynecological care in the

central Texas area.

### **Objectives**

The primary objective of the project was to increase postpartum depression screening to identify women with symptoms of depression so they can receive the necessary follow-up care. The second objective was to improve postpartum depression treatment referral to mental health services to minimize the adverse effects so the mother can focus on caring for her infant.

### **Anticipated Outcomes**

Anticipated outcomes: 1) By March 16, 2018, increase depression screening from 84% to 100% using the EPDS in postpartum patients receiving care at an obstetrical and gynecological clinic. 2) By March 16, 2018, increase treatment referral from 4% to 60% among postpartum patients receiving care at an obstetrical and gynecological clinic.

### **Summary and Strengths of the Evidence**

It is evident in the literature that postpartum depression has garnered increased attention. Thirteen states have passed legislation and guidelines regarding screening for depression during pregnancy (Venkatesh et al., 2016). New Jersey passed a law for new mothers to be screened for postpartum depression before leaving the hospital and Texas requires that all mothers receive information about postpartum depression before discharge (Shivakumar, Brandon, Johnson, & Freeman, 2014). Despite the recommendation from ACOG and the USPSTF, there are no defined national guidelines specifically for postpartum depression. Many studies regard the use of the EPDS as the tool of choice to screen for postpartum depression (Agustinho Cardillo, Camargo Quialheiro de Oliveira, dos Santos Monteiro, & Azevedo Gomes-Sponholz, (2016). A literature search identified a study comparing six clinical guidelines from the United States, Australia, and the United Kingdom (Haran, van Driel, Mitchell, & Brodribb, 2014). The

guidelines addressed postpartum women and their infants. The familiar categories of care identified in the guidelines include maternal health, maternal mental health, infant health, and breastfeeding (Haran et al.). The one guideline from the United States addressed infant health and breastfeeding but not postpartum depression (Haran et al.). Of the six, four guidelines, two from the United Kingdom and two from Australia addressed maternal mental health (Haran et al.). All four of the identified guidelines recommended asking the mother about her emotional well-being and postpartum depression screening tools (Haran et al.). However, two of the guidelines, one from the United Kingdom and one from Australia recommend postnatal depression treatment (Haran et al.). Lacking in the literature are recommendations regarding referral to mental health care if positive screening results for depression are identified (O'Connor et al., 2016).

An observational cohort study from 2010 to 2014 assessed the feasibility and impact of screening for depression during pregnancy (Venkatesh et al., 2016). The study showed that among 8985 women, 576 women (6.5%), screened positive for depression using the EPDS (Venkatesh et al.). Of the women who screened positive, twice as many were in the antepartum stage versus the postpartum stage (Venkatesh et al.). Although all women in the study were referred to a mental health care provider only 79% showed up for their mental health evaluation (Venkatesh et al.).

An 18-month retrospective analysis found that of 28,389 postpartum visits, only 88% received postpartum depression screening (Lind, Richter, Craft, & Shapiro, 2017). Approximately 8.1% of the women had a positive screening for postpartum depression (Lind et al.). Twenty-one percent of the women with positive screening saw a mental health professional within 90 days of being screened (Lind et al.). The study suggested that postpartum depression

screening and treatment can be successful if there is a collaboration between clinicians conducting the screening and clinicians who provide mental health care (Lind, et al.). Larocco-Cockburn and colleagues (2013) revealed that obstetrical and gynecological providers care for minority and low-income women at a higher rate than do other medical specialties with almost one-third of women using these providers as their source of primary care.

A randomized controlled trial was conducted to evaluate collaborative care versus usual care for women at an OB-GYN clinic (Larocco-Cockburn et al., 2013). Two hundred and five women were randomized to usual care or collaborative care groups; the groups were separated further into pregnant and non-pregnant women (Larocco-Cockburn et al.). Women in the usual care group were instructed to contact their OB-GYN provider for depression care. Usual care consisted of treatment with antidepressant medication or referral of the patient for psychotherapy or medication management (Larocco-Cockburn et al.). Collaborative care included being treated by a depression care manager on a weekly basis (Larocco-Cockburn et al.). The collaborative team met regularly to discuss patient treatment and progress. The researchers discovered that many patients either knew something was wrong but did not recognize it as depression, or if they felt depressed they did not ask for assistance (Larocco-Cockburn et al.). The study also identified that providers reported a lack of training and time to screen their patients for depression (Larocco-Cockburn et al.).

A systematic literature review on the screening and treatment of postpartum depression in low-income women found that after passing a law mandating screening, there was no increase in the number of women who received treatment (Hansotte, Payne, & Babich, 2017). The review identified multiple barriers to the treatment of postpartum depression. The barriers identified were categorized as cultural, physical, health care structure, and social (Hansotte et al.). Social

barriers in the review discussed that women are more likely to deal with postpartum depression by relying on their family and friends instead of seeking treatment (Hansotte et al.). Also, if the women did not have a good support system at home, they tended to isolate themselves when dealing with postpartum depression (Hansotte et al.).

The cultural barriers identified included stigma, races, language, immigration status, and religion, all of which can impact the screening and treatment of postpartum depression (Hansotte et al., 2017). In some cultures, women did not want to seek treatment because they did not want to be thought of as “crazy,” or “not being a good mother” (Hansotte et al.). The review identified language as a significant barrier in the Hispanic population (Hansotte et al.). Religious beliefs can also prevent some women from seeking treatment for their postpartum depression (Hansotte et al.).

Physical barriers that affect mothers experiencing postpartum depression symptoms include lack of child care, transportation, financial resources and housing (Hansotte et al., 2017). Barriers within the health care system included a lack of insurance, concerns about the safety of breastfeeding while taking psychotropic medications, and negative experiences with their providers (Hansotte et al.). It was reported that some healthcare providers prescribed antidepressants without educating the patient on the illness or rationale for treatment (Hansotte et al.). The review suggested that providers should ensure patients understand the illness and possible treatment options (Hansotte et al.).

### **Method**

Aggregate data was collected for women that presented to the clinic for their postpartum visit during the pre and post-intervention period. The data was assessed for 1) the rate of postpartum depression screening, 2) the rate of referral to mental health services for patients

identified as positive for postpartum depression. The 24th version of SPSS was used to conduct *t*-test analysis, and the percentage of increase in rates of depression screening and the rate of referral to mental health services was evaluated.

### **Project Intervention**

The project was implemented from February 5, 2018, to March 16, 2018. Patients returning for their first postpartum visit at weeks two, four or six after delivery were screened for postpartum depression using the EPDS. Interventions included 1) educating the staff on the importance of screening for postpartum depression and 2) implementing a practice policy to guide the screening and treatment referral for postpartum depression. The staff was educated in two 10-minute sessions during their weekly staff meetings. The first session was used to educate the staff on the impact of postpartum depression and the rationale for screening with a standardized tool like the EPDS. The second session was used to educate the staff on the objectives of the project and newly developed postpartum depression practice policy.

Discussions with the management led to the development of the postpartum depression policy (Appendix B). The policy stated that all patients presenting for their postpartum visit were to be screened for postpartum depression using the EPDS. For patients with a score of 10 or higher, the medical assistant would notify the providers. The providers would then educate the patient about postpartum depression and give them a referral list of mental health providers. Lastly, the medical assistant would call each patient identified as positive for postpartum depression within four-weeks after they received the referral list to confirm whether they followed up with a mental health provider.

The referral list identified the provider's specialty (counseling or Pharmacotherapy), location, office hours, types of medical insurances accepted, private pay fee, and the usual length

of time it takes to get an appointment.

### **Setting Population**

The project was implemented at a clinic in the central Texas area which provides obstetrical and gynecological services for adolescent and adult female patients. Project participants included women returning for their first postpartum visit. Patients were excluded if their score on question 10 on the EPDS regarding suicide was greater than zero because they required immediate mental health attention and potentially a higher level of care.

### **Organizational Barriers/Facilitators**

Prior to the implementation of the DNP project, there was no practice policy or process in place regarding screening and treatment referral for postpartum depression. This lack of policy meant that every provider could screen and treat postpartum depression according to their preference. Not having a streamlined process at the practice revealed that some patients were not being screened for postpartum depression with a screening tool. Providers reported having limited time to screen for depression and provide problem-focus care. The lack of availability of providers due to their busy schedule prevented a meeting between them and the DNP student which was planned for project information dissemination. Furthermore, the OB-GYN practice had limited mental health referral sources for their patients.

Having a QI team in place consisting of providers and management facilitated implementation of the project. The management team showed strong support for the project. The staff was interested in finding out what was the results of the practice assessment and suggested ways to streamline the process of screening for depression among the women reporting to the clinic for their postpartum visit. The practice manager decided to develop a policy to guide the staff on how and when to screen for depression in postpartum women. The lead physician and

project advisor communicated with each provider in order to promote buy-in and support for the project.

### **Ethical Considerations**

This QI project was approved by the University of the Incarnate Word Institutional Review Board. The management at the practice provided a letter of support stating that they approved implementation of the project at their site. The aggregated patient data was de-identified, encrypted and kept in a locked cabinet in the policy manager's office. The DNP student has been Health Insurance Portability and Accountability Act and Collaborative Institutional Training Initiative certified.

### **Results**

The first staff education session was conducted on December 15, 2017, and the second on February 2, 2018. The education sessions were conducted during the weekly staff meetings, thus all employees were aware of the project objectives and anticipated outcomes. The topics discussed included: (a) the importance of screening for postpartum depression and rationale for depression screening during the postpartum period, (b) administration process of the EPDS, (c) identification of patient score of 10 or greater as positive for postpartum depression, and (d) referring all patients with positive scores to mental health care.

During the pre-intervention period July to September 2017, aggregate data from 200 charts of women who presented for postpartum visits were reviewed to assess the patient demographics, screening rates, referral rates and additional plans of care. Pre-intervention patient demographics are displayed in table 1. Of the 200 charts reviewed 168 (84%) were screened for postpartum depression, 25 (12.5%) were identified as positive for postpartum depression, and one (4%) received a referral to a mental health provider.

Table 1

*Patient Demographics Pre and Post-Intervention*

Demographics	Pre-intervention	Post-intervention
Patients	n = 200	n = 275
Age	28.48 ± 5.304	28.95 ± 5.566
Race		
Hispanic	41.0 %	45.1 %
White	33.0 %	29.5 %
Black	3.5 %	6.2 %
Asian	5.0 %	3.6 %
Other	17.5 %	15.6 %
Insurance		
Medicaid	32.0 %	40.4 %
Private	68.0 %	59.6 %

The project interventions were implemented from February 5, 2018, to March 16, 2018. During that time 275 patients presented to the clinic for their postpartum visit. The patient's charts were reviewed. Post-intervention patient demographics are displayed in table 1. Of the 275 charts reviewed 272 (99%) were screened for postpartum depression, 27 (9.8%) were positive for postpartum depression, and seven (26%) were referred to a mental health provider for treatment.

**Postpartum Screening Rates**

After six weeks of intervention implementation, postpartum depression screening rates went from 84% to 99%, an increase of 15% from baseline screening rates. Results of an independent sample *t*-test pre-intervention screening rates ( $M = .84$ ,  $SE = .032$ ) showed a

statistical significance from the post-intervention screening rates ( $M = .99$ ,  $SE = .007$ ),  $t(473) = -4.65$ ,  $p < .001$ . Statistical analysis of the independent sample  $t$ -test for postpartum depression screening rates is displayed in Table 2. The findings remain consistent with the project anticipated outcomes to increase postpartum depression screening rates.

Table 2

*Results of Independent Sample t-test for Postpartum Depression Screening Rate Pre and Post-Intervention*

	Mean	SD	SEM	95% CI for Mean		$t$	df
				Lower	Upper		
Participants' postpartum depression screening rates pre- and post-intervention	.99	.120	.007	-.206	-.095	-5.34*	473

*Note.* SD = Standard Deviation, CI = confidence interval, SEM = Standard Error of the Mean. \* $p < .05$

### **Treatment Referral to a Mental Health Provider**

The baseline treatment referral rate to a mental health provider was 4%. The post-intervention treatment referral rate to a mental health provider post-intervention was 26%, an increase of 22% for treatment referral for patients identified as positive for postpartum depression. Although the anticipated outcome of increasing treatment referral rates to a mental health provider to 60% was not achieved, results of an independent sample  $t$ -test pre-intervention referral rates ( $M = .04$ ,  $SE = .040$ ) showed statistical significance from the post-intervention treatment referral rates ( $M = .26$ ,  $SE = .086$ ),  $t(50) = -2.31$ ,  $p < .05$ . Table 3 shows the statistical analysis of the independent sample  $t$ -test for treatment referral rates to a mental health provider.

Table 3

*Results of Independent Sample t-test for Postpartum Depression Referral Rates Pre and Post-Intervention*

	Mean	SD	SEM	95% CI for Mean Difference		t	df
				Lower	Upper		
Participants' postpartum depression referral rates pre- and post-intervention	.26	.447	.086	-.415	-.024	-2.25*	50

*Note.* SD = Standard Deviation, CI = confidence interval, SEM = Standard Error of the Mean. \**p* < .05.

**Discussion**

This project sought to improve postpartum depression screening-rates and treatment referrals-rates to a mental health provider. Although the anticipated outcomes were not achieved, secondary notable improvements included an increase in postpartum screening rates by 15% and an increase in the referral rate to mental health care by 22%. According to independent sample *t*-test results, the post-intervention results showed statistical significance from baseline results. The factor which carried the most significance for the project was convincing the practice manager to develop a practice policy for postpartum depression screening and treatment referrals. Prior to the project, 84% of the patients presenting for their postpartum visit were being screened for postpartum depression. However, every provider used a different cut off score on the EPDS to identify depression. Based on the evidence and provider preference, 10 was identified as the cut-off score to identify depressive symptoms and prompt a referral to mental health care (Cox & Holden, 2003).

The lack of screenings and referrals from an OB-GYN provider resulted in a negative

effect on the treatment referral-rate outcome. Besides referring patients with a positive screening to a mental health provider, other plans of care included: 1) providers initiating antidepressant treatment for 37% of the patients, 2) scheduling follow-up appointments in two to three weeks for 14.8% of the patients, 3) patients with a positive screening who were assessed and found not to be depressed were told to follow-up as needed. Also, a small number of patients who presented with a positive screening declined further treatment for postpartum depression. A cohort study implementing depression screening for pregnant women conducted by (Venkatesh et al., 2016) showed that 35% of the women were treated with antidepressants, and women who screened positive during pregnancy are more apt to follow-up with a mental health provider in comparison to postpartum women.

Access to mental health treatment was limited; wait times for initial appointments ranged from four to twelve weeks. Both providers and patients reported frustration with the long wait times for appointments. This discovery is consistent with the findings from Haran et al., (2014) who stated that 21% of the women with positive screening in their study saw a mental health professional within 90 days of being screened. Long wait times for mental health appointments could account for the reason OB-GYN providers decide to initiate antidepressant treatment as opposed to referring patients. During the pre-intervention phase of the project, the OB-GYN clinic attempted collaboration with a psychiatric practice to facilitate prompt evaluation of patients. However, the psychiatric practice failed to follow-up with referred patients. The OB-GYN clinic leadership as a result determined they had to sever the relationship with the psychiatric practice.

Insurance status was also problematic in that many mental health providers do not accept Medicaid for payment. About 40% of the patient who screened positive for postpartum

depression during the post-intervention phase had Medicaid insurance which made referral to mental health services difficult.

### **Limitations**

Some of the OB-GYN providers did not adhere to the newly created practice policy for postpartum depression. During the pre-intervention phase of the project, a scheduled meeting with the providers and the DNP student was cancelled. The Christmas holidays and the provider's busy schedules prevented the rescheduling of the training session. Patients prior history of mental illness was not assessed. Even though it was not readily documented in the postpartum visit sections of the charts, patients with a previous psychiatric diagnosis may already be on antidepressant or verbally instructed to see their mental health provider. A patient with a prior history of a psychiatric disorder may not have been referred which affects the treatment referral outcome.

### **Recommendations**

The statistical analysis determined that the increase in referral rate from pre-intervention to post-intervention was significant. However, additional discussions and training sessions with the providers to facilitate buy-in and congruence with the clinic's goals for postpartum depression treatment referrals are recommended. As a large OB-GYN clinic in central Texas, the practice should pursue collaborative relationships with one or two psychiatric practices that can promptly see their referred patients. As stated by Lind et al. (2017), a collaboration between the screening and treating providers can increase the success of postpartum treatment. Another recommendation is to refer all patients with a positive screening to the free postpartum depression therapy group at the local hospital for further education and support regarding the condition.

**Implications for Practice**

Evidence-based research along with the recommendations from USPSTF and ACOG convey the importance of screening for postpartum depression with systems in place to refer patients whose screening are positive. The project findings indicated that when processes are streamlined and made a part of the practice policy which guides the staff's actions, improvements can be made in the screening and treatment referral rates for postpartum depression.

Doctor of Nursing Practice-prepared nurse practitioners have the training to assess healthcare organizations and implement changes to improve patient outcomes. Identifying and promptly treating depression can improve outcomes for patients seen at the OB-GYN clinic. Doctor of Nursing Practice-prepared nurse practitioners can be used as change agents in healthcare organizations to do needs assessments, and implement policies that will result in improved patient outcomes. The sustainability of the project is anticipated since the practice policy now guides the staff's actions during the screening and referral process for postpartum depression. This project suggests that changes such as educating staff, eliminating barriers, and creating a practice policy could improve the screening and treatment referral rates at an OB-GYN practice.

## References

- Agency for Healthcare Research and Quality. (2016). Depression Screening. Retrieved September 26, 2017, from <http://www.ahrq.gov/professionals/prevention-chronic-care/healthier-pregnancy/preventive/depression.htm>
- Agustinho Cardillo, V., Camargo Quialheiro de Oliveira, L., dos Santos Monteiro, J. C., & Azevedo Gomes-Sponholz, F. (2016). Identification of depressive symptoms during postpartum in adolescent mothers. *Revista Eletronica De Enfermagem*, 181-10. doi:10.5216/ree.v18.32728
- American College of Obstetricians and Gynecologists. (2015). ACOG committee opinion. Washington, DC: American College of Obstetricians and Gynecologists.
- Center for Disease Control and Prevention (2017). Depression among women. Retrieved October 2, 2017, from <https://www.cdc.gov/reproductivehealth/depression/index.htm>
- Center for Disease Control and Prevention (2017). PRAMStat System. Retrieved October 2, 2017, from <https://www.cdc.gov/prams/pramstat/index.html>
- Cox, J., & Holden, J. (2003). Perinatal mental health a guide to the Edinburgh Postnatal Depression Scale. London, England: England Royal College of Psychiatrists.
- DelRosario, G. A., Chang, A. C., & Lee, Elizabeth D. (2013). Postpartum depression: Symptoms, diagnosis, and treatment approaches: Maternal depression following the birth of a baby can impact the quality of life of both mother and child over the course of their lifetimes and may have life-threatening effects. *JAAPA-Journal of the American Academy of Physicians Assistants*, 26(2), 50-4.
- Field, T. (2017). Prenatal Depression Risk Factors, Developmental Effects and Interventions: A Review. *Journal of Pregnancy and Child Health*, 4(1), 301. <http://doi.org/10.4172/2376->

127X.1000301

- Hansotte, E., Payne, S., & Babich, S. (2017). Positive postpartum depression screening practices and subsequent mental health treatment for low-income women in Western countries: A systematic literature review. *Public Health Reviews*, 2017, Vol.38.
- Haran, C., van Driel, M., Mitchell, B. L., & Brodribb, W. E. (2014). Clinical guidelines for postpartum women and infants in primary care-a systematic review. *BMC Pregnancy & Childbirth*, 14(1), 51. doi:10.1186/1471-2393-14-51
- Kurtz, S., Levine, J., & Safyer, M. (2017). Ask the Question: Screening for Postpartum Mood and Anxiety Disorders in Pediatric Primary Care. *Current Problems in Pediatric and Adolescent Health Care*,
- Larocco-Cockburn, A., Reed, S., Melville, J., Croicu, C., Russo, J., Inspektor, E., . . . Katon. W., (2013). Improving depression treatment for women: Integrating a collaborative care depression intervention into OB-GYN care. *Contemporary Clinical Trials*, 36(2), 362-370.
- Lind, A., Richter, S., Craft, C., & Shapiro, A. (2017). Implementation of Routine Postpartum Depression Screening and Care Initiation Across a Multispecialty Health Care Organization: An 18-Month Retrospective Analysis. *Maternal and Child Health Journal*, 21(6), 1234-1239
- Loudon, H., Nentin, F., & Silverman, M. (2016). Using clinical decision support as a means of implementing a universal postpartum depression screening program. *Archives of Women's Mental Health*, 19(3), 501-505. doi:10.1007/s00737-015-0596-y
- O'Connor, E., Rossom, R. C., Henninger, M., Groom, H. C., & Burda, B. U. (2016). Primary Care Screening for and Treatment of Depression in Pregnant and Postpartum Women:

- Evidence Report and Systematic Review for the US Preventive Services Task Force. *JAMA: Journal of The American Medical Association*, 315(4), 388-406.  
doi:10.1001/jama.2015.18948
- Sampson, M., Duron, J., Mauldin, F., Kao, R., & Davidson, L. (2017). Postpartum Depression, Risk Factors, and Child's Home Environment Among Mothers in a Home Visiting Program. *Journal of Child and Family Studies*, 26(10), 2772-2781
- Scheyer, K., & Urizar, G. (2016). Altered stress patterns and increased risk for postpartum depression among low-income pregnant women. *Archives of Women's Mental Health*, 19(2), 317-328. doi:10.1007/s00737-015-0563-7
- Shivakumar, G., Brandon, A., Johnson, N., & Freeman, M. (2014). Screening to Treatment: Obstacles and Predictors in Perinatal Depression (STOP-PPD) in the Dallas Healthy Start program. *Archives of Women's Mental Health*, 17(6), 575-578. doi:10.1007/s00737-014-0438-3
- Siu, A. L., Bibbins-Domingo, K., Grossman, D. C., Baumann, L. C., Davidson, K. W., & Pignone, M. P. (2016). Screening for Depression in Adults: US Preventive Services Task Force Recommendation Statement. *JAMA: Journal of The American Medical Association*, 315(4), 380-387. doi:10.1001/jama.2015.18392
- Venkatesh, K. K., Nadel, H., Blewett, D., Freeman, M. P., Kaimal, A. J., & Riley, L. E. (2016). Implementation of universal screening for depression during pregnancy: Feasibility and impact on obstetric care. *American Journal of Obstetrics and Gynecology*, 215(4), 517.e1-517.e8.

Appendix A: SWOT Analysis

<b>Strengths</b>	<b>Weaknesses</b>
<ul style="list-style-type: none"> <li>• 84% of the patients were screened for postpartum depression after delivery.</li> <li>• Most patients are given a packet with information about postpartum depression and, how to seek help.</li> <li>• The practice has a QI team that meets monthly to address identified issues.</li> <li>• Adequate staff and financial resources to implement necessary changes.</li> </ul>	<ul style="list-style-type: none"> <li>• The weaknesses identified in the OB-GYN practice include the lack of follow-up care for patients identified as positive for postpartum depression</li> <li>• Lack of consistency among providers in administering the screen</li> <li>• Failure to implement an Arabic version of the EPDS despite having a significant number of Arabic patients.</li> </ul>
<b>Opportunities</b>	<b>Threats</b>
<ul style="list-style-type: none"> <li>• One potential opportunity for the OB-GYN clinic involves the implementation of depression screening during pregnancy which has been shown to improve mother and infant outcomes (O'Connor, Rossom, Henninger, Groom, &amp; Burda, 2016).</li> <li>• Another potential opportunity is to establish a practice policy regarding the screening and treatment of postpartum depression.</li> <li>• Increasing the number of women referred for postpartum depression to mental health services after a positive screening.</li> <li>• Forming collaborative relationships with one or two mental health practices.</li> </ul>	<ul style="list-style-type: none"> <li>• Not having a copy of the patient's EPDS on file is a potential threat especially if the patient harmed herself.</li> </ul>

## Appendix B

## OB-GYN Postpartum Depression Practice Policy

- 1) The medical assistant will screen all patients presenting to the clinic for their postpartum visit with the Edinburgh Postnatal Depression Scale.
- 2) The medical assistant will notify the provider of each patient that score a 10 or higher on the Edinburgh Postnatal Depression Scale.
- 3) The provider will educate the patient about postpartum depression and give them a referral list of mental health providers and recommend they get seen as soon as possible.
- 4) The medical assistant will follow-up with each patient that was given a referral list within four-weeks to find out whether they saw a mental health provider or have a scheduled appointment.