Title:
Standardized Perinatal Depression Screening for Optimizing Patient Care

Melissa D. Nehl, DNP
Kara A. Kniert, DNP
Shawn E. Brooking, DNP
Department of Graduate Nursing, University of Mary, Bismarck, ND, USA

Session Title:
Rising Stars of Research and Scholarship Invited Student Posters

Keywords:
Obstetric Providers & Nurses, Perinatal Depression (PND) Screening and Women's Health

References:


Abstract Summary:
This evidence-based Doctorate of Nursing Practice capstone project aimed to determine whether standardized perinatal depression (PND) screening identifies more cases of PND than provider discretion. Through quantitative and qualitative data analysis, authors concluded that standardized screening is more sensitive in detecting patients who may have PND, than clinical judgement alone.

Learning Activity:

<table>
<thead>
<tr>
<th>LEARNING OBJECTIVES</th>
<th>EXPANDED CONTENT OUTLINE</th>
</tr>
</thead>
<tbody>
<tr>
<td>The learner will be able to state at least 2 reasons why screening all women for PND is necessary for optimal patient care.</td>
<td>This learning objective will be accomplished by including information regarding the prevalence and consequences of PND. The presentation will also show that self-reporting of symptoms to healthcare providers is low, increasing the importance of screening efforts. The presentation will also support these facts with quantitative data from this DNP project. The presentation will be formatted in a poster presentation.</td>
</tr>
<tr>
<td>The learner will be able to explain why integration of standardized screening efforts into electronic health records is necessary for optimal patient care.</td>
<td>This learning objective will be accomplished by describing the screening process used for this DNP project, supported by qualitative data showing that lack of electronic health record (EHR) integration likely resulted in missed screening opportunities. These qualitative points will be supported by similar reports from the literature.</td>
</tr>
</tbody>
</table>

Abstract Text:

Introduction

Perinatal depression (PND) is a pervasive condition affecting hundreds of thousands of new mothers each year in the United States.\(^1,2\) PND includes major and minor depressive episodes during pregnancy and/or up to a year following the birth of a baby, affecting up to one in five new mothers.\(^3,4\) The United States recorded nearly four million births in 2014, meaning up to 800,000 cases of PND developed during the same time period.\(^1\) The birth of a baby should be an event filled with joy, yet, many women bear the burden of negative emotions, inability to perform daily tasks, and guilty thoughts of harming themselves or
their new baby. Screening for PND is a vital component of perinatal care and should be done for all women at least once during the perinatal period.

Inconsistent PND screening practices still exist, despite evidence the condition has a vast array of negative consequences and healthcare providers tend to overestimate their PND screening frequency and accuracy. For the infant, such consequences may include malnutrition, illness, developmental delay, poor growth, delayed mother-infant attachment, and behavior difficulties. Problems for the mother may include difficulty bonding with the baby, withdrawing from family and friends, suicidal thoughts or attempts, difficulty sleeping, eating, concentrating, and enjoying previously pleasurable activities. Suicide is the second leading cause of death in the perinatal period, accounting for 20 percent of deaths, making the identification of PND especially important. Fewer than 20 percent of women report PND symptoms to their healthcare provider, and symptoms of PND may be confused for normal life changes of pregnancy and new parenthood, such as changes in sleep pattern. The National Institute for Health Care Management states simple interventions such as maternal depression screening and patient education could increase identification of maternal depression cases, resulting in prevention of further complications and unnecessary cost accrual. PND screening is a great segue to educate patients about PND. Improving consistency of screening practices by healthcare providers may identify affected women sooner, leading to earlier initiation of the treatment needed to care for themselves and their budding families.

This doctoral nursing practice (DNP) capstone project encompasses the implementation of a standardized PND screening protocol in an obstetric (OB) clinic located in the upper Midwestern United States. Evidence based practice was integrated throughout the project, utilizing the governing body recommendations of ACOG and the US Preventative Services Task Force (USPSTF). ACOG recommends screening all women for depression at least once during the perinatal period using a standardized and validated tool. PND screening should be done throughout the perinatal period, but heavily focused on the postpartum since the majority of PND presents postnatally. Forty percent of PND cases present after delivery, 33 percent during pregnancy, and 27 percent preceding pregnancy. The USPSTF also recommends standardized screening for depression among pregnant and postpartum women.

Three distinct project recommendations were developed in order to meet the overall goal of standardized PND screening. These three recommendations included: 1) for all OB providers participating in the clinical project to screen each pregnant and postpartum woman receiving perinatal care from the OB clinic using the Edinburgh Postnatal Depression Scale (EPDS), once antenatally and once postnatally; 2) women who score 10 or higher on the EPDS are referred to a mental health provider for a same or next day appointment; and 3) to educate all of the participating OB providers about the importance of standardized PND screening, the use of the EPDS screening tool, as well as of the need for timely referral to mental health.

Over the course of four semesters, DNP project managers progressed through the stages of their DNP capstone project. Project implementation took place for 12 weeks, from October 30, 2016 to January 20, 2017. Quantitative and qualitative data were collected and analyzed to evaluate the project in its entirety.

Purpose

The purpose of this DNP project was to investigate whether screening women at certain points in the perinatal period for depression, using a standardized screening protocol, identifies more cases of PND than does individual provider discretion.

Methods

Implementation of a standardized 12-week PND screening protocol took place at an OB clinic located in the upper Midwest. Screening was completed with the EPDS, a clinically validated tool for depression
screening in the perinatal period. Women were screened for PND at two points during the perinatal period: 24-28 weeks gestation (same visit as the oral glucose tolerance test) and 6 weeks postpartum. Patients who had an EPDS score of ≥ 10 were referred to a mental health provider for diagnosis and treatment of possible PND.

Data was collected and analyzed for the following three time periods, each 12 weeks in length: 1) one year prior to implementation (10/31/15-1/20/16), 2) pre-implementation (8/8/16-10/28/16), and 3) implementation (10/31/16-1/20/17). The computer programs utilized to analyze data included Microsoft Excel and SPSS Statistics.

Quantitative data analyzed PND screening rates and EPDS scores. Qualitative data, regarding OB clinic staff attitudes toward standardized PND screening, was gathered from pre- and post-implementation surveys given to clinic staff. Pre-implementation survey was distributed to clinic providers (physicians, nurse practitioners, and physician assistants), and there were 5 respondents. Post-implementation surveys were distributed to all clinic staff, and responses received from 5 providers, 11 nurses, and 3 clerical staff.

**Results**

Quantitative data collected in the DNP project serves to demonstrate the efficacy of the project and is not intended to meet rigorous statistical tests for significance, as are the works of philosophy doctorates. PND screening rates were determined by the number of EPDS screenings completed out of the total number of patient encounters for each time period: Period 1= 0% (0/3,725), Period 2= 1.8% (64/3,562), Period 3= 11.1% (346/3,110). Frequency of screening increased by 622% from Period 2 to 3. It needs to be taken into consideration that this increase is artificially inflated, due to the fact that prior to the project implementation, providers were only screening based on their clinical judgement, inconsistently, and usually only at the six week postpartum visit. This project recommended screening patients at two specific time points. In addition, the increase by which screening was increased was not calculated to statistical significance.

EPDS score data included the following: Period 2 (min=0, max=21, mean=3.6, scores ≥10 = 8), Period 3 (min=0, max=25, mean=4.8, scores ≥10 = 47). A comparison of the number of EPDS scores 10 or higher, considered a, “positive” screening, was conducted. It was found that in Period 2, eight patients scored 10 or higher. In Period 3, 47 patients scored 10 or higher. A recommendation of this DNP project was that women who score 10 or higher on the EPDS be referred to a mental health provider for diagnosis and treatment. This finding supports the notion that standardized screening is more sensitive than clinical judgement alone, in the detection of patients who may have depression during the perinatal period.

Qualitative data identified 4 distinct themes: 1) OB clinic staff are willing to screen for PND and acknowledge the value of it, 2) they intend to continue screening, 3) improved communication with mental health resources likely improved attitudes toward screening, and 4) barriers still exist to standardized PND screening, mostly in the form of EHR limitations.

**Limitations**

Lack of ability to integrate reminders into the EHR, to prompt clerical staff to hand out EPDS forms, resulted in missed screenings. Also due to EHR limitations, authors were unable to objectively measure whether time from referral to mental health appointment decreased. Quick mental health follow-up is essential to increase likelihood of patient follow-through.

**Conclusion**

Standardized screening resulted in an increase in the PND screening frequency, average EPDS score, and the number of women scoring ≥10. This suggests that standardized screening is more sensitive in
detecting PND, than clinical judgement alone. Overcoming barriers is critical to future sustainability and usefulness of a successful standardized PND screening program. In order to keep the program sustainable, EHR integration should take place to create a reminder for clerical staff to distribute screening questionnaires. In order to keep the program useful, mental health resources need to be available for quick referral, diagnosis and treatment, in order to meet the needs of the patients who are identified to be likely suffering from PND. While each clinical environment is unique, this project may provide future project managers insight and direction for making needed practice changes, to effectively care for pregnant women and result in optimal pregnancy outcomes and healthy patients and families.