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**Integration of Depression and Anxiety Screening Among Uninsured and Underinsured
Patients in a Mobile Nurse-Led Clinic**

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Background

Maternal mental health is a key public health concern (Vázquez & Míguez, 2019). In the most recent community health needs assessment (2022-2025) in one Midwestern rural community, priority needs were identified with the top priority of building families with access to culturally competent healthcare, including access to mental health services (Central MN Alliance, 2022). This report acknowledged depression and anxiety are common in pregnancy and postpartum with about 1 in 7 women diagnosed with one or both of these conditions, with evidence this number is underreported (Mughal, Azhar, & Siddiqui, 2022). Significant risk factors of postpartum depression include a history of psychopathology or depression in pregnancy, poor marital relationships, intimate partner violence, low social support, stressful life events, and low socioeconomic status (Edwards, Le, & Garnier-Villarreal, 2021).

Under-reporting anxiety and depression is extended by low levels of screening in this population. Sidebottom and colleagues (2019) determined in a large sample of postpartum patients in a variety of settings that screening rates varied from five to 95% with the average rate of anxiety and depression screening at 52%. This same study found African American, Latina, Asian, and otherwise non-White patients, along with low-income patients, were less likely to be screened (Sidebottom et al., 2019). The low rate of screening coupled with the high prevalence of maternal depression in Latinas specifically (greater than 59%) in the United States, warranted investigation into screening and referral processes suitable to this and other diverse populations (Edwards, Le, & Garnier-Villarreal, 2021).

Purpose of the Project

In the absence of current screening procedures at one mobile clinic, this quality improvement project sought to 1) increase the rate of pregnant/postpartum depression screening using the Edinburgh Postnatal Depression Scale, and 2) increase the rate of mental health referrals as a result of that screening. The Edinburgh Postnatal Depression Scale is a widely used self-response screening tool that is validated in English and Spanish, which are the most common languages spoken at the mobile clinic (Vázquez & Míguez, 2019).

Description of the Setting/Population for the Project

The setting for this project is a free nurse-led mobile clinic that travels throughout Central Minnesota, focused on areas of the community that are underinsured or uninsured. The mobile clinic provides monthly stops at several locations throughout the community and serves all ages, with the largest population being Hispanic women. The population of focus for this project is Hispanic women who are pregnant/postpartum or within 1 year postpartum attending the mobile clinic, although the screening process was applied to all who were eligible.

Detailed Description of Each Element of the Intervention

The interventions for this project were 1) the integration of the Edinburgh Postnatal Depression Scale to screen all pregnant/postpartum patients at a nurse-led mobile clinic in Central, Minnesota to address prenatal and postnatal care for pregnant women; and 2) resulting referrals to the local family health center or applicable resources for mental health support.

The instrumentation used for data collection will include the Edinburgh Postnatal Depression Scale, which has been demonstrated to be valid and reliable in English and Spanish-speaking patients (Vázquez & Míguez, 2019). The EPDS is a self-reported questionnaire designed to detect postpartum depressive states and asks about how the women have been feeling over the past seven days (Cox et al., 1987). This scale includes ten items with four response

options, each of them having a single value ranging from zero to three the higher the value, the more severe the symptoms. Consequently, the scale scores range from 0 to 30 (Vázquez & Míguez, 2019).

Detailed Description of Methods to Evaluate Outcomes and Data Collection

To allow for anonymous data collection, a tracking form without patient identifiers was used to document data. The tracking form, completed by a clinic registered nurse, included the number of weeks post-partum a patient was, if they were screened using the EPND scale or not, the score of EPND, if a referral was made to the family health center, and if, in follow-up, referred patients actually attended appointments.

The mobile unit director also distributed a post-implementation survey to nurses and staff to determine benefits and limitations of the screening process. Survey questions included what worked well in the screening process, barriers and limitations to the screening process, the level of cultural competence displayed through the screening, satisfaction with the follow-up and referral process, and suggestions for improving the project. Staff were also asked if the screening and referral process should continue. The survey was administered electronically via a link connected to an email invitation and distributed to staff via the program director. Data were collected anonymously by the program director.

Data Analysis

Data were analyzed using descriptive statistics to indicate the number of patients screened and those referred. Qualitative data collected from surveys were summarized for frequency and overall perception.

Results

Twenty-five eligible (pregnant/postpartum) patients attended the clinic. Of these, all were postpartum patients ranging from 2 weeks to 32 weeks after birth. Of those attending, all were offered screening and 19 were screened using the Edinburgh Postnatal Depression Scale (76%) and 6 refused screening (24%). Scores on the EPND ranged from 1 (indicating a very low number of screening indicators) to 12. Eight of the 19 screened patients (42%) were referred to the Family Health Center for potential postpartum depression and anxiety. In addition, follow-up on those patients referred revealed seven (88%) reportedly attended the mental health appointments scheduled post-screening.

Fourteen staff provided feedback on the utility and sustainability of the screening and referral process (Table 1). In response to benefits and satisfaction with the screening process, respondents indicated the survey was simple and was easily integrated into the workflow. They mentioned Spanish translation was important and that the screening process and referrals greatly benefitted the Hispanic community in particular. One participant wrote, the process is “very effective at closing some of the gaps that we continue to see across our communities and reaching postpartum patients”

The question on barriers noted in the screening revealed a lack of understanding from the patients on the value of screening and fear or mistrust of the healthcare community with low levels of health literacy noted. In addition, barriers to referrals revealed speculations of lack of transportation and stigma around mental health care. However, once respondent reflected on these speculations by noting, “Looking at the % of completion, nearly 90% have attended the appts scheduled post survey”

The question about cultural sensitivity of the process revealed positive perceptions that the screening process was adequate and well-aligned with the clinic's goals. One participant

wrote, “The entire process is focused around being culturally aware in all of our conversations and connections.”

All 14 surveys answered the project was culturally sensitive and met the community's needs. One staff member wrote, “The entire process is focused around being culturally aware in all of our conversations and connections.” Overall, staff indicated that the process for both screenings and referrals was easy, valuable, and important. Suggestions for improvement of the process included integration with the electronic health record, guidance about how to have continued conversations with patients about anxiety and depression, and the potential for adding more questions alongside the EPND that addressed other determinants of health, such as socioeconomic status.

Discussion

The purpose of the project was to increase screening and referrals for depression and anxiety among uninsured or underinsured pregnant or postpartum women attending a mobile health clinic. Anxiety and depression rates, found among one in seven pregnant/postpartum women has been shown to be limited by low screening rates (Mughal et al., 2022). This project addressed this need in one community by adding screening to all eligible patients who accepted this assessment. The project had surprisingly high levels of adherence to results of the screening with nearly 90% of referred patients actually attending mental health appointments. The project revealed the addition of the EPND screening was an easy, useful, and sustainable tool that identified almost half of those screened would benefit from mental health services. Staff found the process for screening and referrals to be simple without interruption to the workflow.

The barriers to the screening and referral processes were also revealed. These identified barriers, such as lack of understanding from patients on the value of screening and distrust in the

healthcare system, are important to address to help identify patients struggling with postpartum depression and anxiety and to increase the number of referrals to receive care. Providing culturally competent care is an essential part of this project and its success. To help minimize these barriers in the future, staff should be trained on skill building in core areas including communication, mental illness, symptom identification, cultural awareness, and cultural sensitivity. This training has been identified as necessary to help reduce the gap in care for underserved communities (Garcini et al., 2022).

Limitations to the project include a limited time window for data collection (three months) and a small sample of patients attending one mobile clinic and of staff responding to the survey, which inhibits generalizations. In addition, the screening would be enhanced with integration into the electronic health record, rather than the paper version administered during the project, to enhance communication and follow up care. This recommendation is supported by evidence of the benefits of using electronic health records, which includes improved quality of care, better communication, patient empowerment, improved productivity, decreased cost, more accessible data, improved data quality and accuracy, improved storage and backup, better organization and workflow, decreased workload, and improved efficiency (Tsai et al., 2020).

Summary

The number of patients screened and referred as well as nurse satisfaction with the process and outcomes supports the benefits of screening for postpartum depression in the mobile health clinic. The process increased care equity and resulted in a positive response to attending mental health appointments. Overall, the project benefited the mobile health patients in this community and helped to close a gap in the awareness and recognition of depression and anxiety in this vulnerable population.

Authors of DNP project manuscripts must also submit the following two documents:

- 1. Documentation of formal internal quality improvement review status or institutional review board status including if deemed exempt or not human research**
- 2. Approval form completed and signed by the project faculty advisor**

Title: Implementation of Postpartum Depression Screening in Care of Postpartum Hispanic Women Seeking Care within CentraCare Community Wellness Mobile Clinic
Samantha Hamm

CENTRACARE NURSING RESEARCH REVIEW BOARD

Criteria for Quality Improvement Graduate Projects

		Comments
The purpose statement of the project is clear and contains the patient/population, intervention, comparison, and outcome.	<input checked="" type="radio"/> Yes No	
The literature review thoroughly summarizes the key findings and strength of the evidence applicable to the project.	<input checked="" type="radio"/> Yes No	
The practice change is clearly defined.	<input checked="" type="radio"/> Yes No	
The practice change implementation plan includes the necessary communication and education.	Yes <input checked="" type="radio"/> No	Communication and education plan could be clearly defined
The project pre-and post-measures are clearly defined.	<input checked="" type="radio"/> Yes No	Pre measure is that they are currently not screening.
Confidentiality and subject's rights are adequately protected.	<input checked="" type="radio"/> Yes No	
Data collection tools are appropriate to the purpose of the project.	<input checked="" type="radio"/> Yes No	
Data collection tools are included and do not seem unnecessarily cumbersome or complex.	Yes <input checked="" type="radio"/> No	listed as attached but were not included. Can you send?
The proposed timeline is realistic.	<input checked="" type="radio"/> Yes No	
The expectations of resources from CentraCare are realistic and not excessive.	<input checked="" type="radio"/> Yes No	
Dissemination of findings is described and will be shared with CentraCare site location.	<input checked="" type="radio"/> Yes No	

Describe how this project aligns with the CentraCare Strategic Plan. Increasing access from a population health perspective.

Melissa Fradette
Signature, Nursing Research Review Board Member

11/17/22
Date

NRRB Members Present:

<input checked="" type="checkbox"/>	Jennifer Burris, MA, RN, APRN, CNS	<input checked="" type="checkbox"/>	Roxanne Wilson, PhD, RN	<input checked="" type="checkbox"/>	Melissa Fradette, MSN, RN, CCRN-K
	Bridget Klein, BSN, RN, RN-BC	<input checked="" type="checkbox"/>	Katie Schulz, DNP, MBA, RN, NPD-BC		Kirsten Skillings, MA, RN, APRN
<input checked="" type="checkbox"/>	Evalyn Michira, MSN, RN, PHN		Jenna Buganski, MSN, RN	<input checked="" type="checkbox"/>	Amy Hilleren-Listerud, DNP, APRN, CNS
<input checked="" type="checkbox"/>	Judy Jensen, BSN, RN	<input checked="" type="checkbox"/>	Renee Doetkott, MSN, RN	<input checked="" type="checkbox"/>	Melissa Stowe, MSN, RN, CNOR

Table 1:

Survey Question	Identified theme(s)
1. What worked well with the postpartum screening process?	Focusing on the Hispanic community specifically as they have more needs in this community. Bringing translated easy to read materials on-site Having the survey be simple and incorporated into daily workflow
2. What were the barriers that you noticed to screening?	Lack of understanding from the patient on how important the screening is. Fear or mistrust in the healthcare community. Stigma surrounding mental health. Low health literacy
3. What barriers did you notice to patients getting referrals? Or going to a referral appointment?	Lack of transportation to attend follow up appointments. Declining follow up even though they have signs of postpartum depression for unknown reasons. Other social determinants of health that impact their overall care.
4. How much is the process culturally sensitive and meeting the community's needs?	Adequately culturally sensitive and very aligned in meeting the community's needs
5. To what extent do you believe patients are attending follow up appointments?	Most patients are attending follow up appointments.
6. How effective would you say the referral process is?	Very effective with simple workflow
7. Do you think this service is beneficial and should continue to be offered at the clinic?	Yes, the goal is to offer this continued
8. What suggestions for improving this project do you have?	Epic (EHR) integration, continue to have conversations on postpartum depression and anxiety, add questions that align with other social determinants of health

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