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RESEARCH SUMMARY

Title: Screening for Postpartum Depression at a Family Medicine Clinic: a Prospective Study

A. Objectives of this project:

To determine whether administration of the Edinburgh Postnatal Depression Scale (EPDS) questionnaire at six months and twelve months will improve our ability to identify women with Postpartum Depression (PPD) who may not indicate they are having symptoms at their initial 6-8 week postpartum visit, but may present with symptoms later on.

Hypothesis: Administering the EPDS questionnaire to patients at six months and twelve months postpartum will allow us to identify patients who may suffer with depression weeks or months after their initial 6-8 week postpartum visit.

B. Background:

Postpartum depression (PPD) is a debilitating mood disorder and one of the most common complications of childbirth.[6] The DSM-IV defines PPD as Major Depressive Disorder characterized by the onset of a major depressive episode within four weeks of delivery.[3] Symptoms of PPD have a substantial impact on the health of women and on the cognitive and emotional development of their infants.[2] Prevalence estimates suggest that 5% to 25% of new mothers experience depression in the postpartum period.[4]

Recent studies suggest that postpartum depression can develop after 6-8 weeks postpartum. A meta-analysis from 2005 concluded that 14.5% of women have a new episode of depression during the first 3 months postpartum.[4] A prospective study from 2011 stated that significant depression scores were observed by nine months postpartum.[5] A multicenter study from 2012 evaluated for postpartum depression at 6-8 weeks, 6 months and 12 months and observed elevated depression scores at all points in 34.5% of the participants.[7] Given that symptoms of depression could develop during the twelve-month postpartum period, screening for PPD through twelve months would be an effective means of identifying women suffering from depression who did not have symptoms of depression during the two months following delivery. Failure to identify depression could have detrimental effects on the health and overall wellbeing of mothers, their infants, and their families.

The Edinburgh Postnatal Depression Scale (EPDS) has been shown to be an effective and sensitive diagnostic tool for screening women for symptoms of PPD.[6] At many family medicine clinics, the EPDS questionnaire is administered only once. At the UnityPoint Health Methodist Family Medical Center in Peoria, IL, it is administered to women at their initial 6-8 week postpartum visit. However, since recent studies have

demonstrated that woman can develop PPD through twelve months postpartum, the authors of this study believe that screening for PPD only at the initial postpartum visit falls short of identifying those patients who may struggle with depression later on. A positive screen test at six months or twelve months will allow physicians to address PPD and implement appropriate treatment measures. Therefore, the authors believe that postpartum mothers should be screened for PPD at six months and twelve months in addition to their initial 6-8 week screening.

C. Study Method:

The EPDS questionnaire will be administered at the 6-8 week initial postpartum visit. Patients who do not score 10 or above or indicate they are having thoughts of harming themselves (negative screen) will be administered the questionnaire again at 6 months and 12 months. They will be called and asked to complete the questionnaire in the clinic proctored by a registered nurse. They will be offered a ten-dollar Walmart gift card in compensation for their travel time and expense.

If patients screen positive on the EPDS questionnaire, score of greater than 10, their physician will be notified for appropriate intervention and treatment. If the patient is suicidal or homicidal, emergency management will be arranged by the registered nurse administering the questionnaire. The EPDS scores will be recorded at 6-8 weeks, 6 months and 12 months. The data will be collected and submitted to a statistician for analysis.

D. Inclusion/Exclusion Criteria for Subjects:

Inclusion criteria:

(1) Postpartum patients from UnityPoint Health Methodist Family Medical Center who will have delivered at UnityPoint Health Methodist Medical Center within 6 months from the start of this study;
(2) Postpartum patients who screen negative, score less than 10, on the EPDS questionnaire at their initial 6-8 week postpartum visit.

Exclusion criteria:

(1) Postpartum patients from UnityPoint Health Methodist Family Medical Center who screen positive on the EPDS questionnaire at their 6-8 week initial postpartum visit.
(2) Postpartum patients who have a history of depression or other psychiatric disorders.

E. Theoretical risks or potential benefits to:

Those subjects at risk of PPD who do not present with symptoms of depression at their initial 6-8 week may be identified as having depression through additional screening during their 12-month postpartum period. Those who screen positive on the EPDS questionnaire will receive appropriate intervention and treatment.

F. Alternative treatments to patients: None.

G. Precautions and safeguards taken:

HIPAA rules regarding patient confidentiality will be followed explicitly. In the event that a subject of this study indicates that she is depressed, the patient's primary physician will be contacted for appropriate intervention and treatment. If the patient

indicates she is suicidal or homicidal, emergency management of the situation will be made to ensure the subject's safety and welfare. (Refer to item C).

H. Results:

From February 2013 to April 2014, eighty-four UnityPoint Health Methodist Family Medical Center patients delivered at UnityPoint Health Methodist Medical Center. Of those patients, forty-seven patients came to their initial postpartum visit. Twenty patients came for a 4-8 month visit and two patients for an 11-12 month visit. There was a slight but non-significant increase in EPDS in several patients evaluated at 4-8 months compared to their initial visit. There was insufficient data to analyze at 11-12 months.

I. Limitations of the study:

The sample size was small and thus difficult to gain statistically significant results. The measures chosen to collect data limited this study because of inability to contact subjects by phone and a poor response to return to clinic for repeat evaluation by subjects who were contacted. Language barriers provided difficultly in communicating with non-English speaking subjects.

J. Conclusion:

There is potential benefit of subsequent follow-up visits within the first postpartum year to detect Postpartum Depression. However, due to insufficient data, further research is recommended to determine effectiveness of screening at one year postpartum. The authors of this study recommend that repeat screening for PPD at 6 months and 12 months should be adopted as protocol in the UnityPoint Health Family Medical Center to help detect late depression and ensure the safety and welfare of postpartum patients and their babies.

K. References:

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4. Gaynes BN, Gavin N, Meltzer-Brody S, et al. Perinatal depression: prevalence, screening, accuracy, and screening outcomes. *Evid Rep Technol Assess (Summ)* 2005; 119:1-8.
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7. Yawn BP, Dietrich AJ, Wollan P, et al. TRIPPD: a practice-based network effectiveness study of postpartum depression screening and management. Ann Fam Med 2012; 10(4):320-329.