

SCREENING FOR POSTPARTUM DEPRESSION AT A FAMILY MEDICINE CLINIC: A PROSPECTIVE STUDY

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POSTPARTUM DEPRESSION (PPD)

- DSM-IV defines as **Major Depressive Disorder** characterized by onset of a **major depressive episode within 4 weeks of delivery**
- Symptoms include mood swings, anxiety, sadness, irritability, crying, decreased concentration, and/or trouble sleeping
- **“Postpartum Blues”**
 - Depressed mood experienced shortly after childbirth
 - Begins at day 3 or 4 and usually **ends within 2 weeks**
 - Develops in 50% to 70% of all women

POSTPARTUM DEPRESSION

- Risk factors: history of depression or anxiety, child care stress, life stress, lack of support, and/or marital dissatisfaction
- 5% to 25% of mothers experience PPD in the 12-month postpartum period

RESEARCH FOR HYPOTHESIS DEVELOPMENT

- Perinatal depression: prevalence, screening, accuracy, and screening outcomes. Gaynes BN, Gavin N, Meltzer-Brody S, et al. , 2005.
- Changes in depressive symptoms over 0-9 months postpartum. Gjedingen D, Crow S, McGovern P, et al. , 2011.
- Translating Research into Practice for Postpartum Depression. Yawn BP, Dietrich AJ, Wollan P, et al. , 2012.

PERINATAL PREPRESSION: PREVALENCE, SCREENING, ACCURACY, AND SCREENING OUTCOMES

- Meta-analysis of different prevalence and incidence estimates in 30 studies
- Prevalence estimates of depression during postpartum year ranged from 6.5% to 12.9%
- Incidence estimates suggest **14.5% of women have a new episode of depression during first 3 months postpartum**

CHANGES IN DEPRESSIVE SYMPTOMS OVER 0-9 MONTHS POSTPARTUM

- Prospective study of 506 mothers from family medicine and pediatric clinics surveyed at 0-1, 2, 4, 6, and 9 months postpartum.
- 112 (22.1%) mothers had positive PHQ-9 scores equal and greater than 10 within first 9 months after delivery.
- Scores rose from between 5.0% and 7.1% at 2-6 months to 10.2% at 9 months.

TRANSLATING RESEARCH INTO PRACTICE FOR POSTPARTUM DEPRESSION

- Multicenter study: 28 family medicine practices (**including UnityPoint Health-Methodist Family Medicine clinic**); March 2006 to August 2010
- Studied effectiveness of screening, diagnosis, and management of depression on detection and patient outcomes among postpartum women
- Participants were given EPDS and PHQ-9 questionnaires to fill out at initial postpartum visit, 6 months, and 12 months
- **1,897 patients in study analysis, 654 (34.5%) had elevated depression screening scores at all points**

HYPOTHESIS

- These studies conclude that depression can present at different times during the postpartum year, therefore screening only at the initial postpartum visit may fail to identify depression leading to detrimental effects on mothers, infants, and families
- The authors of this study propose that **follow-up EPDS surveys at regular interval months throughout the postpartum year will help identify women who develop depression weeks or months after their initial postpartum visit**

EDINBURG POSTNATAL DEPRESSION SCALE (EPDS)

- Effective and most commonly used diagnostic screening tool
- 92% specificity and 88% sensitivity
- Total of 30 points. **Score of 10 or greater indicate risk of depression.**
- At UnityPoint Clinic-Methodist FMC, EPDS usually given at initial well-child visit between 3 days and 4 weeks after delivery, and at 2, 4, or 6 month well-child visit.
 - **Some mothers not present at well-child visits.**

In the past 7 days:

1. I have been able to laugh and see the funny side of things
 - As much as I always could
 - Not quite so much now
 - Definitely not so much now
 - Not at all
2. I have looked forward with enjoyment to things
 - As much as I ever did
 - Rather less than I used to
 - Definitely less than I used to
 - Hardly at all
- *3. I have blamed myself unnecessarily when things went wrong
 - Yes, most of the time
 - Yes, some of the time
 - Not very often
 - No, never
4. I have been anxious or worried for no good reason
 - No, not at all
 - Hardly ever
 - Yes, sometimes
 - Yes, very often
- *5. I have felt scared or panicky for no very good reason
 - Yes, quite a lot
 - Yes, sometimes
 - No, not much
 - No, not at all
- *6. Things have been getting on top of me
 - Yes, most of the time I haven't been able to cope at all
 - Yes, sometimes I haven't been coping as well as usual
 - No, most of the time I have coped quite well
 - No, I have been coping as well as ever
- *7. I have been so unhappy that I have had difficulty sleeping
 - Yes, most of the time
 - Yes, sometimes
 - Not very often
 - No, not at all
- *8. I have felt sad or miserable
 - Yes, most of the time
 - Yes, quite often
 - Not very often
 - No, not at all
- *9. I have been so unhappy that I have been crying
 - Yes, most of the time
 - Yes, quite often
 - Only occasionally
 - No, never
- *10. The thought of harming myself has occurred to me
 - Yes, quite often
 - Sometimes
 - Hardly ever
 - Never

STUDY METHODS

- Study conducted February 2013 to April 2014.
- Subjects limited to postpartum women who delivered at UnityPoint Health MMCI and were patients at UnityPoint Clinic - Methodist Family Medicine.
- EPDS scores at 4-8 week postnatal visit, 4-8 months, and 11-12 months were surveyed on McKesson Horizon Ambulatory Care EHR software.

STUDY METHODS

- Participants who did not complete a follow-up questionnaire were called and asked to come to the clinic to complete one.
- Participants who returned to the clinic were given a packet consisting of a brief description of the study, consent form, and follow-up questionnaire.
 - Available in both English and Spanish
- Participants were given a Walmart \$10 gift card to compensate for time and travel expenses.
 - Grant money was obtained for the gift cards.

STUDY METHODS

- Follow-up questionnaires completed by patients who returned to the clinic were scored by a registered nurse.
- If patient screened positive at any point, patient's PCP was notified immediately.
- If patient indicated she was suicidal, she was immediately referred to ER by nurse, and PCP was notified.

INCLUSION/EXCLUSION CRITERIA

- Inclusion Criteria

- Postpartum patients from UnityPoint Clinic-Methodist Family Medicine who delivered at UnityPoint Health MMCI from Feb 2013 to Oct 2013.

- Exclusion Criteria

- Patients who screened positive at initial postpartum visit.
- Patients with history of depression or other psychiatric disorders.

RESULTS

84 Deliveries

47 Initial Visit

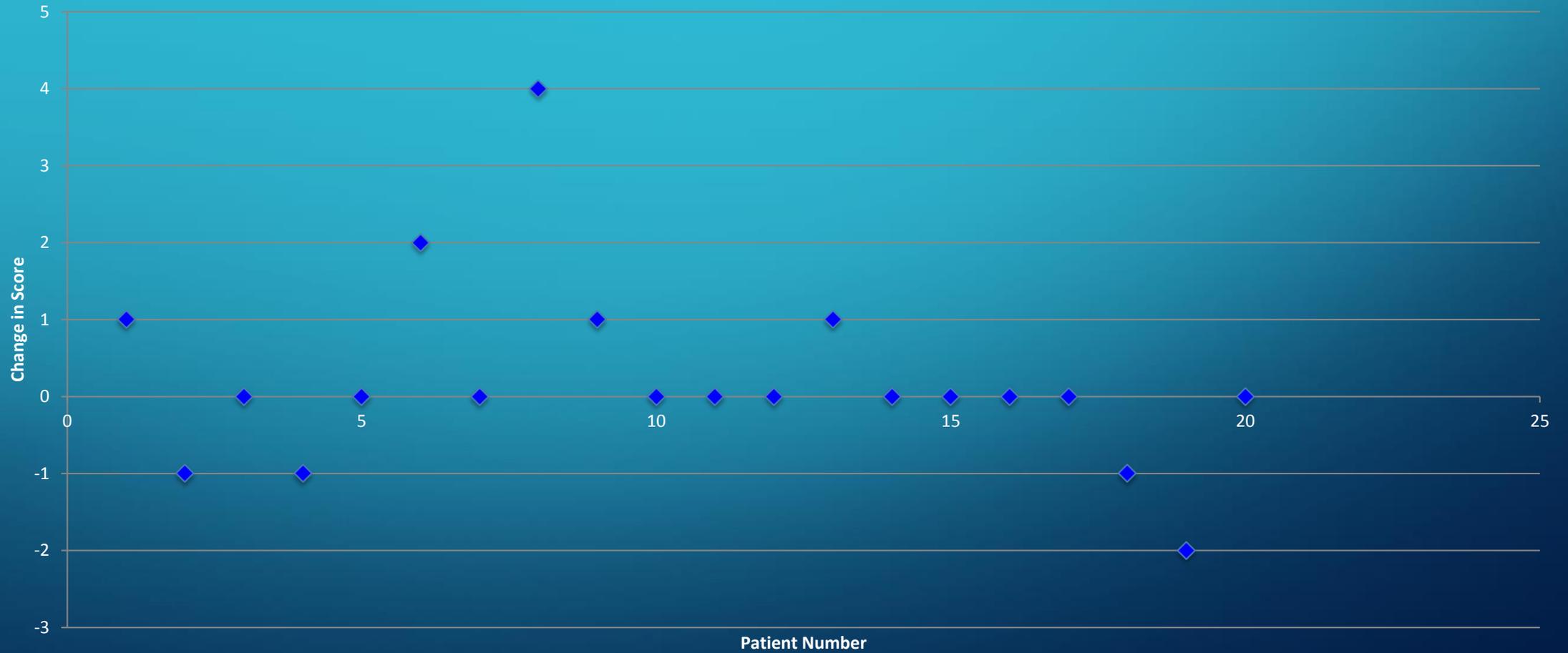
20 Six-Month Visit

2 Twelve-Month Visit



RESULTS

Difference Between Initial and Follow-Up EPDS Scores



RESULTS

- Slight but non-significant increase in EPDS scores in several patients evaluated at 4-8 months.
- Insufficient 11-12 month data to analyze.
- There were no women who indicated they were suicidal.

LIMITATIONS OF STUDY

- Sample size
 - Small, difficult to gain statistically significant results
- Measure used to collect data
 - Difficult to contact subjects by phone
 - Poor response by subjects
- Language barrier
 - Communication difficult with non-English speaking subjects

CONCLUSION

- There is potential benefit of subsequent follow-up visits within first postpartum year to detect PPD.
- PHQ-2 may be more effective and efficient screening tool than EPDS.
 - 100% sensitivity and 79.3% specificity
 - Consider replacing EPDS with PHQ-2 since it is already being used for general visits.

PHQ-2

Over the last 2 weeks, how often have you been bothered by any of the following problems?

1. During the past month, have you often been bothered by feeling down, depressed, or hopeless?

Yes

No

2. During the past month, have you often been bothered by little interest or pleasure in doing things?

CONCLUSION

- Due to insufficient data, further research is recommended to determine effectiveness of screening at one year postpartum.
- Repeat screening for PPD at 6 months and 12 months should be adopted as protocol in our clinic to help detect late depression and ensure the safety and welfare of postpartum patients and their babies.

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