The Challenge of Early Inpatient Postpartum Depression Screening

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The Challenge of Early Inpatient Postpartum Depression Screening

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Objectives

• To determine if women who screen positive on an early inpatient Edinburgh Postnatal Depression Scale (EPDS) have a specific risk factor profile.
• Assess the results of EPDS screening if applied to a risk-identified population.

Methods

• This is a retrospective study of 2 cohorts of women delivering from 1/2010 to 6/2010.
  • Cohort 1: A 5-week cohort of consecutive deliveries.
  • Cohort 2: 5 months of consecutive deliveries from mothers with the most important risk factor for postpartum depression identified in Cohort 1, a history of mental illness.
• Screening was performed prior to discharge.
• An EPDS score ≥13 or failure to answer “never” to a question about the potential for self-harm was considered positive.
• All screen positives had a psychiatric consultation.

Results

• Cohort 1 included 322 subjects with 11(3.4%) positive screens.
• Cohort 2 included 215 subjects with 33(15.3%) positive screens.
  • Significant differences based on screen results in Table 1
• Multivariable logistic regression-identified predictors of a positive screen:
  • Cohort 1 (R²=0.44)
    • A history of mental illness
    • Neonatal infection
    • Gestational diabetes
    • Earlier EGA at delivery
  • Cohort 2 (R²=0.14)
    • Employment
    • Vaginal delivery
    • Gestational hypertension
  • Diagnoses from psychiatric evaluation prior to discharge results in Table 2.

Conclusions

• There are low screen positive rates for population-based EPDS administration prior to hospital discharge.
• A history of mental illness identifies an enriched population at increased risk for an early positive screen.
• Predictors of positive screening vary based on the population screened.
• Early screening prior to discharge can identify a variety of mental health disorders.

Table 1. Significant differences between those women who screened positive using the EPDS screening tool for a universally screened postpartum group (Cohort 1) and a targeted risk population with a history of mental illness (Cohort 2).

<table>
<thead>
<tr>
<th>Medical Condition</th>
<th>Cohort 1 (n=322)</th>
<th>Cohort 2 (n=215)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>89% (282)</td>
<td>92% (199)</td>
</tr>
<tr>
<td>Major Depression</td>
<td>54% (9)</td>
<td>6% (3)</td>
</tr>
<tr>
<td>Anxiety Disorder</td>
<td>24% (79)</td>
<td>19.9% (42)</td>
</tr>
<tr>
<td>Substance Abuse</td>
<td>3% (11)</td>
<td>2% (4)</td>
</tr>
<tr>
<td>Bipolar Disorder</td>
<td>2% (7)</td>
<td>0.6% (2)</td>
</tr>
<tr>
<td>None</td>
<td>9% (28)</td>
<td>6.2% (2)</td>
</tr>
<tr>
<td>None</td>
<td>22% (79)</td>
<td>19.9% (42)</td>
</tr>
<tr>
<td>None</td>
<td>53% (116)</td>
<td>36.2% (78)</td>
</tr>
<tr>
<td>Psychological factor</td>
<td>6.2% (2)</td>
<td>6.2% (2)</td>
</tr>
<tr>
<td>No Diagnosis Assigned</td>
<td>92% (293)</td>
<td>91.1% (196)</td>
</tr>
<tr>
<td>1 Diagnosis Assigned</td>
<td>54% (9)</td>
<td>69.7% (146)</td>
</tr>
<tr>
<td>2 Diagnosis Assigned</td>
<td>22% (69)</td>
<td>36.2% (78)</td>
</tr>
<tr>
<td>3 Diagnosis Assigned</td>
<td>9.1% (28)</td>
<td>9.1% (28)</td>
</tr>
</tbody>
</table>

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