The Challenge of Early Inpatient Postpartum Depression Screening

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Published In/Presented At
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.
- To 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 11.34% positive screens.
- Cohort 2 included 215 subjects with 33.15% 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>EPDS + (n=11)</th>
<th>EPDS - (n=311)</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Univariate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anxiety Disorder (NOS)</td>
<td>32.9% (11)</td>
<td>39% (311)</td>
<td>0.05</td>
</tr>
<tr>
<td>Panic Disorder</td>
<td>52.8% (9)</td>
<td>27.6% + 8.6</td>
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<td>GDM</td>
<td>12.5% (40)</td>
<td>15% (311)</td>
<td>0.001</td>
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<tr>
<td>Pre-pregnancy</td>
<td>1.6% (3)</td>
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<tr>
<td>AP/IP/PP/neonatal</td>
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<td>52.8% (92)</td>
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Table 2. 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).

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