To Understand the Impact of the Behavioural Health Consultant Model on Postpartum Depression Scores in a Family Physician Office

Dr. E. Greyvenstein MBChB(SA), CCFP, Dip PEC
Barbara Rodrigues MSW
Overview

- Rates for PPD cited in literature is ~ 10-15% (Cox et al, 1987)
- Research has identified importance of psychosocial and psychological risk factors
- Postpartum women require proactive and preventative approach to address risk factor
Circle Medical@ Copperfield
Clinic background

- Primary focus is Holistic Family Medicine with obstetrical care
- Comprehensive care
- Breastfeeding services also provided
- 5 family physicians working at the clinic
- 100-150 deliveries each year
- Based on research 10-20 mothers will develop postpartum depression
The Behavioral Health Integration Model utilizes Behavioral Health Consultants in physician’s offices. The consultants:

- Provide 15 – 30 minute consultations with patients (1 – 4 visits per patient)
- Address a wide range of mental health concerns
- Goals are early identification, quick resolution, long-term prevention and health promotion.
Research Idea

- BHC services available at clinic
- Make-up of clinic population
- Research related to postpartum depression
- Posed questions related to whether this new service could impact outcomes
- Either decrease incidence or increase awareness of common conditions
Research Study Overview

Research Question:

- Does care supplemented by the BHC during the 6 week postpartum period provide better PPD outcomes than for those women who receive routine primary care?

- Specific outcomes being evaluated included:
  - Depression score (Edinburgh Postnatal Depression Scale)
  - Relationship Happiness
  - General confidence as a mother
Research Study Overview

- Random assignment of postpartum patients
- 2 groups: control and prevention
- 50 participants in each group
- Same packages to all study participants
- Control group seen by physician only
- Prevention group seen by both physician and BHC who reviewed study package
- Validated tool used: Edinburgh Postnatal Depression Scale (EPDS)
Results

- The Edinburgh Postnatal Depression Scale (EPDS) identifies patients at risk for postpartum depression.
- EPDS total scores higher than 10 indicate possible depression.
- EPDS mean total scores for the prevention group from time 1 to time 2 decreased slightly more than the control group.
## EPDS Total Scores

<table>
<thead>
<tr>
<th></th>
<th>Control Group</th>
<th>Prevention Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>T1</td>
<td>T2</td>
</tr>
<tr>
<td>Mean</td>
<td>5.0909</td>
<td>4.7091</td>
</tr>
<tr>
<td>N</td>
<td>55</td>
<td>55</td>
</tr>
<tr>
<td>Std. deviation</td>
<td>4.55531</td>
<td>3.43550</td>
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</tbody>
</table>
Clinical Measures

- Control Group
  - Time 1
  - Time 2
- Prevention Group
  - Time 1
  - Time 2

Bars represent Happiness and Confidence as a mother.
Postpartum Support Group

![Frequency distribution of number of attendances for Control and Prevention Groups. The y-axis represents frequency, and the x-axis represents the number of attendances (0, 1, 2, 3, 4, 5, Missing Data). The bars for Control Group are in blue, while the bars for Prevention Group are in red. The graph shows that the majority of individuals attended 0 or 1 session.](Image)
Data Analysis

- The results show the decrease in mean EPDS total scores from T1 to T2 for the prevention group was statistically significantly (p=0.006, 95% CI [0.41, 2.3])
- Mean number of calls to postpartum support line in the 6 weeks postpartum period for control group = 0.8 vs 0.2 in prevention group (p=0.00)
- Happiness in Relationship on a scale of 1-10 differences
- Confidence as mother on a scale of 1-10 differences
- Data not statistically significant but shows trend
Successes & Learning's

- Able to implement idea into an ethically approved study
- Recruitment of patients, developed good process
- Increased awareness of community resources
- Increased awareness of BHC services

Learning’s:

- Sample size
- Research question development and study design
- Language use, prevention vs intervention
- Limited BHC time at clinic impacted uptake and dropout rates
Where Do We Go From Here?

- Are we going to recreate this study? – need to review the study design
- Continue using study packages & circulate to other PCN clinics
- Continue advocating for the BHC role within primary care
References


- Adouard F, Glangeaud-Freudenthal NMC, Golse B. Validation of the Edinburgh postnatal depression scale (EPDS) in a sample of women with high-risk pregnancies in France. Archives of Women’s Mental Health 2005 8: 89-95

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- Gotlib IH, Whiffen VE, Wallace PM, Mount JH. Prospective investigation of postpartum depression: factors involved in onset and recovery. J Abnormal Psychology 1991;100:122-32 [Cross Ref]
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