Providing prenatal breastfeeding education to healthcare providers increases breastfeeding rates in postpartum patients

Introduction
• Evaluating the effect of provider prenatal breastfeeding education on breastfeeding rates in clinic patients

Background and Significance
• Breastfeeding and breastmilk have benefits for mother and baby.
• Mothers need breastfeeding support and resources to successfully breastfeed.
• Interventions to support and promote breastfeeding should be made by providers and training of all pertinent healthcare staff in the knowledge needed to educate patients is priority

Methods
• Quality improvement project with convenience sample at a local clinic
• Online breastfeeding module assigned to all clinic providers and case managers
• After completion of the module, breastfeeding education during prenatal visits officially began before or at 36 weeks gestation
• Anonymous postpartum breastfeeding survey given to each patient at their postpartum visit
• Two months of pre and post data collected
• Quantitative data analysis with chi-square was used to evaluate effects of prenatal breastfeeding education for providers on breastfeeding rates

Results
• Two by two frequency table used
• Pre-intervention group: 6.4% breastfeeding
• Post-intervention group: 11.6% breastfeeding
• Post-intervention group were twice as likely to breastfeed their babies than mothers in the pre-intervention group showing that prenatal breastfeeding education increased breastfeeding rates in clinic patients

Table 1. Cross tabulation and chi-square test of association expected frequencies

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Feeding status</th>
<th>Frequency</th>
<th>Expected</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-intervention</td>
<td>Breast</td>
<td>12</td>
<td>17.99</td>
<td>6.4%</td>
</tr>
<tr>
<td></td>
<td>Formula/Both</td>
<td>88</td>
<td>82.01</td>
<td>46.6%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>100</td>
<td>35.9%</td>
<td>52.9%</td>
</tr>
<tr>
<td>Post-intervention</td>
<td>Breast</td>
<td>22</td>
<td>16.01</td>
<td>11.6%</td>
</tr>
<tr>
<td></td>
<td>Formula/Both</td>
<td>67</td>
<td>72.99</td>
<td>35.5%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>89</td>
<td>47.1%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Table 2. Chi-square test of association

<table>
<thead>
<tr>
<th>Chi-square statistic</th>
<th>Degrees of freedom</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1636</td>
<td>1</td>
<td>0.0231</td>
</tr>
</tbody>
</table>

Discussion/Implications
• Prenatal breastfeeding education should become a standard of care in prenatal visits
• Providers require up to date, ongoing education on breastfeeding
• Providers should be confident in their breastfeeding knowledge as they relay it to their patients
• Mothers will be better prepared to breastfeed their babies successfully in the postpartum period with proper education and support prior to delivery
• Increase in breastfeeding rates has economic benefit by reducing health issues which reduces healthcare costs with a savings of more than $300 million

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