IMPROVING BREASTFEEDING INITIATION RATES THROUGH IMPLEMENTATION OF A BREASTFEEDING-FRIENDLY ALGORITHM FOR INCARCERATED MOTHERS

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University of Alabama IRB #19-OR-221 (10/7/19)
UTMB IRB QA/QI Determination-IRB #19-0091 (6/6/19)
TDCJ- Approval (7/30/19)
Objectives

Identify the background & significance of incarcerated pregnant mothers in prison

Describe the benefits of breastfeeding for the infants and the mothers

List the special considerations for the infants of incarcerated mothers related to breastfeeding

List the special considerations for incarcerated mothers related to breastfeeding

Describe the resources included in the ACOG Breastfeeding Toolkit for Healthcare Providers

State the purpose and appropriate use of the Breastfeeding Friendly Algorithm for Incarcerated Mothers

Describe the outcome of the implementation of the Breastfeeding Friendly Algorithm for Incarcerated Mothers
**Introduction & Purpose**

There are programs in Texas that encourage infant access and improved breastfeeding access for incarcerated mothers. Example: BAMBI Program & BAMBI/SON Collaborative Project

Approved processes are in place at a health system in Texas that allow inpatient breastfeeding access as a standard of care for the incarcerated mothers. Since 2015, various process, guideline modifications to support.

**PROBLEM:** Even with policies and guidelines in place, there inconsistent application and use of the standard care processes by the healthcare team at the health system in Texas.

**AIM:** The overall aim of the project is to increase the overall breastfeeding initiation rates for incarcerated mothers.

**PICOT Question:** For incarcerated mothers, how does implementation of an evidence-based breastfeeding-friendly algorithm for incarcerated mothers as compared to no algorithm influence breastfeeding initiation rates?
Women in prison has increased by more than 400% in the last 30 years, shifting the number of women in prison in the United States (U.S.) from 26,210 to 111,616, respectively (Bureau of Justice Statistics [BJS] 1986, BJS, 2018).

In 2017, an estimated 78% of the incarcerated women were of childbearing age (Texas Department of Criminal Justice [TDCJ], 2018). In 2016, 4% of incarcerated women were pregnant on entry to prison with individual states ranging from 0% to 17% upon entry. In 2016, the number of women who entered Texas prisons pregnant was 241, and the number of live births was 171. (Sufrin, Beal, Clarke, Jones, & Mosher, 2019).

The Healthy People 2020 (2017) recently published the goal to improve the rate of infants who have been breastfed at all to the level of 81.9%. Benefits for mothers and infants well document** Financial, Health Equity, Health

UTMB has recently received credentialing for the Baby Friendly USA status, and this QI project would influence the continued success and support for the mission of the initiative.
### Model of Improvement - Project Planning:

#### Model For Improvement:

- **AIMS** - What does the team want to accomplish?
- **MEASURES** - How are you able to identify whether the change is effective?
- **CHANGE** - What type of adjustment can we make to improve outcomes (IHI, 2020)?

#### Plan:

- Extensive planning and collaboration were necessary, [Letters of Support for Implementation of Initiative](https://www.tn.gov/health/health-program-areas/mch/mch-mh/mh-quality.html).

#### Do:

- Vetted through leadership & implemented (do) with a continuous feedback on the algorithm usefulness in practice.

#### Study:

- Measuring the breastfeeding initiation rates for the pre implementation and post implementation.

#### Act:

- Improve algorithm and implementation  
  
  *(Institute for Healthcare Improvement [IHI], 2020)*

#### The Interactive Theory of Breastfeeding (ITB) Model

- based on the theoretical framework of King’s Conceptual System (Primo & Brandão, 2017).
 Implementation of the ACOG Breastfeeding Toolkit for Healthcare

**ACOG Breastfeeding-Toolkit**

- ACOG Committee Opinion # 756 (October 2018) Physician Conversation Guide on Support for Breastfeeding
- Breastfeeding Frequently Asked Questions
- Breastfeeding Resources
- Breastfeeding-Friendly Algorithm for Incarcerated Mothers

https://www.acog.org/AboutACOG/ACOG-Departments/Toolkits-for-Health-Care-Providers/Breastfeeding-Toolkit
Table 1: Pre-intervention and Post-intervention Breastfeeding Initiation Rate in the Inpatient Setting

<table>
<thead>
<tr>
<th>Month</th>
<th>November 2018</th>
<th>December 2018</th>
<th>January 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feeding Status</td>
<td>n</td>
<td>Percent</td>
<td>n</td>
</tr>
<tr>
<td>Breastfeeding Initiation</td>
<td>2</td>
<td>14%</td>
<td>2</td>
</tr>
<tr>
<td>Bottle-feeding Only</td>
<td>12</td>
<td>86%</td>
<td>11</td>
</tr>
<tr>
<td>Total Inmate Mothers</td>
<td>14</td>
<td></td>
<td>13</td>
</tr>
</tbody>
</table>

**Total n Pre-Intervention: n=41**

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<th>Month</th>
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<td></td>
<td>10</td>
</tr>
</tbody>
</table>

**Total N Post-Intervention: n=41**

*Independent Sample Test p = 0.371

**Anticipated Results ≠ Actual Results**

**Time Constraints**

**Aggregate Data**

**Staffing Constraints**
Discussion - Implications for Practice

EMPOWER
- Project provides a template

AWARENESS
- Ethical and human rights issues.

POLICY
- Template for site-specific breastfeeding friendly algorithm for incarcerated mothers.
- House Bill 650- (Dignity Act, 2019).

EVIDENCE THROUGH THE PROCESS
- Evidence that correctional systems and health systems must work in tandem to provide clear and ethical care processes.

Conclusion & Future

- Address the limitations of the project
- Expand and revise algorithm to address HB 650 & other needs as assessed by nursing staff
- Re-Implement revised algorithm with nursing, medical and correctional staff
- Consider EMR ribbon/box for confirmation of use of algorithm
- Utilize the plan-do-study-act (PDSA) cycle to improve outcomes
- Engage breastfeeding champions- Lactation Consultants, Educators
- Addressing Sustainability


