

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

Created & Presented for:

2021 Fourteenth National Doctors of Nursing Practice Conference

August 11-13, 2021 - Chicago

Jacquelyn Svoboda DNP, RN, WHNP-C

University of Alabama- Doctor of Nursing Practice

Preceptor: Dr. Veronica Kwarteng Amaning, UTMB, TDCJ

Faculty Advisor: Dr. Robin Lawson, University of Alabama

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



governing.com

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?

Background & Significance



<https://www.shutterstock.com>



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:



<https://www.tn.gov/health/health-program-areas/mch/mch-mh/mh-quality.html>

Model For Improvement:

- (a) **AIMS**- What does the team want to accomplish?
- (b) **MEASURES**- How are you able to identify whether the change is effective?
- (c) **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

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).

TIMELINE

Baseline	<ul style="list-style-type: none">• Needs assessment completed.• Evaluation of non-identifiable aggregate data.
Setting	<ul style="list-style-type: none">• Large academic health system hospital in Texas.
Population	<ul style="list-style-type: none">• Incarcerated mothers who delivered at the health system in Texas and had access to their infants.
Implementation	<ul style="list-style-type: none">• 1) Education sessions; 2) Visual reinforcements, 3) Staff use of the algorithm, and 4) Evaluation of data
Data Collection	<ul style="list-style-type: none">• <i>November 1, 2018 to February 1, 2019 (PRE- Implementation). * November 1, 2019 to February 1, 2020 (POST- Implementation)</i> Data was analyzed using SPSS (Version 24.0). Independent sample t-tests were used to examine differences from pre- to post-intervention.

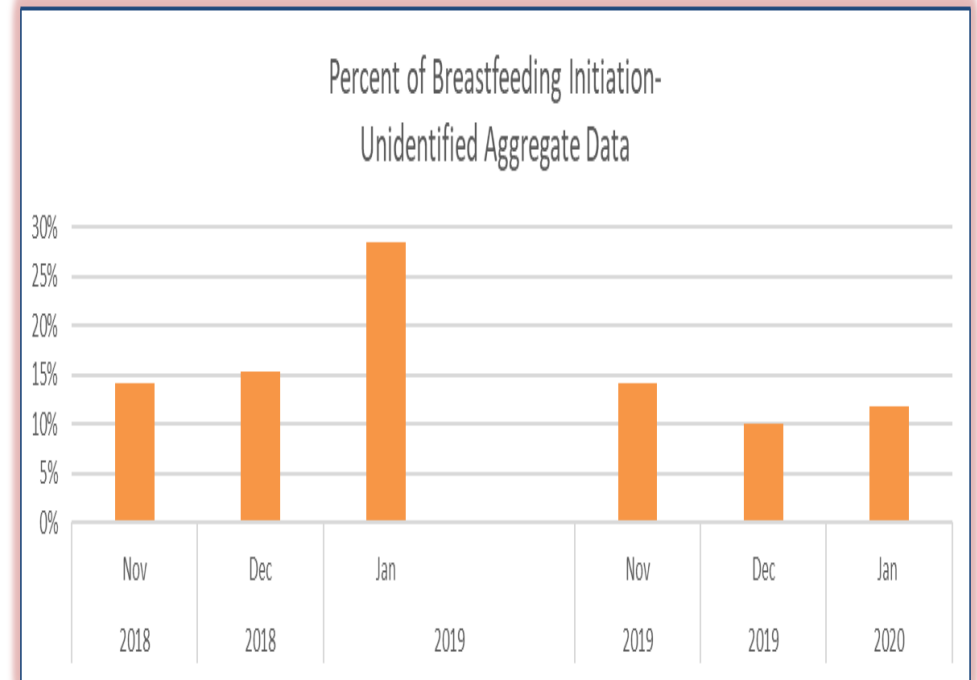
Implementation of the ACOG Breastfeeding Toolkit for Healthcare

	<u>ACOG Breastfeeding-Toolkit</u>
	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

Anticipated Results ≠ Actual Results

Table 1: Pre-intervention and Post-intervention Breastfeeding Initiation Rate in the Inpatient Setting

Table 1 <i>Breastfeeding Initiation Rates</i>						
Pre-Intervention						
Month	November 2018		December 2018		January 2019	
<u>Feeding Status</u>	<u>n</u>	<u>Percent</u>	<u>n</u>	<u>Percent</u>	<u>n</u>	<u>Percent</u>
Breastfeeding Initiation	2	14%	2	15%	4	29%
Bottle-feeding Only	12	86%	11	85%	10	71%
Total Inmate Mothers	14		13		14	
Total n Pre-Intervention: n=41						
Post-Intervention						
Month	November 2019		December 2019		January 2020	
<u>Feeding Status</u>	<u>n</u>	<u>Percent</u>	<u>n</u>	<u>Percent</u>	<u>n</u>	<u>Percent</u>
Breastfeeding Initiation	2	14%	1	10%	2	12%
Bottle-feeding Only	12	86%	9	90%	15	88%
Total Inmate Mothers Monthly	14		10		17	
Total N Post-Intervention: n=41						
Independent Sample Test p = 0.371						
*Independent t tests						



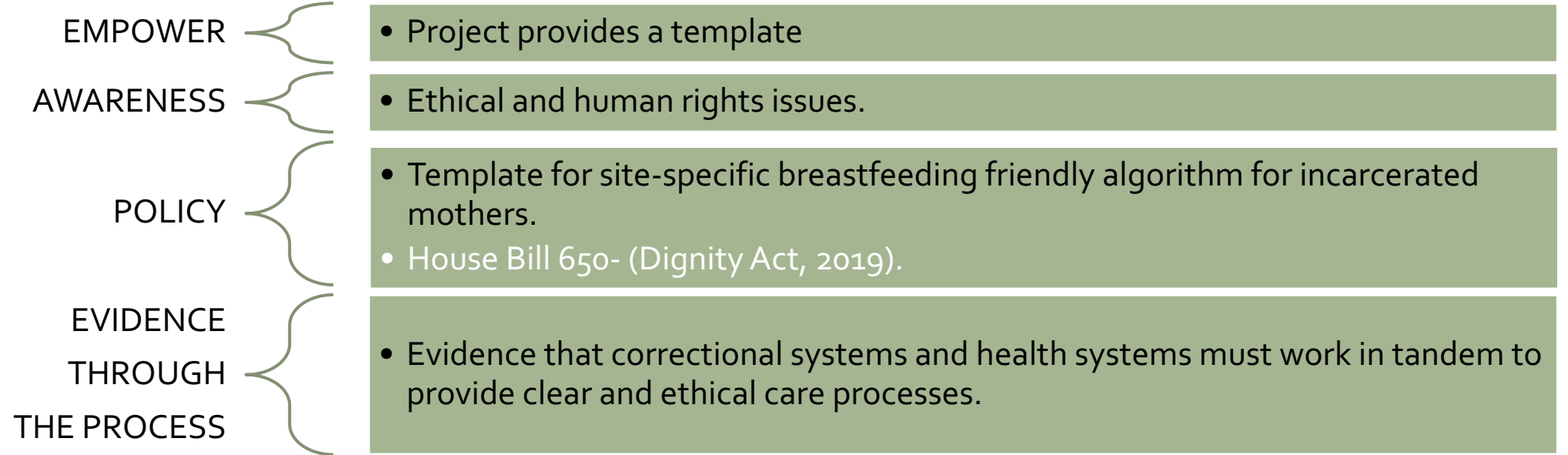
Limitations

Time Constraints

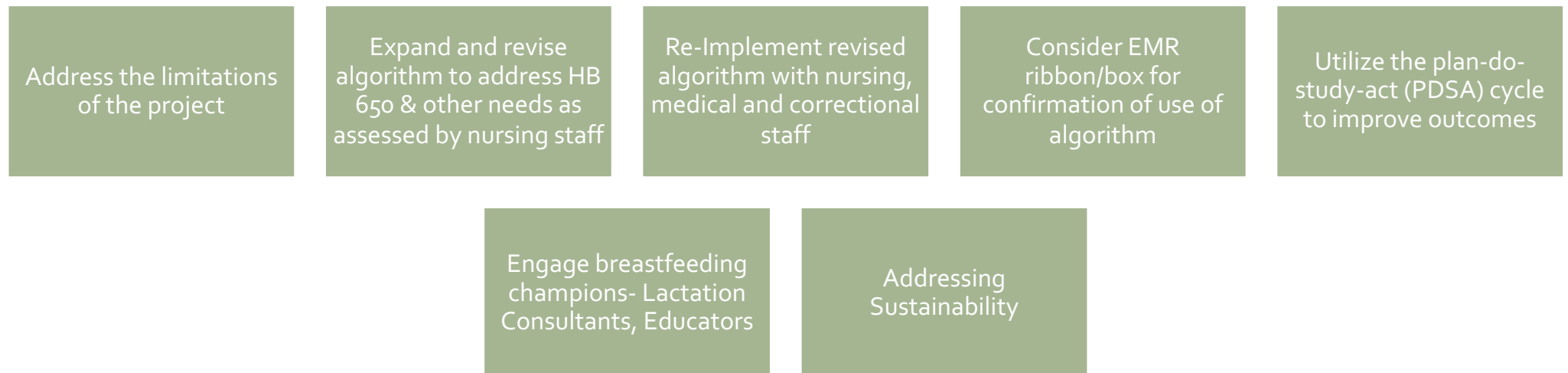
Aggregate Data

Staffing Constraints

Discussion- Implications for Practice



Conclusion & Future



Reference

- American Academy of Pediatrics. (2012). AAP reaffirms breastfeeding guidelines. Retrieved February 25, 2020. <https://www.aap.org/en-us/about-the-aap/aap-press-room/Pages/AAP-Reaffirms-Breastfeeding-Guidelines.aspx>
- American Colleges of Obstetrician & Gynecology (2018) Breastfeeding Toolkit for Healthcare Providers. Retrieved from <https://www.acog.org/About-ACOG/ACOG-Departments/Toolkits-for-Health-Care-Providers/Breastfeeding-Toolkit>
- Association of Women’s Health, Obstetric and Neonatal Nurses (2015). AWHONN Position Statement: Breastfeeding. *Journal of Obstetric, Gynecologic & Neonatal Nursing*, 44 (1), 145–150. Retrieved from [http://www.joggn.org/article/So884-2175\(15\)31769-X/pdf](http://www.joggn.org/article/So884-2175(15)31769-X/pdf)
- Baby Friendly USA (2018) The ten steps to successful breastfeeding. Retrieved from <https://www.babyfriendlyusa.org/about-us/10-steps-and-international-code>
- Bureau of Justice Statistics (1987). Prisoner in 1986. Retrieved from <https://www.bjs.gov/content/pub/pdf/p86.pdf>
- Bureau of Justice Statistics (2018). Prisoner in 2016 Retrieved from <https://www.bjs.gov/content/pub/pdf/p16.pdf>
- Chantry, C. J., Eglash, A., & Lobbok, M. (2015). ABM position on breastfeeding—revised 2015. *Breastfeeding Medicine*, 10(9), 407-411. Retrieved from <http://online.liebertpub.com/doi/pdf/10.1089/bfm.2015.29012.cha>
- Dignity Act, H.B. 650, 86th Legislature (2019). Retrieved from <https://capitol.texas.gov/BillLookup/Actions.aspx?LegSess=86R&Bill=HB650>
- Healthy People 2020 (2017) Healthy People 2020: Maternal, Infant, and Child Health Retrieved from <https://www.healthypeople.gov/2020/topics-objectives/topic/maternal-infant-and-child-health/objectives>
- Michigan Breastfeeding Network (MIBFN) (2018). Incarceration Roadblock Series Toolkit (2018), https://www.mibreastfeeding.org/wp-content/uploads/2018/07/All-Toolkit-Items_Breastfeeding-and-Incarceration.pdf
- Sufrin, C., Beal, L., Clarke, J., Jones, R., & Mosher, W. D. (2019). Pregnancy Outcomes in US Prisons, 2016–2017. *American journal of public health*, (0), e1-e7. Retrieved from <https://ajph.aphapublications.org/doi/pdf/10.2105/AJPH.2019.305006>
- Texas Department of State Health Services (2010) *Texas Department of State Health Services Position Statement on Infant Feeding, Updated 2010* (updated 2017). Retrieved from <https://www.dshs.texas.gov/wichd/lactate/position.shtm>