

• **Objective.** Little is known about current breastfeeding rates among incarcerated women. Incarcerated women often belong to racial and ethnic minorities, have low levels of education and low socioeconomic status, lack social support and receive limited prenatal care – factors that are associated with low breastfeeding initiation (Huang, Atlas, & Parvez, 2012). The purpose of this study was to further examine factors impacting breastfeeding initiation among a sample of incarcerated pregnant women.

• **Method.** Participants ($N=182$) were recruited from seven different county jails across the mid-atlantic region. The women were interviewed in three stages: at intake ($n=182$), post-counseling ($n=126$) and postpartum ($n=118$). At all three time points, eating behaviors were collected using the Fruit & Vegetable Intake Questionnaire (Mullen, Krantzer, Grivetti, Schultz, & Meiselman, 1984). During the postpartum interviews, the women were asked about whether they had attempted to breastfeed their infants.

• **Results.** Factors associated with decisions not to initiate breastfeeding were delivering while incarcerated, $\chi^2 = (1, N = 87) = 5.03, p = .03$; finding out about pregnancy while incarcerated, $\chi^2 = (1, N = 109) = 3.36, p = .066$; and longer duration of incarceration during pregnancy, $t(89) = 2.138, p = .035$. Compared to mothers who breastfed, mothers who did not initiate breastfeeding also consumed significantly more processed meats, $t(91) = 1.946, p = .055$, and fast food, $t(103) = 3.271, p = .001$, per month.

• **Conclusion.** These findings suggest that incarceration has a significant impact on a mother's decision not to initiate breastfeeding. This may be due to lack of breastfeeding support, both social and educational, that women receive while incarcerated. These findings further suggest that mothers who maintain unhealthy diets are less likely to initiate breastfeeding. This may be due to their disinterest in healthy behaviors or to the common misconception that mothers need to maintain a healthy diet in order to produce nutritious breastmilk (Hannon, Willis, Bishop-Townsend, Martinez, & Scrimshaw, 2000).

Background

- For infants, the positive outcomes of breastfeeding include reduced risks of various childhood illnesses as well as long-term benefits such as lower rates of obesity. Mothers who breastfeed their infants experience physical benefits (i.e., decreased postpartum blood loss) as well as psychological benefits, including lower rates of postpartum depression (American Academy of Pediatrics, 2012).
- Little is known about current breastfeeding rates among incarcerated women. Incarcerated women often belong to racial and ethnic minorities, have low levels of education and low socioeconomic status, lack social support and receive limited prenatal care – factors that are associated with low breastfeeding initiation (Huang, Atlas, & Parvez, 2012).
- The purpose of this study was to further examine factors impacting breastfeeding initiation among a sample of incarcerated pregnant women.

Participants and Procedures

Participants included 182 women identified as pregnant in mid-atlantic county jail facilities

90.2% not married
50.3% African American
73.3% high school education or less
42.6% unemployed in the last year
66.1% received food stamps
44.3% received no health insurance

- Participants ($N=182$) were recruited from seven different county jails across the mid-atlantic region. The women were interviewed in three stages: at intake ($n=182$), post-counseling ($n=126$) and postpartum ($n=118$).
- At all three time points, eating behaviors were collected using the Fruit & Vegetable Intake Questionnaire (Mullen, Krantzer, Grivetti, Schultz, & Meiselman, 1984).
- During the postpartum interviews, the women were asked about their delivery dates and whether they had attempted to breastfeed their infants.

Breastfeeding Initiation Among Incarcerated Pregnant Women

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Results

Figure 1. Impact of Delivering in Jail on Breastfeeding Initiation

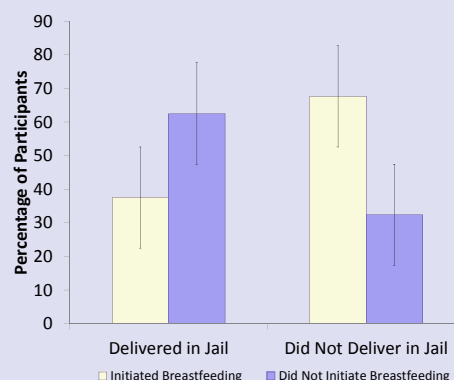


Figure 1. Women who delivered while incarcerated were significantly less likely to initiate breastfeeding, $\chi^2 = (1, N = 87) = 5.03, p = .03$, than women who delivered after their release.

Figure 2. Impact of Length of Incarceration During Pregnancy on Breastfeeding Initiation

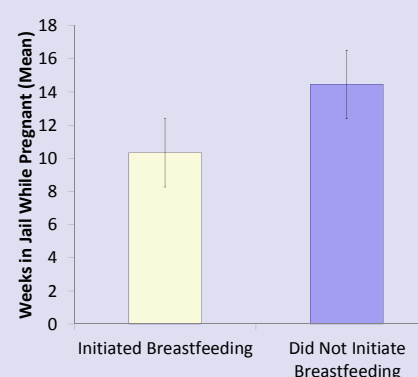


Figure 2. Women who did not initiate breastfeeding were incarcerated for a significantly longer duration during pregnancy than women who initiated breastfeeding, $t(89) = 2.138, p = .035$.

Figure 3. Impact of Diet on Breastfeeding Initiation

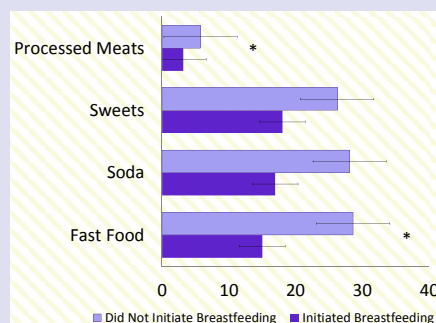


Figure 3. Women who did not initiate breastfeeding consumed significantly more processed meats, $t(91) = 1.946, p = .055$, and fast food, $t(103) = 3.271, p = .001$, per month. There were no significant differences in the consumption of sweets or soda.

Figure 4. Reasons Not to Initiate Breastfeeding



Figure 4. This word cloud represents reported reasons to not initiate breastfeeding and to stop breastfeeding. Larger words represent more frequent responses.

Other Findings

- Women who were incarcerated for a longer duration during pregnancy were more likely to find out about their pregnancy while incarcerated, $t(116) = -2.774, p = .006$, and were more likely to deliver while incarcerated, $t(92) = -4.65, p = .000$.
- Women who found out about their pregnancy while incarcerated were less likely to initiate breastfeeding, $\chi^2 = (1, N = 109) = 3.36, p = .066$, than women who found out about their pregnancy outside of jail.
- Women who found out about their pregnancy at a later time point were less likely to initiate breastfeeding, $t(89) = -2.044, p = .043$.
- Women who received Medicaid were less likely to initiate breastfeeding, $\chi^2 = (1, N = 109) = 4.42, p = .035$.
- Women who intended to breastfeed, $\chi^2 = (1, N = 96) = 24.22, p = .000$, and who had breastfed previous children, $\chi^2 = (1, N = 81) = 9.35, p = .002$, were more likely to initiate breastfeeding.

Conclusion

- Incarcerated women are at risk not to initiate breastfeeding. Factors associated with incarceration, such as delivering in jail, finding out about pregnancy while in jail, and longer duration of incarceration during pregnancy, significantly impact decisions not to initiate breastfeeding.
- The impact of incarceration on decisions not to initiate breastfeeding may be due to lack of breastfeeding support, both social and educational, that women receive while incarcerated.
- Mothers who maintain unhealthy diets are less likely to initiate breastfeeding.
- The impact of diet on decisions not to initiate breastfeeding may be due to mothers' disinterest in healthy behaviors. This association may also be due to the common misconception that mothers need to maintain a healthy diet in order to produce nutritious breastmilk (Hannon, Willis, Bishop-Townsend, Martinez, & Scrimshaw, 2000).
- Further qualitative research needs to be conducted in order to determine why incarceration and poor diet are negatively associated with breastfeeding initiation.

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