Prenatal Stress Coping Strategies Predict Breastfeeding Initiation

Andrea D Clements
East Tennessee State University

Beth A Bailey
James H. Quillen College of Medicine

Heather Wright
James H. Quillen College of Medicine

Poster Submitted for Presentation at the
Conference on Human Development
April 9-11, 2010
New York, NY
Abstract

During intake history a rural sample of 1312 women admitted for singleton birth were asked “How do you deal with stress?” Stress coping answers were categorized into 18 stress coping strategies, which were explored as predictors of infant feeding method choice, dichotomized into any breastfeeding or exclusive bottle feeding. Coping with stress through Prayer/Religion ($p = .002$), taking a Bath/Shower ($p = .001$), Exercise ($p = .001$), and Reading/Writing ($p = .001$) predicted breastfeeding. Smoking ($p = .003$), Resting ($p = .03$), and “Not Well” ($p = .035$) predicted that women would not breastfeed.

Summary

Despite a recent trend toward increased breastfeeding, the six lowest rates of initiation are in southeastern states (KY, TN, WV, MS, LA, AL) with an average initiation rate of 52%. This discrepancy (adjusted odds of not being breastfed 2.5-5.15 times greater in southeastern states) exists even after controlling for sociodemographic factors.

The benefits of breastfeeding for maternal and child health have been well documented. Research has revealed many factors related to breastfeeding initiation including maternal age, level of education, and smoking. Findings regarding other associated factors such as race and health of the neonate are less consistent across studies.

The current study evaluated the ability of stress coping strategies to predict breastfeeding initiation in a sample of women from rural Southern Appalachia with low rates of breastfeeding. To date, no published studies have explored the link between methods of coping with stress prenatally and breastfeeding, so there was little to inform predictions. However, we do know that positive coping techniques have been associated with positive health behaviors, while negative techniques predict negative behaviors. In addition, certain religious groups have been found to have high rates of breastfeeding, and maternal religiosity was specifically of interest for this reason and given the known associations between religiosity and health.

Delivery charts were reviewed for 1334 cases, representing all singleton deliveries from 1/1/06 through 12/31/08 at a rural Appalachian hospital. Women admitted in the final stages of labor were not asked the primary question of interest in this study (N=22), bringing the final sample size for this report to
High-risk births were transferred to a nearby teaching hospital, thus the sample was of low-
obstetric-risk. Data were collected via individual chart review by research project staff using a two page
study-designed data collection form. Over 90% of the deliveries were reviewed by a single examiner, with
reliability checks performed early in the process.

All women were asked the following open-ended question by the intake nurse when they arrived
for delivery:

“How do you deal with stress?”

No response choices were offered and responses were recorded verbatim. Women identified as many as
four coping strategies, but some identified none. For the first 300 exactly what was written in the chart
was recorded, with qualitative methodology used to combine responses into 18 distinct and meaningful
categories. These categories allowed for classification of all responses from the first 300 cases, and were
then used to record responses dichotomously for the next 200 cases. At the end of those 200 cases it
was clear that the categories included all possible responses seen, and were subsequently used as
designed for the remainder of the data collection. The final categories of coping were: Support Seeking,
Rest, Bath/Shower, Exercise, Reading/Writing, Hobbies, Prayer/Religion, Housework, TV/Music,
Relaxation Techniques, Smoking, Lashing Out, Medication, Eating, Being Alone, Crying, “Not well”, and
Nothing.

Breastfeeding initiation was determined by the feeding method recorded in the medical chart by
newborn nursery staff for each infant. We were interested in comparing women who breastfed at least
once during the delivery stay to those who exclusively bottle fed.

We found that four of the 18 coping strategies significantly predicted breastfeeding initiation:
Prayer/Religion ($p = .002$), Bath/Shower ($p = .001$), Exercise ($p = .001$), and Reading/Writing ($p = .001$).
Three coping strategies predicted exclusive bottle feeding: Smoking ($p = .003$), Resting ($p = .03$), and
reporting “Not Well” when asked how they cope with stress ($p = .035$).

Findings were largely consistent with expectations. Exercise predicted breastfeeding in previous
studies, most likely because women who exercise are attuned to health promoting activities.
Prayer/Religiosity also predicted breastfeeding initiation as hypothesized. This adds to the wealth of
studies which report a positive relationship between aspects of religiosity and health/health behaviors. Previous studies have also shown that smokers are much more likely to bottle feed than breastfeed, and it is not surprising that those who report not coping with stress well would be less likely to breastfeed as breastfeeding takes a certain amount of coping and commitment. The variables of Reading/Writing and Bath/Shower will be further explored in relation to stress reduction and breastfeeding, and it was surprising that choosing to rest as a way to cope with stress was predictive of the choice to bottle feed. While further study is needed, the current study suggests a link between many positive ways of coping with pregnancy stress and breastfeeding, and between more negative coping strategies and bottle feeding in this rural Appalachian sample. Findings may be useful in informing interventions to increase rates of breastfeeding initiation.