Breastfeeding Support Resources, Breastfeeding Initiation, and Infant Mortality Rates in North Carolina and Georgia

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Background: Professional organizations recommend breastfeeding for the first two years of life. Breastfeeding initiation rates in North Carolina (NC) and Georgia (GA) are below the national average. Research suggests breastfeeding resources help increase breastfeeding rates and lower infant mortality.

Objective: The objective of the study is to inform extension efforts to support breastfeeding. We aim to identify counties in NC and GA in need of additional support for breastfeeding and lowering infant mortality rates, and to pinpoint impactful support methods.

Study Design, Settings, and Participants: In our observational study, data consist of county-level characteristics for NC and GA. Primary outcomes are county breastfeeding initiation rates and infant mortality rates. The following data were recorded: numbers of IBCLCs, La Leche League groups, breastfeeding peer counseling programs through WIC (Special Supplemental Nutrition Program for Women, Infants, and Children), Baby Friendly hospitals, Rural-Urban Continuum Codes (RUCCs), and the Social Vulnerability Index (SVI).

Measurable Outcome/Analysis: We fit multiple linear regression models for breastfeeding initiation and infant mortality rates as a function of the four service availability types and the two population-level correlates of both outcomes. Maps were created to evaluate geographic distribution of breastfeeding and infant mortality rates and breastfeeding resources.

Results: The regression models predict the following: the support systems most significantly associated with increased breastfeeding initiation rates are IBCLCs and WIC sites numbers of IBCLCs are significantly associated with lowering infant mortality and the higher the SVI Score of a county, the lower the initiation rates, and the higher the infant mortality rates. The maps show that the regions most in need of breastfeeding support resources include North Eastern NC, Southern NC, and South Western GA.

Conclusion: Increasing the number of IBCLCs and WIC sites should be a priority in the identified underserved areas. Introducing more breastfeeding resources to the most vulnerable counties may increase breastfeeding initiation rates and lower infant mortality rates over time.

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