Effect of Heart Button Counseling on WIC Infant Feeding Practices

The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) is a federal assistance program that provides grants for the healthcare and nutrition of low-income pregnant women, breastfeeding women, and infants and children under the age of five in both States and Tribes. Not only is WIC effective at improving the health of those it covers, but it is one of the nation’s most successful and practical nutrition intervention programs as proven by studies conducted by the USDA Food and Nutrition Services (Women, Infants, and Children, 2015). The Chickasaw Nation Women, Infants and Children program (CNWIC) has developed and implemented the Heart Button educational strategy that aims to build rapport with new mothers prior to nutritional counseling in order to increase the utilization of appropriate WIC infant feeding practices. The CNWIC aims to identify whether or not the Heart Button educational strategy has a conclusive impact on the breast and/or bottle-feeding practices of mothers enrolled in the program. Obesity prevalence is increasing in the United States, and is largely comorbid with other chronic conditions. Appropriate infant feeding practices can counteract this, and can reduce an infant’s later risk of obesity and disease. The purpose of this project is to determine the effectiveness of the CNWIC Heart Button educational strategy on infant feeding practices related to obesity prevention.

The Choctaw Nation WIC (CHNWIC) has an established relationship with the Chickasaw Nation WIC, but currently still employs traditional education methods. Thus, the CHNWIC has agreed to participate in the Heart Button evaluation as a comparison group for the implementation of the strategy. The sample population will include WIC mothers who receive education at the CNWIC or CHNWIC clinics. Convenience sampling will be applied, and it is anticipated that 50 WIC mothers will participate.

The study design is quasi-experimental, with Chickasaw Nation WIC clinics as the intervention group and Choctaw Nation WIC clinics the comparison group. There will be no manipulation of current educational strategies at either the CNWIC or CHNWIC clinics, and current practices will continue throughout the duration of data collection. Data on infant feeding practices will be collected by way of survey throughout the first months after an infant’s birth. The survey will explore infant feeding practices, such as breastfeeding initiation and delayed introduction of solid foods, which are associated with reduced obesity prevalence. Data from the surveys will be collected via an iPad using the Qualtrics software. The receptionists at both the CHNWIC and CNWIC clinics will administer the survey, and paper copies will be available should a technology problem occur. Participation in the investigation is voluntary, and WIC mothers who partake in the survey will receive a gift upon its completion. WIC household ID numbers, not names, will be used to identify the clinic each mother attends, and therefore, which educational strategy she is exposed to.

Data will be uploaded from the iPads once each month, and will be evaluated using frequency, McNemar, and Chi-square tests through Statistical Analysis Software (SAS). Data between the two groups will be compared in order to determine whether or not the Heart Button strategy has a significant effect on the frequency of appropriate infant feeding practices. In the case that the Heart Button strategy improves the infant feeding practices of WIC mothers, the educational technique can then be promoted in WIC clinics across the United States as a means to minimize obesity prevalence.