Dr. Elizabeth Reifsnider’s (PI) Preventing Childhood Obesity Through Early Feeding and Parenting Guidance demonstrates that community health workers (CHW), supervised by public health nurses, can deliver a home-based obesity prevention intervention to low-income Mexican and Mexican-American women and children in a major urban area. The CHW will work with WIC clients to support them in breastfeeding their infants and teach them about feeding and caring for their infants. Obesity, especially among low income minority children, is a grave threat to the current and future health of our nation, and culturally congruent, community supported interventions are needed to reverse this epidemic. Dr. David McCormick (Co-I) is a Clinical Professor of Pediatrics in the Division of General Academic Pediatrics at the University of Texas Medical Branch and Lu Zheng is a Project Coordinator at ASU’s Center for Health Promotion and Disease Prevention.

Please describe the program and the needs for this project.

Lu: We are focusing on the Latino population, specifically low-income mothers, as they have the highest risk of obesity. We’d like to see if home visits and intervention during the early stages of life can prevent obesity in their children. This would, or could, then have an impact on their overall, lifelong health. Funding for this ends June 30th of this coming year.

Dr. McCormick: About 15 years ago we became more aware of childhood obesity as an issue in the Latino population. One study we did a few years ago looked at infant obesity. Children had started gaining weight very quickly from birth and we wanted to know first of all, what was the percentage and secondly why this was occurring. In other words, why was there a higher percentage of overweight babies and children in Galveston. Professor Elizabeth Reifsnider and I aimed at getting a project going that would prevent this. She has always been very active in community health; particularly in the realm of prevention and making home visits as a public health nurse. In the current health care system, few public health nurses are able to visit homes after birth. We decided to see if a community health worker (promotora) trained to provide education in nutrition and other childhood development issues can make home visits to provide education for high-risk mothers. Basically what we have in Houston and many other cities are mothers who themselves have a problem with weight, so frequently the family has issues as well. Overweight or obese mothers are at higher risk for having obese children and we wanted to see if we could prevent this. We have enrolled mothers prenatally to provide education to support breastfeeding and good nutrition. We are following their babies for 3 years to evaluate the outcomes. The intervention team trained community health workers who were as similar as possible in culture, values, and social status as those mothers we work with. Our primary goal is to improve the health status (especially the weight) of these children.

How and where has the program been implemented during this study? Why in these locations?

Lu: The work for this project has been done in the Houston and Galveston area.

Dr. McCormick: Dr. Reifsnider has a deep relationship and history working with WIC and we received permission from the City of Houston Health Department to recruit mothers into the project through their WIC program. Our promotoras screened the mothers who were clients of the WIC program. Women were enrolled who met all the study requirements and were in their third trimester. The WIC office is fairly close to where they live and the mothers are a very uniform group in terms of ethnicity, as we were looking primarily for overweight/obese Mexican American pregnant women. We then had the chance to provide them with in-home education, specifically breastfeeding promotion, and education on safety, physical activity, sleep, child development, and parenting, beginning prenatally and continuing for two years. The visits from the promotoras correlated with the American Academy of Pediatrics visits for well children (2,4,6,9,12, 18 and 24 month visits). At the same time, Dr. Reifsnider wrote into the grant that we
One of the things we have done with Professor Reifsnider is to work closely with WIC. WIC is a multibillion dollar government program to provide nutrition support to families at high risk for food insecurity and to help mothers live healthier when having their baby by providing sufficient food resources before and after the baby is born. The WIC program gives out free infant formula. A few years back, WIC realized they had been giving out formula but that their focus should really be on promoting breastfeeding. They then instituted interventions with the mother to promote breastfeeding. Breastfeeding is now more common than in years back in both the general population and in WIC participants. We have shown a significant difference in outcomes in terms of infant and child obesity in the babies that were breastfed versus the formula fed babies. Our results are still in the peer review stage but if this is really true, based on the data, and if we can get an intervention that works using community health workers, then WIC can apply that same educational intervention to promote breastfeeding. We are studying the whole issue of how can we get high-risk WIC babies healthier? There may be some very specific outcomes that come out of this research in how WIC can improve the health of children. It’s interesting because their first weight at WIC is at one year, which is much later than recommended. If we can change the trajectory of growth and keep babies healthier during infancy, I personally think and many people think we will be successful in preventing obesity. I believe we should be working on the obesity epidemic at a very young age (basically from birth). If fact, even prenatally if we can get mothers on the breastfeeding track and we can keep them breastfeeding as long as they can, they are on a good track to obesity prevention and healthier living.