Introduction

The burden of obesity disproportionately affects marginalized populations, such as Mexican-heritage (MH) children who reside in impoverished communities along the U.S.-Mexico border. These areas are occupied by a growing population of people who share a similar Mexican heritage, language, and socioeconomic standing; have unacceptably high rates of poverty and financial stress, adult and childhood obesity, food insecurity, and physical inactivity; and limited access to affordable, healthy foods and physical activity opportunities.

MH children in the U.S. are consistently choosing more high-energy, less nutritious foods, and spending more time in sedentary activities, such as television and video games. Demographic characteristics of the proposed study areas in AZ, NM, and TX (Figure 1) indicate families are predominately of MH; almost half are foreign-born; Spanish is the language spoken in most of homes; half of families have incomes below the poverty level; a large proportion of adults have less than 9 years of education; a large proportion of households receive Supplemental Nutrition Assistance Program (SNAP), and children are eligible for Child Nutrition Programs. MH residents of colonias have significant needs and face substantial barriers to being healthy and are considered hard-to-reach.

It is widely recognized that the family and home environment significantly influence children’s diet and physical activity behaviors. Thus, a multilevel framework that includes family and ecological systems changes recognizes that positive behavior changes in children are not sustainable if the family system and home environment remains unchanged.

Overall Objectives

Research Objectives
1. Engage MH children and families from underserved areas along the AZ, NM, and TX border with Mexico and conduct formative research, develop, pilot test, and refine Salud Para Usted y Su Familia (Health for You and Your Family) (SPUSF).
2. Evaluate the efficacy of SPUSF curriculum in a cluster randomized controlled intervention trial (RCT).

Education Objective
1. Use experiential learning and innovative teaching methods to increase the competency of faculty and undergraduate and graduate students through development, implementation, and evaluation of high-quality education activities.

Extension Objective
1. Deliver, develop, and evaluate science-based knowledge and skills through informal education, certificate programs, in-service training, and group discussions.

Hypothesis

Behavior change (child and parent) and environmental change (home environment) together can improve children’s food and beverage consumption and physical activity.

Approach

Three-phase, sequential mixed-methods approach (Figure 3)

Promotoras-Researchers

• Have the bilateral task of functioning as professionals, community advocates and collaborators, researchers, and information disseminators while maintaining the trust and respect of the communities they serve.
• Native Spanish-speakers; most are monolingual.
• Reside in the communities in which they work.
• A unique and value-based position; increasingly empowering as promotoras acquire and polish their knowledge, skills, and collective strength.

Year 1 Activities

• Conduct Spanish-language training for Promotoras.
• Develop and implement evaluation plan for needs assessment, process, and summative evaluations.
• Recruit and establish Community Advisory Boards in each area to serve as an advisory and decision-making group.
• Develop Spanish-language materials.
• Complete neighborhood/community assessments in each area.
• Conduct panel series of separate focus groups among MH fathers, mothers, and children in AZ, NM, and TX.
• Form Education and Extension workgroups.
• Identify targets and channels for inclusion of the project activities in undergraduate and graduate education (readings, experiential training, in-class activities, and in-class presentations).
• Develop practicum and internship protocols.
• Inventory Extension programs.

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