

Title: Community Health and Nutrition - Extension

Project Leader: Lindiwe Sibeko

Project Overview

Most Americans fall short of achieving national guidelines for healthy dietary intakes, particularly of fruits and vegetables. This has contributed to unprecedented obesity rates in the US for both child and adult populations. Disparities in achieving national dietary guidelines are particularly evident in low income and some racial and ethnic minorities; population groups with high levels of food insecurity and poor health status.

The city of Springfield has an infant mortality rate (IMR) that is nearly double that of the state of Massachusetts (8.8 versus 4.7 deaths per 1000 live births, before the age of 1). Racial disparities are at the core of these distressing figures, with African American IMR being higher than the white counterparts (8.2 vs 3.2). The CDC estimates the infant mortality gap in the black population can be reduced by at least 50% through increased breastfeeding among African American women.

This work will address the nutritional health issues of low income and racial and ethnic minorities who are at high risk of food insecurity and poor health outcomes, including overweight and obesity. Training of undergraduates and graduate students will focus on delivery of nutrition education to underserved populations in the community. Extension education activities and research will advance through collaboration with community partners, to better understand individual, community and institutional barriers to the improvement of health outcomes in women, newborns and children vulnerable to health disparities. Specifically, projects will be focused on: 1) nutrition education activities aimed at the prevention of childhood obesity; and 2) to promote and support increased breastfeeding rates among African American women in Springfield.

Activity Summary – 2016

- Ongoing Study - Breastfeeding Attitudes, Beliefs and Experiences of African American Women in Springfield MA: a community based participatory approach (1)
- Establish Breastfeeding Coalition composed of community members, healthcare institutions and academics. The Aim of the coalition is to develop strategies to promote, protect and support breastfeeding among African American women. (1)
- Presentation to WIC peer support counselors, WIC Nutritionist (1)
- Presentation to stakeholders (Springfield) serving low income families (1)
- Building collaborations with Amherst Elementary School and Holyoke Care Center(1)
- Collaborating with national organization (R.O.S.E. - Rural Organization for Social Elevation) to address breastfeeding disparities (1)
- Research feedback to Elementary school principal and food service staff on data from our study: *Integrating Urban Agriculture and Nutrition Promotion to Increase*

Consumption of Fruits and Vegetables: A Focus on Worcester, Massachusetts October 2016 (1)

- Invited presentation: University of the Pacific; Title: *Black and Brown: Systemic Racism Colors the Maternal and Child Health Experience. April 2016 (1)*
- Invited presentation to conference hosted by Lowell Cambodian Association: Presented on research outcomes of study on: *Food Security, Health Outcomes, and Nutrition Education Among Cambodian Women in Massachusetts (1)*
- Chair of Community and Public Health Nutrition: *DISPARITIES AND PROMOTING HEALTH IN DIVERSE POPULATIONS* mini symposium at Experimental Biology: American Society for Nutrition April 2016 (1)
- Advisory committee member on the Regional Nutrition Education and Obesity Prevention Centers of Excellence (RNECE) for the North East region (there are 4 regions in total) (1)
- Member of the Diversity sub-Committee on the Board of the International Lactation Consultants Association. (1)

Total Educational contacts

	Youth Contacts	Adult Contacts
Direct Contacts	30	289
Indirect Contacts (Print, Web, etc...)		

Narrative Summary and Impact

The two areas of foci for my 2016 research agenda were breastfeeding disparities and prevention of childhood obesity. Extension outreach and education activities were focused on prevention of childhood obesity and have included training of UMass senior undergraduate students to deliver nutrition education lessons to elementary school aged children, with a focus on motivating healthy dietary intake, particularly fruits and vegetables. These lessons are tailored to be budget conscious and ethnically diverse, reflecting the target audience (large percentage from diverse racial ethnic backgrounds and high proportion coming from food insecure households).

Additionally, we concluded phase 1 of our study on an assessment of grade 7 students' fruit and vegetable intake and their attitudes, beliefs and practices towards increased produce intake. The students are from a multicultural and low income inner city neighborhood. Our findings were shared with the school principal and food service staff. Bringing the data back to the school has led to a discussion of the next steps which are being shaped by our findings and will guide phase 2 of our study.

Two grant proposals have been submitted to NIH related to childhood obesity prevention: (i) *Identifying Mechanisms of Peer Influence on Youth Weight-related Behaviors*; (ii) *Multi-level Prevention of Childhood Obesity in Preschool Children*.

A pilot study examining the breastfeeding experiences of African American women in Springfield was launched summer 2016. This study lays the groundwork for a NIH grant submission for an intervention study aimed at increased breastfeeding rates among African American women.

Collaborating (Partner) Organizations

- **Tapestry WIC: Mason Square**
- **Caring Center: Holyoke**
- **Holyoke Community College**
- **Amherst Public School: Crocker Farm**
- **Mason Square Health Task Force**
- **Franklin/Hampshire/North Quabbin WIC Delta Sigma Theta Sorority, Inc.**