

Obesity and substance abuse are increasingly prevalent, costly, and deadly--fueling a twin epidemic in the United States. The importance of addressing obesity and alcohol and other drug (AOD) use simultaneously is supported in part by recent research at NIDA linking the brain mechanisms that fuel drug addiction and compulsive eating behaviors. Although AOD abstention and abuse patterns vary considerably by region and tribe, American Indian (AI) drug-related deaths are 1.5 times higher than for all other ethnic groups in the US. AI women in particular exhibit significant disparities with other women in obesity and AOD prevalence and higher rates of premature mortality and morbidity as a result. Based on preliminary research, we have developed the *Yappalli Choctaw Road to Health*, a culturally focused, strengths-based outdoor experiential obesity-AOD risk prevention and health leadership program. The 3-month intervention (i.e., 3 individual meetings; 8 group-sessions + 2-day culture boot camp + 10-day Choctaw Trail of Tears walk) is grounded in the PI's Indigenest Stress-Coping Model and the Information-Motivational- Behavioral Skills framework, with activities consistent with Motivational Interviewing and leadership development principles. This RO1 application, prepared in response to PAR-11-346 (*Interventions for Health Promotion and Disease Prevention in Native American Populations*), proposes to evaluate the program among 150 at-risk adult Choctaw women across 5 regions of the Choctaw Nation of Oklahoma (CNO), where Native women have some of the highest obesity, physical inactivity, and excessive drinking prevalence in the country. We will conduct a longitudinal study using a cluster randomized stepped-wedge design to evaluate the intervention impact on the AOD and obesity prevention primary aims of: (1) substance use harm reduction (SUHR) and AOD use and intentions to use; and (2) reduction in weight/BMI and increase in leisure-time physical activity and healthful food habits. The project is a multidisciplinary community-based participatory research collaboration among experienced AI researchers at the Universities of Washington and Minnesota and Choctaw behavioral health leaders and providers. A unique feature of the proposed project is its direction at both the university and tribal levels by Choctaws. The project is supported by pilot and tribal acceptability data; addresses a critical public health issue among a group experiencing considerable health disparities; and strengthens the research infrastructure in partnership with the Tribe. If efficacious, it has the potential for widespread dissemination and could be generalizable to other chronic co-occurring mental health and physical health conditions (e.g., diabetes and depression).