



The *Mano a Mano* Cohort Study

Project Overview

- The *Mano a Mano* Cohort Study is an ongoing prospective, population-based study of individuals of Mexican origin and their household members residing in Harris County, TX, and contiguous counties in the Houston area.
- This study was initiated in 2001 by the Department of Epidemiology at The University of Texas M.D. Anderson Cancer Center to establish a sample of 50,000 participants of Mexican origin and to follow them over time to:
 - Improve understanding of risk factors for cancer and other chronic diseases; and
 - Use this information on behavioral and genetic risk factors to develop chronic disease prevention strategies to improve the health of individuals of Mexican origin locally and nationwide.

Motivation for Establishing a Cohort of Mexican Origin Adults

- Hispanics in the US, among whom nearly two-thirds are of Mexican origin, represent the most rapidly growing segment of the US population. Approximately 30% of residents in Harris County are of Mexican origin.
- Patterns of behavior and disease differ in individuals of Mexican origin compared to that of other racial and ethnic groups in the US, yet the factors underlying these differences are not clear.
 - Individuals of Mexican origin are two times more likely than non-Hispanic Whites to have diabetes.
 - Adults of Mexican origin are thought to share with other Hispanics distinct patterns of cancer such that they are less likely than non-Hispanic Whites to develop more common cancers (e.g. breast and prostate cancer) but more likely to develop relatively rare cancers (e.g. cancers of the stomach, cervix).
 - Mexican origin adults report the lowest rates of leisure-time physical activity among all racial/ethnic groups.

Study Design and Protocol

- Participants have been recruited through four primary strategies: 1) random digit dialing, 2) approaching homes in neighborhoods with high concentrations of Mexican origin households, 3) community intercepts, such as health fairs, clinics, and community events, and 4) networking through currently enrolled participants.
- Teams of interviewers conduct in-person interviews at participants' homes with one primary participant at least 21 years of age, and up to three secondary participants above five years of age. The survey inquires about demographic characteristics, personal and family medical history, acculturation, use of health services, lifestyle and social habits, and occupational and residential history.
- Interviewers also collect blood samples from participants over age 13 and urine and buccal (cheek) samples from all participants for genetic analysis.

- Participants are contacted by phone every six months to update the health status information of all household members.

Recent Findings

- Over 17,000 individuals from nearly 12,000 households have been enrolled.
- The majority of respondents are women (75%), were born in Mexico (64%), and did not complete high school (62%). The average age of respondents at enrollment was 38 years.
- The most common chronic conditions reported at enrollment include high blood pressure (15%), diabetes (12%), and high cholesterol (13%).
- The most common cancers reported at enrollment include breast cancer (1% of women), cervical cancer (1% of women), and prostate cancer (.6% of men).
- 43% of men and 57% of women were obese upon enrollment based on a BMI of at least 30.
 - These rates are much higher than national (23% and 25%) and state (28% and 32%) estimates for Hispanic men and women, respectively.
 - Although Mexican-born men and women have a lower risk of obesity than their US-born counterparts, their risk of obesity increases with longer duration of US residency.

Affiliated Studies

- Affiliated studies involving participants from this Cohort or their children have focused on the following:
 - Identifying factors associated with susceptibility to smoking and smoking initiation in Mexican origin youth.
 - Developing a dietary assessment tool for use with adults and youth of Mexican origin.
 - Understanding health risk communication and health behaviors among Mexican origin families related to family health history.
 - Designing prevention strategies to: increase awareness of health risks associated with secondhand smoke exposure, promote smoke-free homes, and facilitate smoking cessation in Mexican origin households with at least one family member who smokes.

Policy Implications

- High rates of obesity among Mexican origin adults and youth highlight the importance of understanding the determinants of obesity and identifying strategies to prevent obesity in this population.
- This research provides an infrastructure to facilitate population-based research and serves as a resource for public health planning and research.

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