

Mexican Americans are more likely to live in poverty, have lower educational attainment (Vega and Amaro 1994), be without insurance, not have regular medical care (Weinick and Krauss 2000, National Center for Health Statistics 2004; Knosnood et al 2000), yet have lower rates of mortality than their non-Hispanic white counterparts (Markides and Coreil 1986; Sorlie et. al. 1993; Hummer et al. 1999; Singh and Siahpush 2001; Elo et. al. 2004). This “epidemiological paradox” has puzzled the scientific community for twenty years and various theories have evolved, as a result, to explicate this Mexican American mortality advantage.

Diabetes in the United States is growing in prevalence and disproportionately affecting Mexican Americans (Center for Disease Control 1999; Burke et. al. 1999). Compliance with medical treatment for Mexican Americans is challenged by their lack of insurance coverage and regular medical care. Older age and lack of Medicare supplemental health insurance is associated with medical non-compliance and over time this defiance is linked to higher prevalence of kidney disease and increased all-cause mortality and diabetes-related deaths (Kuo et. al. 2003; Harris 1999). Other lasting effects of non-compliance or inaccessibility to resources can be appreciated by the fact that Mexican Americans with diabetes have greater chances of requiring an amputation of the lower extremities due to Peripheral Vascular Disease, a disease known to be directly related to diabetes (Lavery et. al. 2003; Lavery et. al. 1999).

Looking at Mexicans in the United States only, limits our abilities to comprehend the epidemiological paradox and skews our perceptions of Mexicans’ health. For example, diabetes and associated complications are the most prevalent cause of death in Mexico (Secretaria de Salud de Mexico, 2003) and mortality from diabetes has been on

the rise (Barquera et. al. 2003). Age-adjust mortality rates from the disease for Mexico are higher than the general population in the United States and the difference between countries has been growing in recent years.

The purpose of this study is to examine the resources Mexicans (migrants versus non-migrants) in the United States and in Mexico have to manage their diabetes. Using diabetes as the focus disease will enable us to better understand the epidemiological paradox by using an illness that is chronic, sensitive to treatment or non-treatment, costly to manage, and a risk factor for other life terminating diseases. The research aims of this paper therefore are as follows:

1. To determine what social, financial, and family resources are available to Mexicans with diabetes in the United States and Mexico to manage their disease.
2. To determine if the resources are more effective at managing diabetes in Mexico than in the United States.
3. To demonstrate how do Mexicans who migrate differ with respect to resources and diabetic health in Mexico and the United States.

Using quantitative data (i.e. Mexican Health and Aging Survey (2001), Health and Retirement Survey (2000) and The Hispanic Established Population of Epidemiologic Studies of the Elderly (2001)), comparative statistical analysis will be performed to determine the availability and effectiveness of familial, social, and economic resources in reducing the negative health effects associated with diabetes in both countries.

Functional status will be used as the dependent variable since it best illustrates progression of diabetic illness. It will be measured by an index of questions related to

ability to perform personal care or Activities of Daily Living (ADL's). Two variables will be used to determine the relationship between migration and diabetic health. First, nativity will be measured by country of birth and country of legal residence. This variable is important, particularly in the United States since it may indicate eligibility to work legally or qualify for federal and state programs such as Medicare and Medicaid. Analysis will be limited to US born and Mexican born and legal residents of both countries. Secondly, in terms of migration, history of migration, years lived in the United States and years since returning to Mexico will be used for this analysis.

To evaluate familial resources, this study will use whether the subject has received assistance from family members and marital status. Social resources will be measured by whether there are neighbors or friends who the subject can count on in time of need. Type of insurance (or health care in Mexico) will also be considered as a social resource in this study. Health coverage systematically is quite different in Mexico than in the United States however, fundamentally similar in that employment status determines type of coverage an individual will receive. Therefore insurance type will be used in the United States (i.e Medicare, Medicaid, HMO, etc.) and in Mexico the health system type of care (i.e. IMSS, SSA, etc.) will be use the analysis. Economic resources will be measured as relative income, type of housing, dwelling ownership, and current employment status.

Preliminary Bivariate results reveal that the percent of subjects needing assistance with their ADL's (scale from 0 to 6, six being most dependent on assistance from others) for the EPESE was 21.01% for those without diabetes and 36.19% for persons with diabetes. For the HRS dataset 31.62% of Mexican descent with diabetes needed some

form of assistance with their ADL's, as opposed to 22.46% of non-Hispanic whites with diabetes. For the MHAS sample, the percent of subjects needing assistance with their ADL's was 9.2% for persons without diabetes and 16.90% for persons with diabetes. Additionally, from the Mexican sample with diabetes, 16.86 % of those never migrating to the United States needed assistance with their ADL's, less than ten years 17.53% and more than ten years 17.53% needed assistance. Significant variation appears to exist between countries and between races in the United States. Less variation appears to exist among Mexicans with different migration histories residing in Mexico.

Exploration of resource availability as a determining factor for this variation will be conducted using a series of stepwise logistic regressions will be carried out using the family, economic, and social variables. Regressions will be completed using the entire samples from the data sets comparing diabetics to non-diabetics. Additionally, separate regressions for diabetics only and by gender will be performed. Comparisons between migrant versus non-migrant and US versus Mexico will be made to establish the effect of migration and nativity. Non-Hispanic whites will also be included in part of the analysis as an important point of reference.