A Comparison of Food Insecurity Levels and Weight Status among Rural and Urban Residing Latino/Hispanics in North Carolina

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BACKGROUND OF STUDY:

The high prevalence of food insecurity and overweight/obesity among low income, Latino/Hispanic households has serious implications for the health and welfare of the members of these households. Indisputable evidence indicates that proper nutrition is essential to normal development of children and that it serves as a protective factor in reducing susceptibility to illness and disease. Consequently, determining ways to avoid food insecurity and overweight/obesity is an important priority.

The problems of food insecurity and overweight/obesity are likely to manifest differently as a consequence of the availability of support systems and density of population groups. It is likely that Latino/Hispanic immigrants living in rural areas face additional barriers that their counterparts do not experience living in urban areas. Urban areas are more likely to have more services available to low income of any ethnicity and consequently offer more resources to food insecure families than those living in less populated and less service dense areas.

The Latino/Hispanic population is particularly vulnerable as they have disproportionately high rates of obesity and diet related chronic diseases compared to Caucasians and African Americans. The Latino/Hispanic population has extremely high rates of obesity, diabetes, and increased chances of dying from certain cancers and heart disease. Being overweight or obese is associated with most chronic diseases such as diabetes, cardiovascular disease, hypertension, coronary heart disease and cancer. Living in a rural area only compounds these issues as there is limited availability and accessibility of necessary resources.

Given its potential impacts on health and well being, understanding the determinants of food insecurity and weight status is essential. Currently, little has been done to assess the food security levels of the increasing, rural Latino/Hispanic population. This is of particular importance as this group, compared to non-Hispanic whites, is at the greatest risk for poverty, poor dietary intake and the development of diet related chronic diseases, such as obesity.

The objectives of this proposal were to: (1) assess the level and contributors to food insecurity and weight status in a rural Latino community, (2) compare food insecurity and weight determinants among rural and urban Latino populations, and (3) identify barriers to food acquisition and strategies used by Latino/Hispanic families to manage limited food resources.

METHODS:

A convenience sample (N=126) of rural residing low income Latino/Hispanics adults were recruited and interviewed by two bilingual, bicultural interviewers. A translated and face
validated survey examining socioeconomic status and demographics; nutrition knowledge, attitudes, behaviors, beliefs; food security; strategies for managing food; food group consumption; acculturation; food assistance program participation, anthropometrics was used for data collection. Rural data were then compared to data collected previously on an urban sample (N=166). Based on information derived from the survey questionnaire, a qualitative component involving a semi-structured interview was conducted with a sub-sample of the rural respondents. Interviews focused on identifying barriers to food acquisition and strategies used by families to manage limited food resources.

FINDINGS AND DISCUSSION:

Rural Latinos were primarily low income, low educated, Mexican women that spoke Spanish only. Respondents had been in the US on average 9 years. Over three-fourths of the participants reported some level of food insecurity with one-quarter reporting current food stamp participation. The majority of respondents (>80%) were overweight or obese with a mean body mass index (BMI) of 29.1 kg/m².

Both rural and urban participants were similar in demographic characteristics. However, some distinct differences were noted with regard to key variables in this study. Compared to their urban counterparts, rural Latinos were significantly more likely to have been receiving food stamps at the time of the interview, report food insecurity and be classified as overweight. Although rural respondents had been living in the US significantly longer than urban respondents (9 years vs. 4.5 years, respectively), this was associated only with current food stamp use among the urban respondents. Respondents living in the US longer were more likely to be currently receiving food stamps. Rural respondents were also more likely than urban respondents to report feeling that it was difficult to eat healthy and had a lower self-efficacy with regard to selecting healthy snacks for their children.

Logistic regression revealed that determinants of food insecurity and weight status differed between groups. For rural respondents, difficulty eating healthy was both a determinant of food insecurity and overweight/obesity; however this was not the case for the urban sample. Food insecurity, older age and weight gain since arriving to the US were determinants of overweight/obesity among urban respondents.

Findings from this study indicate that rural residing Latinos are more vulnerable than urban Latinos to food insecurity and overweight; although high levels of food insecurity and overweight/obesity exist among both rural and urban Latinos. This may be due in part to the fact that rural Latinos find it more difficult to eat healthy and report less confidence in their ability to choose healthy snacks. Not addressed in the survey was the availability of alternative food assistance options and opportunities for nutrition education which may help to explain the difficulties rural Latinos are experiencing with regard to healthy eating. Qualitative interviews may help elucidate reasons for this increased vulnerability by identifying strategies used by rural Latinos to meet food needs.
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