Texas Obesity Research Center

Is There Less Access to Quality Grocery Stores in Minority and Poor Neighborhoods in Houston, Texas?

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ABSTRACT

Background: There has been an enormous increase in obesity and diet-related diseases in the past decade. Limited access to nutritious foods and easier access to unhealthy foods is believed to be among those at fault. However, access to healthy foods, although studied extensively, does not have a standard measure and is conceptualized in multiple ways by researchers. The relationships between availability of quality grocery store and the socio-demographic profile of the neighborhood are not well understood, particularly in an ethnically and socially diverse city, such as Houston. **Purpose:** Our study aims to explore the relationships between distribution of small, medium or large grocery stores and community socio-demographics in neighborhoods. **Methods:** Data on grocery stores characteristics were obtained through InfoUSA. Sales volume and number of employees were used to categorize stores into three types, small, medium and large. Number of stores by type was calculated to the level of neighborhood. Census 2000 data were aggregated for each neighborhood on ethnic composition and poverty. Three ethnic quintile variables were further derived (White, Black, Hispanic) as well as three poverty quintile variables (below poverty level, 1-2 times the poverty level, above twice poverty level). Poisson models by store type were employed to estimate effects of these quintile variables on number of grocery stores. **Results:** Among the 88 neighborhoods, 12.5% (11) had no small stores, 31.8% (28) no medium stores and 46.6% (41) no large stores. Seven (8%) neighborhoods had no stores of any type. The regression models showed one quintile increment on poverty would result in 1.44 times increase the number of small stores. One quintile increment in ethnic black would reduce the number of medium stores by 14% while "below poverty level" remained positive (1.34 times). Finally, increment of one quintile in ethnic black would reduce the number of large stores by 23%. **Conclusions:** Our study indicates that there exists significant disparity in access to grocery stores in Houston. Some communities had access to all three types of stores but others had none. We also found higher concentration of small and medium stores in communities of poor people and fewer medium and large stores in communities of more ethnic blacks.

These results suggest that impoverished Black communities in Houston may suffer reduced access to a selection of healthy foods when compared to other neighborhoods.

KEY WORDS: Grocery stores, Neighborhood, Poverty, Race/Ethnicity, Measurement