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NEIGHBORHOOD ASSETS AND HYPERTENSION IN DISADVANTAGED COMMUNITIES. \*L Isaac, T LaVeist (Johns Hopkins University, Baltimore, MD 21205)

Many disadvantaged neighborhoods have been shown to lack the resources available to live a healthy lifestyle and combat chronic diseases such as cardiovascular disease. What is less known is how community assets in disadvantaged neighborhood environments impact cardiovascular disease risk factors. The goal of this study is to evaluate the association between the presence of community assets and hypertension prevalence in a low income area. This study used 2003 data from the Exploring Health Disparities in Integrated Communities (EHDIC) study, a household sample of 1408 adults living in a low income neighborhood in Baltimore, Maryland. Trained independent raters collected desirable and undesirable neighborhood characteristics for each respondent's street segment. A Generalized Estimating Equation (GEE) was used to determine associations between presence of community assets and hypertension, while adjusting for having one or more undesirable neighborhood characteristic, socio-demographic variables, health related factors and community duration. The presence of a general store (Odds Ratio (OR): 0.69, Confidence Interval (CI): 0.50-0.96) and a recreational facility (OR: 0.42, CI: 0.23-0.77) on the street segment predicted lower odds of hypertension for those respondents who lived on the street segment as compared to those that did not have these items present on their street segment. Our results show that the presence of a general store and recreational facilities in a respondent's street segment is associated with lower hypertension prevalence. Future studies should address the accessibility and quality of these resources. In addition, research and interventions should be done to help community residents use these community assets.

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NEIGHBORHOOD DISADVANTAGE AND STROKE. \*A Brown, L Liang, S Vassar, S Merkin, W Longstreth, B Ovbiagele, T Yan, J Escarce (UCLA, Los Angeles, CA 90024)

Background: The spatial and social separation of poorer persons and racial/ethnic minorities into disadvantaged communities may contribute to stroke disparities, but the mechanisms are not well understood. Methods: We used data from the Cardiovascular Health Study, a multicenter, population-based, longitudinal study of adults  $\geq 65$  years. The dependent variable was incident ischemic stroke. Residential neighborhood disadvantage was measured using a composite of six census tract variables representing income, education, employment, and wealth. Race-stratified multilevel Cox proportional hazard models were constructed, adjusted for sociodemographic characteristics (age, gender, education, and income), behavioral risk factors (smoking, physical activity, and alcohol use), and biologic risk factors (EKG abnormalities, subclinical cardiovascular disease, or diagnosed hypertension, diabetes, and hyperlipidemia). Results: Among the 3834 participants with no prior stroke, 548 had an ischemic stroke over a mean 11.5 years of follow up. In models adjust for sociodemographic characteristics, stroke hazard among whites was significantly higher among residents of neighborhoods in the lowest SES quartile relative to those in the highest quartile (Hazard Ratio = 1.32; 95% CI 1.01-1.72), but not after adjustment for behavioral risk factors (HR = 1.30; 0.99-1.70) or biologic risk factors (HR = 1.16; 0.88-1.52). Among African Americans, there was no association between neighborhood disadvantage and stroke. Conclusions: We found shorter time to first ischemic stroke in the most disadvantaged neighborhoods among whites, but not among African Americans. Neighborhood disadvantage appears to influence stroke hazard through higher levels of biologic risk in low income neighborhoods.

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ETHNIC-SPECIFIC SEX DIFFERENCES IN STROKE RISK. \*S Sealy-Jefferson, S Reeves, J J Wing, M A Smith, L B Morgenstern, L D Lisabeth (University of Michigan, Ann Arbor, MI 48109)

Age-adjusted stroke risk is higher in men than women but more strokes occur in women due to their greater longevity and high stroke rates at older ages; patterns are similar for Mexican Americans (MAs) and Non-Hispanic Whites (NHWs). In whites, women are protected from stroke compared with men before age 75 but this protection is lost or reversed at older ages. Similar age and gender-specific stroke incidence data are not available for minority populations, including MAs, a population with an increased stroke burden. The objective was to compare age-specific stroke incidence in MA women and men and to compare these patterns to those in NHWs. Active and passive surveillance were used to identify all ischemic stroke cases  $\geq 45$  years old presenting to hospitals in Nueces County, Texas (2000-2008) as part of the Brain Attack Surveillance in Corpus Christi (BASIC) Project. Population counts were from the 2000 US Census. Cumulative stroke incidence was calculated by age, sex, and ethnicity (MA, NHW). Risk ratios and 95% confidence intervals were used to compare stroke incidence in women and men stratified by 5-year age groups and by ethnicity. For both MA and NHW women, there was a pattern of protection from stroke compared with men until older ages. For MAs, women had significantly lower stroke risk than men until age 80, after which the protection was no longer apparent. For NHWs, the pattern was similar except that there was no sex difference in stroke risk among those aged 70-74 years. Age-adjusted summary measures of sex differences in stroke risk may mask the more complex interplay of age, gender and stroke. Stroke prevention in women of both ethnic groups is critical given the aging US population and the rapidly growing MA population.

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PROXIMITY TO CORNER STORES AND OBESITY IN YOUTH. T A Barnett, \*A Van Hulst, Y Kestens, M Daniel, L Gauvin, M Lambert. (Centre de Recherche du Centre Hospitalier Universitaire Sainte-Justine, Montréal, QC, Canada H3T 1C5)

INTRODUCTION: Evidence linking characteristics of the neighborhood dietary environment to obesity in youth is inconsistent. We investigated the association between proximity to corner stores and obesity in children aged 8-10 years using multiple indicators of adiposity. METHODS: Participants were 514 children from Montreal, Canada, at risk for obesity due to a parental history of obesity. Height and weight were measured, and body composition was assessed using DEXA. Adiposity outcomes included age- and sex-adjusted body mass index (BMI) percentile, and % central body fat. Network (walking) distance in meters between child's residence and nearest corner store was obtained using a Geographic Information System. Distance was categorized according to tertile rank. The association between proximity to corner stores and adiposity was examined in sex-specific linear regression models controlling for age, mother's BMI, father's BMI, population density and median neighborhood income. RESULTS: Mean age of children was 9.7 years, 54% were boys, and 42% were overweight or obese (age- and sex-adjusted BMI percentiles  $\geq 85$ th). The median network distance to the closest corner store was 800 m (inter-quartile range: 425-1330 m). Proximity to corner stores was not associated with adiposity in boys. However, girls living closest to corner stores had 2.3% units (95% confidence interval 0.2-4.0 units) greater central body fat on average than those living furthest from corner stores. This relationship was not apparent when using BMI as an indicator of adiposity. CONCLUSION: Using multiple indicators of adiposity may help us to better understand the obesogenic potential of neighborhood environments.