PAST POLICIES AND PRESENT RAMIFICATIONS

DISPARITIES IN

A closer look at how a 1930s housing program affects visual health today.

In the 1930s, a new housing policy was enacted in the United States to encourage home ownership and suburban development. The policy, known as redlining, color-coded communities to steer where mortgage lending occurred. Ultimately, neighborhoods with high proportions of Black individuals were denoted as "undesirable" and a high risk for lending. Black individuals were excluded from obtaining traditional insured mortgages to purchase homes, and realtors discouraged Black individuals from purchasing homes in predominantly non-Black neighborhoods. This resulted in decreased home ownership and wealth accumulation among Black individuals and neighborhoods with high proportions of Black individuals.

In a recent article published in Ophthalmology, investigators analyzed 11,668 US census tracts to investigate the rates of visual impairment and blindness in the neighborhoods that were graded for redlining. The study's first author, Patrice Hicks, PhD, MPH, spoke to GT about the findings and the implications of policies such as redlining for visual impairment and blindness.

GT: Redlining was enacted in 1933 and outlawed in 1968; can you explain how policies like this can have long-term effects on minority communities?



Patrice M. Hicks, PhD, MPH: Historic discriminatory housing policies such as redlining have caused injustices in wealth, health, and education outcomes for minority communities. People who live in neighbor-

hoods that were previously redlined are more likely to live in areas with poor environmental quality, low educational attainment, high crime, and poor economic opportunities.² In addition, living in a previously redlined neighborhood has been associated with worse health, such as higher prevalence of chronic diseases including hypertension, cancer, obesity, diabetes, and stroke.³ Because of the disproportionate lack of resources in previously redlined neighborhoods, the people at higher risk of poor health often have more difficulty accessing quality medical care.

GT: What were the effects of redlining on residents' visual health observed in your investigation?

Dr. Hicks: Living in a neighborhood with a worse redlining score was associated with 13.4% increased odds of visual impairment and blindness after controlling for several census tract factors, including age, sex, people of color (any non-White race), state, and population size (odds ratio, 1.134; 95% confidence interval, 1.131–1.138; P < .001). As this policy primarily impacted Black communities, we also conducted

a subanalysis that adjusted for percentage of Black residents within a census tract rather than people of color (any non-White race) and found that living in a neighborhood with a worse redlining score was associated with 18.0% increased odds of visual impairment and blindness (odds ratio, 1.180; 95% confidence interval, 1.177–1.183; *P* < .001).

GT: How can a better understanding of past policies and their ramifications help to address health disparities?

Dr. Hicks: Understanding past policies and their current health ramifications can help to inform new policies to address health disparities for eye health and vision care. New policies can help to ensure that neighborhoods with increased proportions of visual impairment and blindness have the necessary resources to both prevent and treat visual impairment and blindness.

1. Hicks PM, Woodward MA, Niziol L, et al. Seeing red: associations between historical redlining and present-day visual impairment and blindness. Ophthalmology. Published online December 12, 2022. doi:10.1016/j.ophtha.2022.12.005 2. Lynch EE, Malcoe LH, Laurent SE, Richardson J, Mitchell BC, Meier HCS. The legacy of structural racism: associations between historic redlining, current mortgage lending, and health. SSM Popul Health. 2021;14:100793. 3. Townsley J, Andres UM, Nowlin M. The lasting impacts of segregation and redlining. SAVI. 2021. Accessed January 14, 2023. www.savi.org/2021/06/24/lasting-impacts-of-segregation

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