

Impact of residential mobility on associations between historical redlining, gentrification, and life expectancy at birth in Philadelphia metropolitan area

Thursday, July 18, 2024 10:20 AM (20 minutes)

Historical redlining has been associated with various adverse health outcomes in redlined, predominantly Black neighborhoods. Previous studies, however, generally have not considered neighborhood socio-demographic transformation processes, like gentrification, over time. We aimed to evaluate the collective association of household-level residential socio-spatial mobility, gentrification, and historical redlining with life expectancy at birth in the Philadelphia metropolitan area.

Census tract data on life expectancy at birth were obtained from the Centers for Disease Control and Prevention. U.S. Census data were used to define tract gentrification eligibility and gentrification status in 2000-2010 (earlier gentrification) and 2011-2018 (recent gentrification). Household residential mobility and income data derived from DataAxle were used to define tract influx volume of lower- and higher-income in- and out-movers between 2011-2020. Spatial linear regression was used to estimate the association between gentrification, historical redlining, and life expectancy before and after adjustment for residential socio-spatial mobility.

In each category of historical redlining, life expectancy decreased from higher-income tracts ineligible for gentrification or with earlier gentrification to tracts with recent gentrification to non-gentrified tracts. The largest difference in life expectancy by gentrification was among redlined tracts (77.2 years in tracts with earlier gentrification vs 72.7 years in non-gentrified), which was largely explained by the high influx volume of higher-income households into gentrified tracts and lower-income households into non-gentrified tracts. Relatively high life expectancy estimates in redlined and gentrified tracts compared to the redlined and non-gentrified tracts appear to be driven by residential mobility and replacement of lower-income initial residents with higher-income new residents.

Primary author: WIESE, Daniel (American Cancer Society)

Co-authors: Dr BAEKER-BISPO, Jordan (American Cancer Society); Dr ZEIGLER-JOHNSON, Charnita (Fox Chase Cancer Center); Dr KLASSEN, Ann (Drexel University); Dr HILLIER, Amy (University of Pennsylvania); Dr JEMAL, Ahmedin (American Cancer Society); Dr HENRY, Kevin (Temple University); Dr ISLAMI, Farhad (American Cancer Society)

Presenter: WIESE, Daniel (American Cancer Society)

Session Classification: Paper Presentations

Track Classification: Health, Justice, Human Rights, Policy & Practice: Health Disparities