

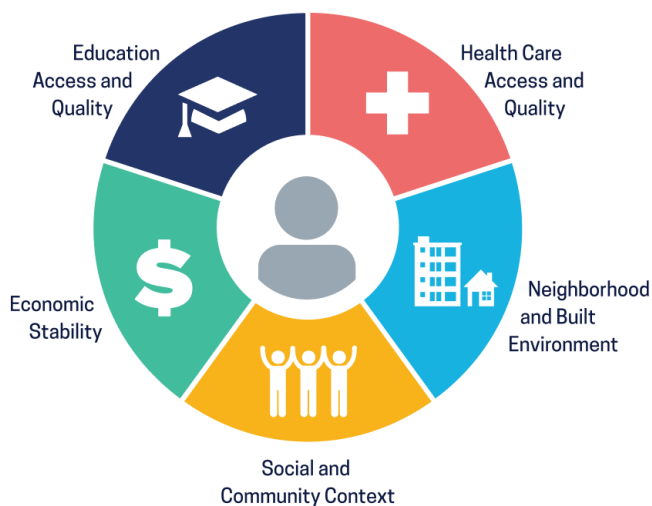
Connections Between Social Determinants of Health, Brain Health, and Dementia in Los Angeles County

Background

Social Determinants of Health (SDOH) are the conditions under which people are born, live, grow, work and age.¹ They also include a broad set of forces and systems such as social policies, racism, or climate change that shape the conditions of daily life. SDOH influence a person's health outcomes in both positive and negative ways; and can contribute to health disparities and health inequities, especially as they relate to brain health and dementia. For example, not having health insurance can make it difficult to manage chronic conditions, such as hypertension or diabetes, which can increase the risk of dementia. It can also prevent someone from getting a timely dementia diagnosis and limits their access to specialty care and support.

Health Disparities vs Health Inequities: Differences in health among population groups are called health disparities. Health disparities that are deemed unfair or stem from some form of injustice are called health inequities.²

Social Determinants of Health¹



According to the US Department of Health and Human Services, SDOH can be grouped into 5 domains: (1) Education Access and Quality, (2) Economic Stability, (3) Social and Community Context, (4) Neighborhood and the Built Environment and (5) Health Care Access and Quality.¹

This brief aims to provide organizations, policy makers, public health practitioners, and other key stakeholders with an overview of the relationship between these SDOH domains, brain health, and dementia and provide some key statistics for Los Angeles County (LAC) related to SDOH.



Dementia: A term used to describe the progressive loss of cognitive abilities that impacts a person's capacity to perform everyday activities. Dementia can be caused by a variety of conditions including Alzheimer's disease, vascular dementia, dementia with Lewy bodies, frontotemporal degeneration, mixed dementia, to name a few.³



Education

Studies have found that people with higher levels of education have a lower risk of developing dementia.⁴

While it is unclear as to how education affects the risk of dementia, there are several possible explanations. For example, some researchers have proposed that education increases cognitive reserve (brain characteristics acquired through intellectual stimulation), which can help preserve brain functioning despite signs of degeneration.⁵ People with education beyond high school are more likely to seek preventive health services, which supports overall health and reduces the risk of chronic diseases, including dementia.⁶ This aligns with local data, which shows that people with a high school degree or less reported visiting the doctor less frequently than those with higher levels of education.⁷

Access to education, however, is not always equal and Black and Latino individuals have lower levels of educational attainment overall than White persons, both nationally and locally.^{7,8}



In Los Angeles County, **Latino residents** are nearly

9 times more likely

than **White residents** to have **not** graduated from high school.^{7*}

*Relative Risk=8.82 (95% CI=8.75-8.88)



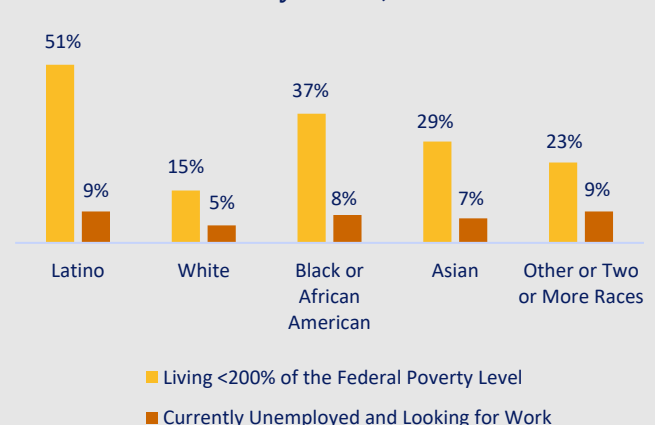
Economic Stability

Lack of access to economic resources may increase a person's risk of memory decline and developing dementia as they get older.^{9,10} In general, people with higher incomes or wealth tend to have lower rates of chronic diseases, longer life expectancy, and better self-reported health compared to people with relatively lower incomes or who are experiencing poverty.¹¹ Furthermore, emerging research indicates that sustained low income and the experience of poverty are associated with lower cognitive performance and higher risk of dementia.⁹

In Los Angeles County, 37% of residents live below 200% of the Federal Poverty Level (FPL), the majority of whom are non-White. Among those living below 200% of the FPL, 22% report that their health is fair or poor.⁷ This is more than twice as high as their wealthier counterparts (10%).

Additional analysis of income and wealth by race/ethnicity shows that, in Los Angeles County, more than half the Latino residents are living below 200% of the FPL (Figure 1).

Figure 1. Indicators of Income and Wealth by Race and Ethnicity in LAC, 2019-2021⁷





Healthcare Access

Regular access to health services can provide more opportunities to protect brain health, detect dementia early, and prevent hospitalizations for people impacted by dementia. Adequate healthcare is particularly important for those with chronic conditions, such as hypertension and diabetes, which, if uncontrolled, may increase the risk of developing dementia later in life.⁴ Furthermore, compared to the general population, adults with dementia have higher rates of hospitalizations for potentially avoidable conditions that can be prevented with access to timely and adequate outpatient care.¹²

Healthcare access can be restricted by a variety of circumstances, such as costly copays, insufficient means of transportation to and from medical visits or lack of health insurance (Table 1).



Table 1. Gaps in Healthcare Utilization and Barriers to Care by Race/Ethnicity in LAC, 2019-2021⁷

	Latino	White	Black or African American	Asian	Other or Two or More Races
Did not visit a doctor in the last year	21%	13%	14%	23%	22%
Missed or delayed medical care	14%	19%	13%	15%	20%
Does not have usual source of care	18%	12%	15%	15%	17%
Difficulty finding primary care	9%	8%	9%	8%	7%
Difficulty finding specialty care	20%	13%	15%	17%	17%
Currently uninsured	13%	3%	4%	5%	6%
Experienced unfair treatment getting medical care due to race/ethnicity*	13%	2%	19%	7%	10%

*2021 Only

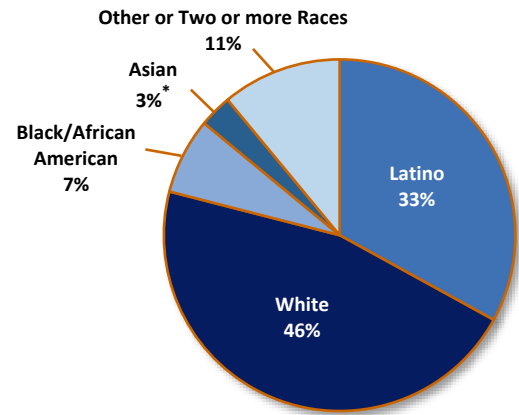


Social and Community Context

Staying socially active can support brain health and possibly reduce the risk of developing dementia. In the US, approximately 1 in 4 adults over the age of 65 experiences social isolation.¹⁴ Research suggests that social isolation is linked to an increased risk of premature death from all causes, as well as a roughly 50% increased risk of dementia.¹⁵ Some possible explanations for this are that social interaction protects brain health by alleviating stress and depression, which lowers inflammation, and by providing mental stimulation, which contributes to an increase in cognitive reserve.¹⁶

In Los Angeles County, 21% of residents over the age of 65 report feelings of loneliness some of the time or often.⁷ Among this group, more White residents reported feelings of loneliness than any other racial or ethnic group (Figure 2).

Figure 2. Self Reported Loneliness Among Older Adults in LAC by Race, 2019-2020⁷



*Statistically unstable due to sample size



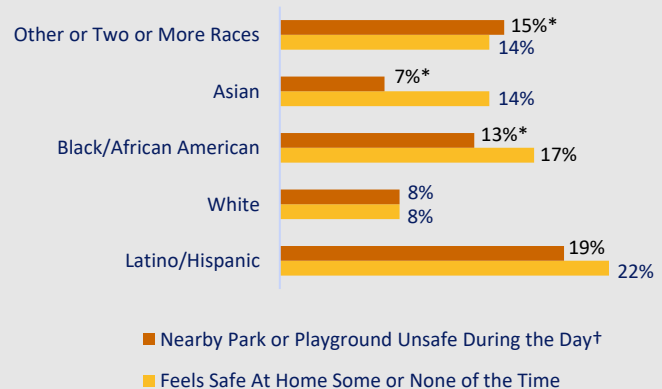
Neighborhood and the Built Environment

Living in an area where the built environment supports community health can have a positive impact on cognition.^{15,10} The built environment refers to the man-made structures and systems *built* to establish living, working, and recreational spaces.¹⁷ This includes homes, schools, businesses, parks, streets and sidewalks. The built environment can offer access to resources that promote healthy behaviors. For example, a neighborhood with low rates of street crime, sidewalks, and sufficient lighting can encourage walking, biking, and exercising out of doors.

Individuals who live in neighborhoods where the built environment is under-resourced are at increased risk of poor health outcomes.¹⁸ Neighborhood disadvantage, which researchers measure using a combination of factors related to a residents' education, income, and wealth, has been linked to higher rates of chronic disease, cognitive impairment, and even earlier death.^{17,19}

In Los Angeles County, more Latino residents report concerns about neighborhood safety than any other racial/ethnic group (Figure 3).

Figure 3. Neighborhood Safety in LAC, 2019-2021⁷



* Statistically unstable due to sample size † Only asked of parents with children under 1

Conclusion

Addressing differences in SDOH is an integral component of working toward health equity for individuals who are at increased risk for chronic and pervasive health conditions, such as dementia. Health inequities can impact brain health and dementia as they relate to early detection, diagnosis and care, as well as caregiving.²⁰ In addition to individuals from racial and ethnic minority groups, SDOH-related challenges regarding dementia disproportionately impact women, members of the LGBTQ, and persons with intellectual disabilities.²⁰ Public health is investing in advancing policies, systems, and environments that promote equitable access to dementia services and support and address SDOH factors that impact brain health.



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