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DEMENTIA RISK REDUCTION

Social Determinants of Health and Dementia Risk: Racism, Discrimination, and Inequity

What Is Already Known

The National Institute on Aging's Health Disparities Research Framework identifies various factors that can affect a person's health across the lifespan. Fundamental factors representing specific levels of analysis are ethnicity, gender, age, race, disability status, and identity. The sociocultural level of analysis adds sociocultural factors (such as values, norms, prejudice, tradition, religion, and collective responses), social factors (such as institutional racism, family stress, financial stress, occupational stress, residential stress, social mobility, and social network), and psychological factors (such as self-concept, stigma, bias, loneliness, and stereotypes).

Understanding this framework is important for identifying pathways of factors that can place people at increased risk for negative health outcomes.

Background and Evidence Base

Sociocultural factors that can affect dementia risk are socioeconomic status, education, environmental exposures, experiences with racism and discrimination, and cultural exposures. The first three are discussed in separate papers.

Racism

Black and Hispanic Americans are more likely to develop Alzheimer's disease compared with White Americans. While there is some research into how the influence of genetics on dementia may differ by race, these small differences in genetic influence do not account for the large differences in dementia risk across racial groups. Rather, studies point to racism and discrimination – rooted in the rules, practices, and policies of federal and state laws, banking policies, and health care systems – as the main drivers of these disparities. Structural racism pervades many aspects of life that directly or indirectly affect the risk for a wide range of conditions, health outcomes, and chronic diseases, including dementia.

A systematic review and meta-analysis examined racism as a determinant of both physical and mental health. Racism was found to be associated with poorer mental health overall as well as increased depression, anxiety, and psychological stress. It was also associated with poorer general and physical health. These effects were not moderated by birthplace or level of education. Participants who had experienced racism had higher rates of depression, which may increase the risk for dementia later in life. Among Black participants, the added stress experienced by Black individuals occurred in diverse settings such as work and community racism, residential segregation, and other socioeconomic barriers. The stress experienced due to racism may also lead individuals to cope by engaging in unhealthy lifestyle behaviors including poor diet and nutrition and cigarette smoking, activities that can contribute to hypertension and diabetes, both major risk factors for dementia.

Specifically related to dementia, a recent study found those experiencing lifetime discrimination have higher dementia incidence, and those reporting discrimination in two or more domains have an even greater risk for dementia. Similarly, among participants In the Black Women's Health Study, both those who experienced daily racism and those who experienced institutional racism had poor subjective cognitive function.

One study investigating the relationship between residential segregation, dementia, and later life cognition found that dementia incidence was higher and cognitive function was lower across segregated neighborhoods in New York City compared with diverse neighborhoods. Another study of Black individuals from four areas around the country found that residential segregation throughout young adulthood was associated with worse processing speed as early as midlife.

Another study found that among Black individuals, executive functioning and memory were lower among individuals who attended segregated schools compared with those who attended integrated schools. In a different study examining schooling, discrimination, and cognition, it was found that among Black individuals, birth and schooling in the Southern United States were associated with lower global cognition. This effect was, interestingly, most significant among those who attended legally desegregated schools in the South in and around 1954, indicating that experiencing the discrimination and chaos that accompanied desegregation may have outweighed the benefits of integrated schooling found in other studies.

Racial discrimination may not only be a risk factor for dementia, but it can also be a barrier to receiving health care for other risk factors for dementia, including diabetes and hypertension.

Health Inequities

Inequities associated with ethnocultural status can be seen in the prevalence of many chronic diseases. For example, among Americans aged 65 years and older, Black Americans are more likely than White and Hispanic Americans to have experienced hypertension (70.6% versus 54.2% and 57.1%, respectively) and stroke (10.6% versus 7.6% and 7.8%, respectively). Similarly, both Black and Hispanic Americans are more likely than White Americans to have experienced diabetes (32.1% and 32.3%, respectively, versus 18.3%).

Disparities in chronic conditions that are risk factors for cognitive decline and possibly dementia are likely a main driver of inequities in the prevalence of Alzheimer's. Black individuals are two times more likely and Hispanic individuals are one and one-half times more likely than White individuals to develop Alzheimer's disease. They are also more likely to be younger at disease onset and to have greater severity of initial Alzheimer's disease symptoms.

Geographic Influences

Some research indicates a connection between place of birth and later life cognition and dementia risk. One study found that Americans born in the "Stroke Belt," a region of higher stroke mortality in the Southeastern United States, were more likely to have a dementia-related death, even if they moved elsewhere later in life, compared with those born outside of the "Stroke Belt."

A similar study examined dementia risk among long-time residents of Northern California. The study found that despite living in California for more than 20 years during later life, birth in a high stroke mortality state was associated with an almost 30% greater risk of dementia. The study also found that birth in a high stroke mortality state was more common among Black individuals, suggesting that place of birth could contribute to racial disparities in dementia risk. However, it is important to note that regardless of place of birth in this study, Black individuals had the greatest overall risk of dementia.

Implications for Public Health

Studies have shown the impact that racism, discrimination, and other cultural influences can have on overall wellbeing and risk of cognitive decline and dementia. Due to a long history of discriminatory policies and practices, addressing inequities and its root causes will require multisector collaboration, including among public health, policymakers, the education system, and the health care system. In addition, given the studies indicating an effect of residential and school segregation on dementia risk – as well as those demonstrating the impact of lifetime exposure to racism – a life-course perspective to addressing dementia risk is important.

There may also be some sociocultural factors that mitigate dementia risk. Such "resilience factors" could include bi- and multilingualism as well as the high value that some communities (such as Hispanic communities) place on family. These factors could provide a point of public health intervention for protecting against dementia.

Discussion

To move toward equity in brain health promotion and risk reduction, it is essential that future research focuses on the potential causal links between racism, discrimination, and cognitive decline. Ensuring inclusion and diverse representation in clinical studies and other research will help improve health equity as well as the appropriateness and effectiveness of interventions to address these risk factors.

The Alzheimer's Association is grateful for the work of Wake Forest School of Medicine in the preparation of this publication, which is supported by the Centers for Disease Control and Prevention (CDC) of the U.S. Department of Health and Human Services (HHS) as part of a financial assistance award totaling $2,973,948, with 100 percent funded by CDC/HHS. The contents are those of the Alzheimer's Association and do not necessarily represent the official views of, nor an endorsement by, CDC/HHS or the U.S. Government.