

Multiple Sclerosis incidence in Black patients: It's time to do away with a racial medical myth.

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For many years, multiple sclerosis (MS) was believed to be a disease that occurred primarily in White persons. However, mounting evidence demonstrates that Black persons may have an equal or even greater likelihood of developing MS than White persons and may experience a higher burden of disease and disability¹⁻³. Prior misconceptions about racial disparities in MS may have arisen, in part, from systematic biases in the data employed to address the issue. For example, some initial impressions of the low incidence of MS in Black persons were derived from Veterans Administration data obtained in the 1950s, even though it was significantly harder for Black veterans to become service connected and included in such investigations at the time.⁴

The notion that Black persons are inherently less susceptible to diseases goes beyond neurological diseases and MS, and has a long, enduring, and pernicious history. For example, it was argued by leading physicians of the time that Black persons were immune to contracting Yellow Fever, a purported biological advantage that made them more suitable to dig graves and handle bodies of persons who had died from the illness.⁵ But erroneous notions of Black immunity are not just relics of the past. For instance, a substantial proportion of medical trainees

and professionals continue believe the medical myth that Black individuals have biological features, such as thicker skin or less sensitive nerve endings that render them less susceptible to pain.⁶ Unfortunately, when persons from marginalized racial and ethnic groups are believed to be inherently immune to or resistant to a disorder, the underlying problem often lies in a systemic failure to look for or treat that disorder in those marginalized populations, with tragic consequences. While many MS researchers and clinical specialists now recognize that Black patients are also at risk of developing MS, generations of neurologists have been trained to think otherwise, contributing to the underdiagnosis of MS in Black persons. Given that racialized notions of disease often exhibit stubborn persistence in clinical practice, it is important to provide robust evidence contradicting these notions when they are untrue.

In this issue of *Neurology*, Langer-Gould et al. report on the results of a retrospective cohort study of over 2.6 million adult community-dwelling members of Kaiser Permanente Southern California, which aimed to determine whether the prevalence of MS varies by race and ethnicity.⁷ The health records of persons who were given an ICD9 code for MS over three-year period were used to determine MS prevalence, stratified by age, sex, and race and ethnicity. Having identified 3868 persons with MS, the authors found that age- and sex-standardized MS prevalence was similarly high among Black (225.8, 95%CI=207.1-244.5) and White (237.7, 95%CI=228.2-247.2) persons, but significantly lower among Hispanic (69.9, 95%CI=64.4-75.5) and Asian persons (22.6, 95%CI=17.1-28.1). The authors also observed that the female preponderance for MS was more pronounced among Black (81.2%) and Asian (83.6%) than White (76.3%) or Hispanic (74.5%) individuals with MS. While MS was most prevalent between the ages of 35 and 64 for all racial and ethnic groups, the prevalence of MS in young adults aged

18-24 was highest in Black and Hispanic persons, lower in White persons, and lowest in Asian individuals.⁷

One of the main strengths of this study is that the authors were able to draw from large, diverse, and relatively unbiased cohort of patients. The finding of a similar MS prevalence in older Black and White persons represents a solid evidence against the notion that MS is an emerging disease in Black persons, otherwise a lower MS prevalence and MS-related mortality in older Black groups compared to White ones would have been detected. It is more likely that the burden of disease in Black persons was not assessed until recently, and therefore wrongly assumed to be low. Another strength of the study is that the diagnosis of MS was confirmed using the revised McDonald criteria through full medical records abstraction including all inpatient and outpatient records, MRI scans, and diagnostic test results (using electronic health records).

The authors' finding that persons who identify as Asian or Hispanic have a lower incidence of MS raises further questions. As the authors note, persons who identify as Asian span an enormous range of geographies, ancestries, and cultural practices. Hispanic identity includes a wide range of cultural and ancestral backgrounds as well. The idea that these broad, highly heterogeneous groups of individuals would all share low levels of MS risk should be greeted with a degree of suspicion, and further research should disaggregate these groups in order to better understand MS risk in specific patient populations. Moreover, the field of neurology's historical misconceptions about MS risk in Black patients should give rise to caution before the field once again concludes that MS is uncommon in any other specific racial and ethnic group. Other limitations of this study include: possible undercounting of true MS patients in the very old groups due to lack of documentation; small samples particularly in Asian males,

which may lead to imprecise estimates; and inability to estimate MS prevalence in the uninsured, although this would have reduced the prevalence in Black and Hispanic persons who were more likely to be uninsured than White persons during the study period.

More broadly, studies that examine the relative risk of disease posed to persons of different racial and ethnic backgrounds should prompt further reflection on what race represents and how it impacts disease risk. Race is not a marker of intrinsic biological categories, but rather a social construct with profound downstream health implications.⁸ When a racial difference in disease risk is observed, it is likely that the structural and social factors that separate races and are already known to strongly influence health in many ways influence this aspect of health as well. As we pursue studies that reveal or disprove the existence of specific racial differences in disease risk, it is important to ensure that our field is also exploring the role of inequities in giving rise to those disparities and the steps required to ameliorate them.

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