Racial Health Disparities in Neurological Care and Incidence of Neurologic Disease

Thank you Chairman Burke, Vice Chair Huffman, Ranking Member Antonio and members of the Ohio Senate Health, Human Services and Medicaid Committee. My name is Elizabeth Page, and I'm here to testify in support of the Senate Concurrent Resolution 14 (SCR 14) declaring that racism is a public health crisis.

I am a third year medical student at The Ohio State University College of Medicine and I have witnessed firsthand how racial disparities affect access to care as well as health outcomes within medical specialties. I am pursuing medicine in order to serve a diverse population of people and advocate for the underserved. I aspire to be a neurologist. Unfortunately, due to societal injustice and barriers to care, black patients have significantly restricted access to outpatient neurologists, despite similar disease burden [1]. Because of access barriers, these patients are far more likely to require emergency room care and experience increased Life Lost to Disability. The increased dependence on emergency care also drives up costs to society due to otherwise preventable or manageable disease.

Numerous studies have routinely documented how minorities have limited access to specialty care [2]. Some patients are not appropriately referred by primary care physicians due to implicit bias. Others may lack access to healthcare due to being uninsured, underinsured, or for fear of being unable to afford specialty care. Furthermore, even when minorities are able to access specialty care, some experience poorer health outcomes due to barriers to treatment adherence and follow-up care, such as lower quality schooling in predominantly Black or Hispanic neighborhoods, less lenient working schedules, or increased childcare burden.

My goal today is to examine health disparities in two of the most common causes of disability within neurology in order to demonstrate the role that racial disparities play in specialty healthcare. I want to emphasize that these are people myself and my colleagues have entered into medicine to serve, but because of the pathological structures of racism in our society, we are unable to reach them.

Stroke Outcomes

Stroke is the fourth leading cause of death and the leading cause of long-term disability in the United States. However, the occurrence of stroke is not equivalent between groups of people. Black people die of stroke at a rate that's three times greater than that of white people. [3] Physicians have long speculated about various genetic variants that promote an increased risk of stroke in this population, but the truth is clear: Racism contributes to a toxic environment of stress and trauma to African Americans which increases risk factors for an amalgam of cardiovascular diseases and stroke. Racial discrimination is increasingly recognized as a

multidimensional environmental stressor. [4] Stress responses to systemic racism and structural violence contributes to increased risk of diabetes, cardiovascular disease, and stroke.

As future physicians, we recognize the importance of the ethical principle of Justice: No person or group should suffer more than others. A second incentive might be the impact to society of life lost: Because minority populations have stroke at younger ages and are often more severe; the cost is far greater per capita then in majority populations. [5]

As politicians and physicians, we owe it to our patients and constituents to ensure they have equitable access to care, preventative treatment, and that we address the environmental factors contributing to early mortality. Just as we would outlaw the dumping of carcinogenic chemicals or the release of air pollutants, we must confront the deadly effects of racism on members of our community.

Migraines

Migraine is the third most common disease in the world; it is more prevalent than diabetes, epilepsy and asthma combined. Migraine is ranked globally as the seventh most disabling disease among all diseases (responsible for 2.9% of all years of life lost to disability/YLDs) and the leading cause of disability among all neurological disorders. [6]

A 2015 study investigated health outcomes of black women and women of low socioeconomic status who suffer from migraine. The study found that these women were more likely to lose a job due to headache and migraine burden. Women of color were also more likely to access the emergency department for migraine crises and experience more frequent and severe migraines. Many of these individuals lacked access to primary and specialty care; or otherwise could not access reliable preventative or abortive migraine medication due to insurance coverage or affordability [7,8].

I have met several of these patients after their long journey with migraine. These women live with disabling migraine more days than not, without reliable treatment. Most days, they are reporting to work with severe pain and increased inability to concentrate. Eventually they may lose work, or need to leave work to visit the ER to receive any relief from this pain. Because they do not have a relationship with a neurologist, of course, they have no disability pay or any options to relieve their discomfort. Most white women do not experience this struggle. Nobody should have to experience this struggle.

Both in research and in the clinic, we encounter far more black women with a delayed diagnosis and delayed presentation to a specialist for disabling headaches that were either self-managed, or were managed inadequately as compared to their white counterparts.

Effective preventative migraine treatment is available that significantly reduces headache burden; unfortunately, race-related disparities prevent African American headache patients from benefiting from these treatments.[9]

By formally acknowledging and taking action to address racism as a public health crisis, we achieve several goals:

- 1) We promote health equity and embody the ethical principle of Justice: we create a community in which minorities have the opportunity to receive an equivalent level of high-quality health care as their white counterparts.
- 2) We reduce the effects of toxic stress in our community members: reducing illness burden and increasing quality of life for all.
- 3) We improve economic outcomes; by reducing the racial disparities of illness burden, we improve the productivity of our community.

Again, I would like to thank the committee and the sponsors of this resolution, Senator Sandra Williams and Senator Hearcel Craig. I am happy to answer any questions you may have.

Thank you,

Elizabeth Page

Sources:

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