

Race Equity and Brain Injury

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This document summarizes a literature review conducted by Monica Lichi, a brain injury research professional. The findings presented here are reinforced by quotes from Eric Washington, a brain injury survivor and advocate who speaks from his own experience with health systems.

NCAPPS recognizes that programs and services that support health and well-being are not fairly distributed. Policies and systems have been designed in ways that limit the access of some communities, especially Black and Brown communities, and make it harder for people to live healthy lives.

Many studies document differences in treatment and outcomes within the healthcare system based on people's race and ethnicity. These include differences in breast cancer screenings, kidney transplants, the prescription of cancer pain medications, eye exams, vaccinations, mental health treatment, and more. A review of studies specific to race-related differences in brain injury outcomes reveals patterns that are, unfortunately, consistent with the disparities in the broader healthcare system.

Incidence of Brain Injury

The importance of examining differences in brain injury care based on race is underscored by several studies that found differences in rates of traumatic brain injury (TBI) by race and socioeconomic status. These studies found a higher incidence of TBI for Black people compared with White people, and a higher incidence of TBI for families with a lower median income than households nationwide regardless of race/ethnicity.^{1,2,3} Relatedly, an examination of veterans showed that, unconnected to their military service, Black and Hispanic veterans show higher odds of experiencing a TBI due to assault or a gun-related injury.⁴

“Because of just how we were raised, you know just growing up in Detroit, Michigan, you're really going to be an athlete, you're going to play football, you'll be a boxer, or you're going to be in a gang and you're going to get jumped on by maybe a cop or another guy – I mean, it was just the way we were. The way we played – we did backflips off of garages. [All that] caused us to have tons of undiagnosed brain injuries which causes issues down the road.”

Disparities in Brain Injury Outcomes

Several studies found that Hispanic and Black people have higher rates of mortality and lower rates of discharge to rehabilitation than White people after TBI.^{5,6,7} (Though some studies found no meaningful difference between groups, so more research into this issue is particularly necessary.)

The literature paints a mixed picture of disparities, and more study is needed to explore factors behind the differences and their impact. After controlling for demographics and severity of injury, race/ethnicity and insurance status

significantly affect outcomes. Specifically, Black and Hispanic people were more likely than White people to have a TBI procedure, and had longer stays in the hospital. Compared with the privately insured, people without insurance were less likely to have a TBI procedure, had longer hospital stays, were less likely to be discharged to rehabilitation, and were more likely to die in the hospital.⁸

“Self-advocacy is not something that I actually was taught. I was forced into it by just being a minority – I had no choice but to fight for myself or to stand up for what was right.”

One study of mental health utilization for children found significant disparities and called for improved transitional care services. Although there were no racial differences in utilization of mental health services during hospitalization, after 12 months all categories of non-White children were significantly less likely to receive outpatient mental health services than their non-Hispanic White peers.⁹

“I understand you know you have to preserve life, but there was no plan of action to say how can we get this guy back to snuff and figure out how to rehabilitate his mind as well as his body at the same time.”

There is also a significant difference in employment outcomes between White people with a TBI and Black people with a TBI,¹⁰ and socioeconomic differences—including race/ethnicity and urban/rural residence—are associated with adverse outcomes after TBI, including depression, anxiety, poor life satisfaction, limited access to outpatient care, worse neurocognitive performance, and higher mortality.^{11,12,13}

“By the time I realized that I had a brain injury, I had straight F's in college and flunked out a hundred times, and I didn't know what was going on. I didn't have a support system like most people, I didn't hear about the Brain Injury Association until maybe two years ago.

I had my [accident] you know in '06, but the funny part about it is when I reached out to my [former] college and colleagues to try to get help, they looked at me and said: 'Well, you should be okay, you guys are tough.'

You guys are tough, that really didn't make a lot of sense at the time, but it did as I got older because [what they meant was] 'you're from Detroit, just be thankful you got a free education and you can just go back home.'”

Although the literature cited here begins to paint a picture of the impact of race on brain injury access and outcomes, there is, on the whole, relatively little research on the topic. More is needed to understand the full shape and extent of racial disparities in brain injury systems as well as to develop the solutions necessary to reverse these inequities.

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