

COVID-19 Testing and Barriers to Vaccine Hesitancy in the Lumbee Tribe of North Carolina

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During the COVID-19 pandemic, the North Carolina Central University Advanced Center for COVID-19 Related Disparities (ACCORD), the Lumbee Tribe of North Carolina, and the University of North Carolina at Pembroke (UNCP) established a partnership named Building Resistance and Vital Equity (BRAVE) to perform COVID-19 testing for Native Americans living in the Lumbee tribal territory of Cumberland, Hoke, Robeson, and Scotland counties. BRAVE was also charged with studying the barriers to COVID-19 testing and vaccine hesitancy in this population. North Carolina has the largest American Indian population in the Eastern United States [1]. The state is home to one federally recognized and seven state-recognized tribes representing 167,808 individuals (1.6% of the total population) [2]. More than half of American Indians in North Carolina live in rural, underserved Tier 1 counties: Cumberland (1.4%), Hoke (8.4%), Robeson (39.4%), and Scotland (11.5%) [3]. COVID-19 vaccination rates among those living in the more rural counties have been significantly lower than the state average (48%), with Cumberland, Hoke, Robeson, and Scotland counties reporting vaccination rates of 47.4%, 23.4%, 27%, and 34.5%, respectively [4].

Introduction

Increased testing has been an important strategy for managing the COVID-19 pandemic and mitigating the impact of the virus on marginalized communities. However, mounting evidence during the pandemic indicates that underserved communities have disproportionate infection rates and are less likely to actively participate in mass testing due to poverty, access issues, inadequate information, logistics, and issues surrounding fear, stigma, and trust [5-9]. American Indians and Alaska Natives have the highest hospitalization and death rates from COVID-19 in the United States [10]. In fact, American Indian populations are 3.4 times more likely to be hospitalized and 2.4 times more likely to die from COVID-19 compared to their non-White, non-Hispanic peers [11]. Socioeconomic vulnerability and

access to care are contributing factors to these disparities [12]. Recent data from nonprofit Surgo Ventures estimates that roughly 20.7 million Americans live in areas known as “testing deserts” where COVID-19 testing facilities are at least 10 miles away [13]. In the four BRAVE counties, there were 24 testing deserts prior to the implementation of the BRAVE testing program.

With support from the BRAVE project, the Lumbee Tribe of North Carolina expanded COVID-19 testing to 25 sites over a four-month period from March 11, 2021, to June 16, 2021. During these four months, while COVID-19 testing numbers were declining in the state, the Lumbee Tribe tested 867 persons for an average of almost 35 persons per testing site. Slightly over 85% of persons tested were American Indian and 5% were African American or Black. The breakdown by gender showed that the majority receiving tests were women (64%). The number testing positive for COVID-19 was 11, or about 1%.

Through ACCORD, we conducted 354 in-person surveys on barriers to COVID-19 testing and vaccination between December 19, 2020, and January 20, 2021, across multiple testing sites in eight North Carolina counties. The United States Food and Drug Administration had recently issued the emergency use authorizations for the Pfizer-BioNTech and Moderna COVID-19 vaccines. We asked participants if they would be willing to take the vaccine once it was available for free. Only 28% of Native American respondents reported that they would “definitely get” the vaccine once it became available for free, compared to White (63%), Black (42%), and Latino (26%) respondents. Twelve percent of the Native Americans stated that they would “definitely not get it” compared to White (0%), Black (9%), and

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Latino (8%) respondents. When asked, "What are the most important things that would have to happen for you to get the vaccine?" 30% of Native American respondents wanted to wait to see what happened to people who got the vaccine first, compared to White (17%), Black (34%), and Latino (20%) respondents. Over one-third of Native American respondents (33%) wanted to see people "like me" get the vaccine without side effects, compared to White (24%), Black (36%), and Latino (22%) respondents. Thirty percent of Native Americans responded that the vaccine needed to be offered close to where they live, compared to White (39%), Black (37%), and Latino (17%) respondents. While American Indians/Alaska Natives make up 1.6% of the population of North Carolina, they make up roughly 1% (48,521) of people vaccinated with at least one dose [14].

The Lumbee Tribe is a state-recognized tribe of 62,500 members and has been engaged in COVID-19 prevention efforts throughout the pandemic. The success of this testing effort can be attributed to the efforts of Lumbee Tribe leadership and close and continuous collaboration with the community. NCMJ

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