

Vaccine Equity: Lessons Learned from the COVID-19 Pandemic

Abstract: *The COVID-19 pandemic has disproportionately affected racial and ethnic minorities, a group who is also less likely to be fully vaccinated. Vaccine hesitancy and vaccine access both play a role in the vaccine inequities observed during the COVID-19 pandemic. Strategies to improve access and reduce hesitancy are discussed.*



Keywords: vaccine equity; vaccine hesitancy; health disparity; pandemic; public health

Disease Control and Prevention, Black Americans are 2.5 times more likely to be hospitalized and 1.7 times more likely die from COVID-19 than White Americans.¹ Likewise, Native Americans have seen 3.2 times as many cases and 2.2 times as many deaths as White Americans and the Latinx population in the United States have seen 2.4 times as many hospitalizations and 1.9 times as many deaths as their White counterparts.¹ Safe and effective COVID-19 vaccinations were rapidly developed

1 dose of a COVID-19 vaccine.² However, as of February 28, 2022, fully vaccinated persons are only 20% Latinx, 10% Black, and .9% American Indian/Native Alaskan compared to 56% White.³ Immunizations to end the pandemic are only successful with high rates of acceptance, access, and uptake for the entire population. Therefore, development of effective strategies to increase vaccination rates is essential in managing the current and future pandemics and promoting health equity among all communities.

Vaccine Hesitancy

Even before the COVID-19 pandemic, the World Health Organization deemed vaccine hesitancy a top 10 threat to global health.⁴ Vaccine hesitancy is characterized by lack of confidence in vaccination and/or complacency about vaccination that may lead to delay or refusal of vaccination despite the availability of services. A confluence of factors exacerbated vaccine hesitancy specific to COVID-19 including vaccine confidence, political factors, and individual attitudes.⁵ Uncertainty regarding vaccine effectiveness, duration of protection, and risk of vaccine-related adverse effects, coupled with the unprecedented speed of the COVID-19 vaccine development,

 Strategies to decrease vaccine hesitancy and improve vaccine access in BIPOC communities will improve vaccine equity and are essential in managing current and future pandemics. 

Introduction

The COVID-19 pandemic has disproportionately affected Black, Latinx, and Native American communities in the United States. According to data from the Center for

and deployed. The first Food and Drug Administration (FDA)-approved vaccines to protect against serious COVID-19 infection were available in December 2020. As of February 2, 2022, 75.3% of the total population in the United States had received at least

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undermine confidence in the American public. Emergency use authorizations, vaccine mandates, lack of trust in those endorsing vaccination, and concerns about profit or political motive also increase mistrust.⁵ Hesitancy for vaccination in racial/ethnic minority populations is increased further by mistrust of the healthcare system and clinical research as a result of a long history of exploitation and unethical conduct (the Tuskegee syphilis study, the unethical and nonconsensual use of cancer cells from Henrietta Lacks, etc.).

A number of evidence-based strategies to overcome vaccine hesitancy have been described. Policy- and community-level interventions including reducing out-of-pocket expenses; requiring vaccination for childcare, school, and college attendance; vaccination programs in schools, child care centers, and Women, Infants and Children programs have all been shown to increase vaccine uptake.⁶ Likewise, engaging community groups, champions, and faith leaders in promoting vaccination also help reduce vaccine hesitancy.⁷ Initiatives that are co-designed, shared, and endorsed by people within the target community are most effective.⁸

Interpersonal-level interventions including a strong quality recommendation from a trusted clinician and use of presumptive, announcement-style language (“Today you’ll receive your COVID-19 vaccine” as opposed to “Are you interested in receiving a COVID-19 vaccine today?”) result in higher vaccine uptake.⁵ In order for clinicians to provide a strong, quality recommendation, adequate education and training is necessary. Training should provide evidence supporting the efficacy, safety, and critical role in the strategic prevention of COVID-19 the vaccine plays and must also promote honest, culturally appropriate communication.

The most effective messaging is positive and appeals to altruism and prosocial behavior. Positive framing or gain-framing messages (emphasize the benefits gained by vaccination) have been shown to be more effective than negative framing messages (emphasize the risk of failing to vaccinate).⁹ Presuming community members have a genuine concern for protecting their own health and that of their community and crafting messaging that appeals to this prosocial behavior will also likely decrease hesitancy.^{10,11}

Vaccine Access

Interestingly, recent research indicates that vaccine hesitancy in Black Americans decreased over time in the COVID-19 pandemic (significantly more than vaccine hesitancy in White Americans) and that ongoing efforts to increase vaccine uptake among Black Americans should attend to a range of vaccination barriers beyond hesitancy.¹² Strategies to improve vaccine access for Black, Latinx, and/or Native American communities should also be prioritized to increase vaccine equity. A survey from the Kaiser Family Foundation found that 37% of Black (vs 24% of White) individuals worry they might have to pay for the vaccine, 23% of Black (vs 16% of White) individuals are concerned about taking time off work to get vaccinated, and 17% of Black (vs 9% of White) individuals worry about finding transportation to the vaccination site.¹²

Strategies to address access-related issues include ensuring universal coverage of vaccines and their administration. Because insurance status, less access to primary care, and delaying medical care due to cost perpetuates lower vaccination rate in Black, Indigenous, and People of Color (BIPOC) communities, efforts should be made to ensure vaccines are available at no cost.^{13,14}

Access to vaccination services at a location that is convenient and a place BIPOC community members trust is also important. In an effort to address these concerns, the federal government established a collaboration with 41 000 community pharmacy partners (the Federal Retail Pharmacy Program) to offer COVID-19 vaccination services within the community pharmacy setting.¹⁵ Of the pharmacies in the federal program, 45% are in high social vulnerability zip codes, which are determined by factors including socioeconomic status, access to transportation, race/ethnicity, and housing, among others. Availability of vaccinations at a community pharmacy allows important access within underserved communities. Ninety percent of Americans live within 5 miles of a community pharmacy.¹⁶ This proximity decreases the transportation barrier for many individuals in BIPOC communities. Availability of vaccinations at a community pharmacy also allows for access outside of the standard clinic setting, and at times, that may be more convenient for patients, especially those with concern for missing work. According to a study by Goad et al, 30.5% of the over 6 million vaccines administered at a large national chain between August 2011 and July 2012 were done so during off-clinic hours (outside of 9:00 am–6:00 pm, Monday through Friday).¹⁷

Access and convenience can also be achieved by providing mass vaccine clinics within the community itself. Several examples of successful community partnerships have been published including a mobile vaccination clinic which visited predominantly Black and Latinx communities in San Bernardino County, California; a 3-day mass vaccination clinic in a church parking lot in Atlanta, Georgia; or a partnership with a non-profit providing resources for immigrants who provided vaccines

on site regardless of immigration status.¹⁸⁻²⁰ Locating vaccine clinics in a known, trusted environment helps eliminate barriers to vaccine access.

Another consideration in access is the move to web-based vaccine registration systems. Reliance on this technology disadvantages communities with less access to computers or high-speed internet in the home—both more common in BIPOC households.²¹

Promoting non-web-based registration opportunities in these populations may help increase vaccine uptake.

Conclusion

Vaccines are only as effective as their rate of uptake. Vaccine hesitancy and lack of access to vaccination services are both higher in BIPOC communities. Strategies to decrease vaccine hesitancy and improve vaccine access will improve vaccine equity and are essential in managing current and future pandemics. Vaccine hesitancy can be reduced by ensuring recommendations for vaccination are delivered by clinicians, champions, and faith leaders who are trusted within the community using strong, positive language that appeals to the prosocial behavior of the community members. Vaccine access can be improved by ensuring the vaccine and its administration are available free of cost, from sites that are both geographically convenient and operating during hours that will not interfere with work. Partnering with community organizations to offer vaccines to BIPOC communities in places they frequent and trust has also proven successful.

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