

The Impact of Race and History on COVID Vaccination Acceptance

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### ABSTRACT

This article delves into cultural and historical factors that negatively impact minority patient coronavirus vaccination acceptance. It provides a basic review of past transgressions committed against minority communities by American medical and scientific research fields. This article then discusses how medical providers can potentially address or mitigate minority patient fears about vaccination.

### KEYWORDS

coronavirus; culture; history of medicine; minority patients; vaccination

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In January 2021, the first batch of Moderna's vaccine for coronavirus disease (COVID) finally arrived at our overseas military base. Two vials came in that initial batch, only enough for 20 people with priority going to healthcare workers. The first 19 immunizations were received without hesitation. It can be easy to assume that any healthcare worker would readily be vaccinated after being on the frontlines of the COVID pandemic and seeing firsthand the devastation that the virus can cause. But the 20th healthcare worker – we'll call him John Doe – stood off alone in a corner, seemingly nervous. A nurse let me know that John had some personal questions about the vaccine that he wanted to discuss with a medical provider. I escorted John to an exam room to discuss his concerns.

John expressed apprehension over his history of atrial fibrillation; he was worried that receiving the vaccine might worsen his condition or increase his risk of stroke. I informed him that the COVID vaccine would do neither and is actually recommended for individuals with medical conditions like his, which put them at higher risk for complications if they contract COVID. The patient still looked unsettled. I ended up using motivational interviewing techniques to guide the patient through pros and cons of receiving the vaccine. I tried to empower him, reiterating that taking the vaccine was his choice and that he shouldn't feel pressured to receive it just because his colleagues were. John expressed a desire to protect himself from COVID, but something was holding him back. Several times he mentioned waiting to take the vaccine until a couple of months later, but when asked what specifically might change in that time period that would make him more comfortable with receiving the vaccine, John's answer was, "Nothing."

Eventually, John communicated a discomfort with taking the vaccine because typically his family didn't go to doctors and preferred natural remedies over medications and vaccinations. It was then that I finally understood that I was dealing with an underlying cultural barrier to vaccination.

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According to the latest U.S. census data, the non-White population is currently 39.3% and increasing.<sup>1</sup>

According to the Centers for Disease Control and Prevention, as of December 2020, only 49.1% of adults intend to receive a COVID vaccine. Non-intent to receive the vaccine is highest among the non-Hispanic Black race. Other historically disenfranchised groups; including Latinos, women, and those with lower education and income; also have higher estimates of vaccination non-intent compared to other groups.<sup>2</sup>

My patient was Latino. Traditional Latin American medicine is based in practices that are generally considered to be complementary or alternative by the mainstream medical community. Historically, herbal therapies; musculoskeletal manipulation; and spiritualism, rituals, and charms have made up the bulk of Latino “folk” medicine. Patients who believe in traditional healing may view certain aspects of Western medicine as unnatural. Some Latinos avoid Westernized physicians altogether, preferring curanderismos - the traditional healers in Mexico and much of Latin America.<sup>3</sup>

Furthermore, past transgressions perpetrated by healthcare institutions against minorities still affect trust in medicine today. Since the Renaissance, theoretical scientific efforts at racial categorization assigned dark complexioned people to the lowest ranks of the human species. In the U.S., such thinking was taught in universities and medical schools through the 1950s. This led to things like the use of stolen African American dead bodies for dissection and surgical demonstrations and the Supreme Court legalizing unethical and eugenic sterilization policies in the 1920s. Those sterilization policies primarily targeted Native American, African American, and Puerto Rican women for involuntary, coercive hysterectomies. It is estimated that about 60,000 people of color; along with the poor, disabled, and institutionalized; were forcefully sterilized from the 1920s to the 1970s. In 1932, a U.S. Public Health Service experiment, in conjunction with the Tuskegee Institute, began recruiting 600 poor black men

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from Alabama for a study on syphilis, promising free testing and treatment. The 399 syphilis-positive study participants were, in fact, never treated despite being told otherwise. Instead, their symptoms were merely observed until they died. The study wasn't terminated until the 1970s. Unfortunately, abuses of minorities by the medical system did not end with the civil rights movement.<sup>4,5</sup> In the 1990s, researchers at the New York State Psychiatric Institute, Queens College, and the Mount Sinai School of Medicine unethically experimented on 6- to 11-year-old boys, the majority of whom were Hispanic or Black, with Attention-Deficit/Hyperactivity Disorder or who were the younger brothers of "delinquents" with court records. The boys were given Fenfluramine, a now-banned diet drug that has been associated with valvular heart disease and pulmonary arterial hypertension, so that the researchers could observe their behavioral response to the drug and measure for a chemical that was believed to be linked to aggression.<sup>6</sup>

Research has shown that minorities have not forgotten their past medical exploitation. In 2009, 117 Hispanic households in a small, rural, predominately Hispanic Washington State community were surveyed regarding barriers to participating in research. 65% of households reported cultural beliefs as a barrier, and 71% of households reported a lack of trust in the biomedical research field.<sup>7</sup> A similar study exploring African American attitudes towards research participation found mistrust of the health care system, stemming from historical events like the Tuskegee Syphilis Study and reinforced by perceived modern-day healthcare discrimination, to be a primary barrier to participation in medical research.<sup>8</sup> Moreover, a recent 2020 study investigated predictors of Hispanic patient intentions to receive the Influenza vaccine. Two of the biggest reasons study participants opted out of vaccine receipt were perceived dangers of the flu vaccine and patient distrust in the government.<sup>9</sup> In spite of effective and safe annual vaccines being available, African Americans and Hispanics continue to demonstrate low flu vaccine uptake, stemming, at least in part, from years of bias in and mistrust of mainstream medicine.<sup>10</sup>

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Unfortunately, these low influenza immunization acceptance rates may foreshadow low COVID vaccine acceptance by minority communities.

One cannot provide holistic, optimized healthcare to minority patients without first understanding their cultural beliefs and the historical relationship between minorities and the medical system. After John Doe opened up about his cultural hesitations regarding the vaccine, I felt compelled to meet him halfway. I opened up to him about my own experiences as an African American, expressing my personal reasons for taking the vaccine despite such a choice being incongruent with beliefs of some of my own family members. I believe that it was my openness and willingness to speak to John on his level that helped him make a final decision. Such communication has been found to be paramount in establishing a good provider-minority patient relationship.<sup>3</sup> John did decide to receive the COVID vaccine, however what truly mattered was empowering John to make an educated decision about his health, regardless of what that decision was. It will be important for us as physicians to be open, straightforward, and genuine with our minority patients if we want them to be receptive to education on the COVID vaccines and make decisions about vaccination that are not based in fear, distrust, or misinformation. This is especially so given that we're asking people, not only to receive a vaccination, but also to participate in research in a way given that the COVID vaccines are still undergoing long-term studies.

Based on the understanding of past violations of minority rights by the medical community, my experiences with minority patients, and my experiences as a minority patient, I recommend that providers consider the following when discussing vaccination with their minority patients:

1. If your practice or hospital regularly serves minority populations, DO read more materials like this in an effort to educate yourself on those minority's cultural beliefs about medicine and historical

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relationship with medicine. This will aide you in cultivating a provider-patient relationship, foreseeing barriers to care, and achieving patient compliance.

2. DO thoroughly educate yourself on the COVID vaccine options to better educate patients and field patient questions.
3. DO educate patients on the basics of how vaccines work. This may make vaccines seem less foreign or unnatural.
4. DO NOT play down potential vaccine side effects and the Emergency Use Authorization status of COVID vaccines. Doing so may cause patient distrust. Discuss both the potential risks and benefits of vaccine receipt in full.
5. DO respect patient autonomy. Engage patients about vaccination with the goal of education. If you are too forceful in your vaccine advocacy, it may damage the provider-patient relationship. Understand that patient reservations and fears regarding vaccination are often reasonably based in past mistreatment by the medical community.
6. DO NOT hesitate to ask female patients about any potential fertility concerns. In Dec 2020, social media was flooded with unfounded and false reports – initiated by a former Pfizer employee named Dr. Yeadon – that Pfizer’s COVID vaccine potentially causes infertility in women.<sup>11</sup> Given the American medical system’s history of forced female sterilization, it’s not unexpected that many female patients now have concerns regarding how the COVID vaccine will impact their future fertility.
7. DO ensure that you allot enough time for vaccination counseling. More uncertain or uneducated patients may require longer counseling (i.e. 30 minutes).
8. DO keep offering the vaccine at follow-up visits if not initially accepted.
9. DO have resources at the ready to direct patients to so that they may conduct their own research on the COVID vaccines if they wish. DO also educate patients on common sources of misinformation.
10. DO initiate an open discussion on barriers to vaccination for those who decline it.

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11. DO use a translator if available for those patients whose primary language is not one that you speak. This will allow you to better communicate and connect with those patients.

## CONFLICT OF INTEREST STATEMENT

None declared. The author has no potential, perceived, or real personal, professional, or financial conflicts of interest.



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