COVID-19 VACCINATION DISPARITIES AND HESITANCY

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Numerous studies have shown that the COVID-19 pandemic has disproportionately affected people of color in the United States. Black, Hispanic or Latinx, and Native American people are approximately four times more likely to be hospitalized and nearly three times more likely to die of COVID-19 than their majority counterparts. There are numerous reasons for these disparities, many of which are the same as other findings of disparity in other disease states (i.e. the social determinants of medicine). We know that vaccination is the key to preventing COVID-19 in all people.

Vaccinated People – What We Know
America’s vaccination effort is among the best in the world. However, where race is known, people of color are getting vaccinated at lower rates than white Americans. The Kaiser Family Foundation analysis reveals a significant disparity where race is known (about 54%) for those who have received at least one dose of vaccine as of April 13, 2021. It shows the racial/ethnic breakdown as White Americans 65%, Hispanic or Latinx 11%, Black 9%, Asian 5%, Indigenous American or Alaskan 2%, Native Hawaiian <1%, and Multiple race 9%. A YouGov poll further supports and illustrates this point as well. Among White adults polled, 26% have gotten the vaccine, compared to 17% of Black adults and 11% of Hispanic adults.

Access to Vaccines
A big part of what is occurring is disparate access to vaccination. There is a consistent pattern across states where Black and Hispanic Americans are receiving smaller shares of distributed vaccine in total. The share of vaccines going to these ethnicities is also under proportioned to the prevalence of death from COVID-19 occurring in those population segments. Additionally, due processes such as limited publication of availability in certain communities, online scheduling requirements where internet access is unavailable, or availability of vaccination only during working hours severely hinders those of lower socioeconomic status from having adequate access.

People of Color and Vaccine Hesitancy
For a myriad reasons, many members of the minority population are hesitant to receive a COVID-19 vaccine. It is unknown exactly how much this affects vaccination rates in people of color, but the phenomenon most definitely exists. Polls early in the pandemic reported that only 40% of Black Americans would be willing to get the vaccine compared to 65% of White Americans. Fortunately, a more recent poll indicates that this number has increased to 60% for Black Americans in some areas. The issue is still pronounced due to the disparity of increased hospitalizations and deaths from COVID-19 in the African American population. This is exactly the population that you would want to have the highest rate of vaccine willingness.

Those of us who are in a position to help fight for vaccination equity should do so. However, even if you are not in a position to influence public health matters, you can still make a difference individually. As TeamHealth clinicians, we are often the only healthcare provider some patients see during the pandemic. Vaccines are indeed the “game changing” weapon against the SARS-CoV-2 virus. We should realize our moral, ethical, and clinical duty to fight against vaccine hesitancy by taking any opportunity to educate our patients about the advantages of vaccination and help dispel misinformation and myths, especially in our patients of color.
Strategies for Addressing Vaccine Hesitancy

The strategy for addressing vaccine hesitancy should begin with a non-judgmental inquiry into whether or not your patient (of any demographic) has or has not been vaccinated against COVID-19. If not, do they plan to do so? If the answer is no or not yet, you should inform your patients that you are encouraging everyone to be vaccinated because this is the only way to beat this disease and end this pandemic. As a follow-up, ask if there are any questions you can answer regarding the vaccine to help allay any fears they may have.

For patients of color, you can emphasize your encouragement for vaccination because of the disparate effects of COVID-19. Once you feel like you have the green light for discussion, an opening conversation can go like this (tailored to the specific patient, of course).

Mr./Mrs. ______, I know historically there has been mistrust by people of color in both the government and the medical industry, and admittedly rightfully so. But regarding the COVID-19 vaccine, the issues of the past were eliminated. The brightest minds developed the vaccine, including lead scientists who were African-American, such as Dr. Kizzmekia Corbett. There were no shortcuts taken in its development. The government did not develop the vaccine. There were over 100,000 people in the three vaccine studies, and in each study, more than 25% were people of color. The studies proved that the vaccine was safe for all, there were no increased serious adverse effects for people of color. Currently there have been over 100 million people vaccinated, with about 37 million of those vaccinated being people of color. The delivery of these vaccines is under the most intense safety monitoring in the history of the United States, and serious adverse reactions are still very rare.

As we know, some people have made up their minds about not taking the vaccine, and that is their right. Our goal is not to change the minds of those that are never going to consider being vaccinated. The purpose is to engage in a dialogue with those patients willing to do so and help them make an informed decision. For many that discussion may lead to them being vaccinated when they otherwise may have not been willing to do so. In those cases, we ask that you be prepared to provide resources for patients to be able get the vaccine in your local area.
We want to use the opportunity to encourage and answer questions, not to strong-arm anyone. That said, your encouragement may spark further questions. Here are a few you may get and some suggested answers.

1. **Was the vaccine developed too fast?**
   No, even though it seemed the vaccine was developed fast, it went through the same rigors as other previously developed vaccines. The technology used to develop the vaccine has been years in the making. Operation Warp Speed was mainly the government giving money to developers, removing previous red tape, and getting suppliers in line to help the pharmaceutical companies get what they needed to bring the vaccine to patients rapidly.

2. **Did the government develop the vaccine?**
   No, the vaccines were developed by three private pharmaceutical companies, Moderna, Pfizer, and Johnson & Johnson. The government involvement was only to provide finances and help secure needed supplies.

3. **Can you get the coronavirus from the vaccine?**
   No, you cannot get COVID-19 from the vaccine. None of the vaccines used live virus that could cause COVID-19.

4. **Is the vaccine safe?**
   Yes, none of the original trials reported any serious safety concerns for the Moderna, Pfizer or Johnson & Johnson (J&J) vaccines. The number of serious problems in those who participated in the studies were very low, and there was little difference in those who received the actual vaccine and those who received the placebo. Now over 100 million people have been vaccinated, and there has not been any change in those findings.

5. **What kind of side effects can be caused by the vaccine? Can they be serious?**
   The most common side effects are pain or swelling at the injection site. You may also get fever, muscle aches, chills, fatigue, headache, or a combination of these symptoms. These effects may last a day or two and are just a signal that your immune system is responding to the vaccine and not a sign that you now have coronavirus. The most serious reactions in people receiving the vaccine were serious allergic or anaphylactic reactions, which only affected 2.5 - 11 patients for every million who received the vaccine. Compare that to 4 out of every 10,000 people who have serious food allergies or 5 of every 1,000 who have serious reactions to penicillin-based antibiotics.

6. **Doesn’t the vaccine change your DNA?**
   No, the Pfizer and Moderna vaccines use a synthetic strand of mRNA designed to make your body produce the protein found on the surface of the coronavirus. Your immune system sees that protein as foreign, so it builds up immunity to it, so that you will be protected if you get exposed to COVID-19. This process does not involve your DNA. The J&J vaccine used a different method not involving mRNA that was used previously in the development of the Ebola vaccine. The J&J vaccine also cannot alter your DNA.

7. **Can’t I just wait to see if there are any long-term effects of the vaccine?**
   The problem with waiting is the risk of contracting COVID-19. The unknown risks of long-term effects from the COVID-19 vaccine are not nearly as great as the known risk of serious illness or death from COVID-19. There is mounting evidence that getting COVID-19 can produce long-term complications, some of which could be serious. To date, no such long-term effects of any of the vaccines has been detected.

8. **What happens if I don’t get the vaccine?**
   If not enough people elect to get the vaccine in the United States, we won’t reach herd immunity, where the virus decreases due to a decrease in susceptible hosts. Worse, if not enough people in your community, those with whom you live, work, shop, etc., don’t get the vaccine, your community won’t have herd immunity regardless of what the rest of the country does. With new variations (mutations) of the virus appearing to be more contagious, your risk of getting COVID-19 and the risk of serious illness or even death increases.

9. **I have other medical conditions. Is it still safe for me?**
   Yes, many of the participants in the COVID trials had chronic medical conditions. Since these were the people COVID affected the most, they wanted to be sure it was safe and effective for that group. The benefits of the COVID-19 vaccines were found to be as good or better in groups of people with chronic medical conditions when compared to generally healthy people.
10. What about the Johnson & Johnson vaccine? Is it safe?
Yes, the Johnson & Johnson vaccine is safe. All vaccines are monitored for any adverse reactions in people who have received the vaccine, whether scientists believe the vaccine caused the reaction or not. The Johnson & Johnson vaccine was paused to investigate rare types of blood clots that happened in 1 in a million patients. Many more patients get blood clots that can be attributed to birth control pills and smoking. As a matter of fact, if you randomly choose 6 million unvaccinated people (the number of people who had received the J&J vaccine before the pause) and watched them over a period of time, some of them will develop blood clots simply because of the incidence of blood clots. What is attractive about the Johnson & Johnson vaccine is that it is only one shot, and still does very well in preventing COVID-19 and extremely well in preventing people from being hospitalized and dying from COVID-19.

11. I heard the vaccine can cause Bell’s palsy. Is that true?
No, unfortunately, a social media post went viral when a healthcare worker developed Bell’s palsy, (a condition that can cause one sided facial muscle paralysis), after the vaccine, which scared many people. Findings show that Bell’s palsy is a rare event with COVID-19 vaccines, and is not any different than other viral vaccines, such as H1N1 flu vaccine. In fact, the frequency of Bell’s palsy in the vaccine group is likely no different than in larger populations that don’t get vaccines. In the trial, out of the 70,000 plus participants in the Pfizer and Moderna trials, 7 in the vaccine group developed Bell's palsy and one in the placebo group. As of March, with over 60 million vaccinations, 844 developed Bell’s palsy, so a .000014% chance. Plus, the facial paralysis in Bell’s palsy is almost always temporary. Rarely is it permanent.

12. What about rumors regarding tracking devices in the vaccine?
This is simply not true. The vaccine is a 100% liquid injection, which cannot carry tracking technology.

13. I heard that the vaccine is being used for the genocide of African-Americans. What about that?
Unfortunately, some radical groups have promoted this conspiracy theory, but it is just not true. The current battle is to decrease the disparities because more White Americans are receiving the vaccine than Black Americans. There is no appreciable genetic difference between the races. To make the vaccine detrimental to one race and not another is impossible. So that doesn’t add up.

14. I hear the vaccine can cause infertility, is that true?
No, this theory has not been proven to be accurate and was based on misinformation. Some scientists recognized some similarities between the Syncytin-1 protein (found in the placenta) and the SARS-CoV-2 spike protein. Therefore they believe the vaccine would also target placenta tissue and thereby result in miscarriages or inability to get pregnant.

The truth is the similarities are so minute between the Syncytin-1 protein and the spike protein that the antibodies developed against COVID-19 would not target placental tissue. The COVID-19 vaccines do not cause infertility.

15. What if I had COVID-19 and have already recovered. Do I still need the vaccine?
Yes, according to the CDC, you should be vaccinated regardless of whether you already had COVID-19. Experts do not know how long having COVID-19 protects you from getting sick again, or being able to carry and spread the virus. If you were treated for COVID-19 with monoclonal antibodies or convalescent plasma, you should wait 90 days before getting a vaccine.