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# **COVID-19** Vaccination Hesitancy in African American and Latinx Populations

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#### Abstract

In the United States, the COVID-19 pandemic has exacerbated health disparities among African American and Latinx populations with particularly low vaccination rates. Vaccine hesitancy is a key barrier to African American and Latinx groups from acquiring the COVID-19 vaccine. Studies highlight that contextual influences, individual and group influences, and vaccinespecific influences have prominence in COVID-19 vaccine hesitation. This literature review summarizes COVID-19 vaccine hesitancy characteristics and the health communication strategies that legislators may consider when developing COVID-19 vaccination policies and programs in the United States.

**Key Words**: literature review, coronavirus disease-19, COVID-19 pandemic, vaccines, COVID-19 vaccines, vaccine hesitancy, minority health, health disparities

Millions of people around the world have been affected by the COVID-19 pandemic. The development of COVID-19 vaccines is one step to alleviate the burden of the global pandemic. Despite the distribution of vaccines across the United States, the COVID-19 pandemic has had a disproportionately negative impact on racial minority groups, particularly within African American and Latinx populations. These two groups have lower vaccination rates because of their hesitancy of taking the vaccine.

Vaccine hesitancy is described by the SAGE (Strategic Advisory Group of Experts) Working Groups as a "...delay in acceptance or refusal of vaccination despite availability of vaccination services" (MacDonald, 2015). Vaccine hesitancy is complicated and situational. This relates to the accessibility of vaccines and how easy or challenging it can be for a minority to get one. The SAGE Working Group also established the Vaccine Hesitancy Determinants Matrix, which explored three factors that can cause vaccine hesitancy: contextual influences, individual and group influences, and vaccine-specific influences (MacDonald, 2015).

This literature review investigates these core factors from the Matrix that influence COVID-19 vaccine hesitation among African American and Latinx populations. Additionally, the goal of this literature review is to address the question: "What are the most effective methods for promoting COVID-19 vaccinations in the United States, particularly among African Americans and Latinx populations?" This evaluation of the research can help healthcare practitioners and policymakers recognize COVID-19 vaccination hesitancy among minorities across the country. Finally, this literature review will encourage effective interventions that will result in higher COVID-19 immunization rates and possibly additional disease vaccinations across the country.

#### Methodology

# **Sources of Information**

This literature review was conducted utilizing commonly used public health research databases such as Web of Science, PubMed, Science Direct, and Google Scholar, as recommended by a public health professor, graduate student, and librarian at the University of California, Merced.

#### Search

This literature review used a conventional search approach throughout Web of Science, PubMed, Science Direct, and Google Scholar. After choosing certain research databases, a comprehensive Google Document sheet was constructed to record articles based on the following requirements: classification, filtering, and qualification.

*Classification*. The investigation began by manually entering the following key terms into the search engine: COVID-19, vaccine, vaccination, vaccine promotion, vaccine hesitancy, vaccine uptake, hesitation, health disparities, healthy equity, community health, public health, communication, minorities, intention, racial, minority groups, underserved communities, and community engagement. Since COVID-19 impacted the United States around early 2020, this literature review focused on research articles published between March 2020 and October 2021.

*Filtering*. Abstracts of articles in public health research databases were evaluated during the filtering process. As stated in the classification section, keywords must be included in articles. Words that were synonyms for the keywords proved to be effective as well. These articles were then assessed for eligibility after the abstracts had been thoroughly analyzed in terms of the topic and relevant keywords.

*Eligibility*. In order to be included in the literature review, full articles were reviewed. They must address the causes of COVID-19 vaccination reluctance in African American and Latinx populations, either directly or indirectly, and provide suggestions on how health professionals and researchers can effectively communicate with minority populations.

### Results

More than 1,500 scholarly articles were found in the databases. The total number varied based on the keyword combinations used to find the articles. Only 15 publications were ultimately chosen for the literature review.

### **Publication Characteristics**

11 articles were published in 2021, 3 articles in 2020, and 1 article (which defined vaccination hesitancy) was published in 2015. Most studies that examined the prevalence of vaccine hesitancy in minority communities utilized qualitative research methodologies, such as focus groups, interviews, and surveys. Articles that identified strategies to confront vaccine hesitation used elements of community engagement, community-based participatory research, and public health and psychology-based theoretical models/strategies.

# Determinants of Vaccine Hesitancy in African Americans and Latinx Populations

Contextual influences, individual and social influences, vaccine-related influences, and communication techniques to minimize vaccine hesitancy emerged as important themes from the review of all 15 research publications. It is important to keep in mind that these influences intersect with one another.

*Contextual Influences*. Contextual influences refer to the "influences arising due to historic, social, cultural, environmental, health system or institutional, economic or political factors" (MacDonald, 2015). According to nine research studies, both African American and

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Latinx populations express fear and mistrust towards healthcare professionals and medical institutions/systems (Carson et al., 2021; Garcia et al., 2021; Marcelin et al., 2021; Marquez et al., 2021; Moore et al., 2021; Okoro et al., 2021; Privor-Dumm et al., 2021; Strully et al., 2021; Webb-Hooper et al., 2021). Minority groups were apprehensive about obtaining inadequate vaccine care because of their fear towards the inconsistent quality of vaccines in comparison to white and wealthy people, according to a community-based qualitative study in Los Angeles (Carson et al., 2021).

One study described the transportation to vaccine clinics as a major logistical concern. This is because clinics were usually located in areas that were further away from their homes and in historically wealthy neighborhoods (Okoro et al., 2021). According to the same study, the change from in-person to online health services has made it difficult for many African Americans to navigate the healthcare system (Okoro et al., 2021). Another study indicated that African Americans without health insurance in the southern United States were more likely to develop vaccination resistance (Moore et al., 2021).

*Individual and Group Influences*. Individual and group influences refer to the "influences arising from the personal perception of the vaccine or influences of the social/peer environment" (MacDonald, 2015). Vaccine hesitation stems from a distrust of the medical system.

For example, African Americans have a long history of vaccine apprehension, which can be traced back to medical experiments such as the Tuskegee Syphilis Experiment (Okoro et al., 2021). Mexican Americans, like African Americans, have a reluctance to visit the doctor, according to a focus group study. They feared encountering law enforcement, immigration, as well as treatment as test subjects (Garcia et al., 2021; Marquez et al., 2021). Additionally, African American and Latinx populations described were uncertain about the information on the COVID- 19 vaccine (Carson et al., 2021; Marquez et al., 2021; Strully et al., 2021). This fits in with the examples from the section on contextual influences.

Another study found that there is an excess amount of widely spreading COVID-19 vaccination misinformation on various social media platforms (Marcelin et al., 2021). Researchers noted identifying accurate information would be harder for Latinx populations, particularly among those with immigrant backgrounds. Language barriers are a primary reason why individuals from immigrant communities have a difficult time receiving factual health communication messages regarding the COVID-19 vaccine (Marcelin et al., 2021).

*Vaccine-Related Influences*. These are the "specific issues that directly relate to the vaccine or vaccination" (MacDonald, 2015). According to two publications, finding pertinent information on the COVID-19 vaccine was challenging for many African American participants who did not have access to the internet (Okoro et al., 2021; Web-Hooper et al., 2021). Consequently, there would be no answers to questions or concerns, and vaccination opportunities would be missed (Okoro et al., 2021). Because of their age and overall health status, several study participants believed they had a low risk of contracting COVID-19 disease (Okoro et al., 2021; Web-Hooper et al., 2021). A study done in Los Angeles reported that African Americans and Latinx participants doubted the COVID-19 vaccine's rapid development and whether the procedure had been rushed (Carson et. al, 2021).

Furthermore, these participants debated whether or not they should wait for future variations of the vaccine with improved safety (Carson et. al, 2021). Aside from those questioning the efficacy of the vaccine, some were confused and did not have enough information on the vaccine requirements. For example, participants were concerned about their health insurance

coverage and potential financial costs (Carson et al., 2021; Moore et al., 2021). Many were not aware that COVID-19 vaccinations were free.

# **Communication Techniques to Reduce Vaccine Hesitancy**

The literature review will now explore publications that suggest communicative approaches to reducing vaccine hesitancy in African American and Latinx populations, given that the determinants of vaccine hesitancy have been addressed.

*Emotional Strategies*. Vaccination has always been a sensitive issue in many American communities. Indeed, since the early stages of the COVID-19 pandemic, people's negative emotions have intensified. Anger, fear, shame, and anxiety are some of the most common emotional reactions to vaccinations (Chou and Budenz, 2020). These unfavorable feelings have been linked to anti-vaccine groups (Chou and Budenz, 2020; French et al., 2020).

One study emphasizes the importance of using emotional engagement to help with behavior change. Researchers found that portraying vaccination as a concrete and achievable technique for reducing COVID-19 risk can help people cope with unpleasant feelings (Chou and Budenz, 2020). Another way to elicit positive emotions is to emphasize the value of family and community ties as a way to demonstrate the perceptions of responsibility for COVID-19 risk reduction (Chou and Budenz, 2020).

In contrast to the positive emotion study, another study hypothesized that vaccine communication tactics would be more effective if both personal and collective health consequences were highlighted (Finney-Rutten et al., 2021; Motta et al., 2021). One communication strategy is to make people afraid of contracting the COVID-19 virus. The Terror Management Theory was used by the researchers to engage people in a coping process in which death is unavoidable at any time (Motta et al., 2021). When COVID-19 presents itself with

mortality or harm, the focus on death pushes people to embrace healthier behaviors and attitudes (Finney-Rutten et al., 2021; Motta et al., 2021).

*Motivational Interviewing*. Healthcare workers, especially those who are from that community, are crucial since they have access to proper vaccine information and can even persuade minorities to acquire their COVID-19 vaccination. Motivational interviewing is a health communication approach that incorporates a "collaborative conversational style for strengthening a person's own motivation and commitment to change" (Gabarda and Butterworth, 2021). According to one study, motivational interviewing communication approaches lessen patient defensiveness, allowing healthcare personnel to connect with them and enhance cooperation (Gabarda and Butterworth, 2021). In addition to providing accurate information, motivational interviewing can improve an individual's belief that their actions will have an impact on a larger scale (Gabarda and Butterworth, 2021).

*Community Engagement*. According to the World Health Organization, community engagement is "a process of developing relationships that enable stakeholders to work together to address health-related issues and promote well-being to achieve positive health impact and outcomes" (WHO, 2020). In order to implement COVID-19 vaccination communication messages, agencies and governments must actively listen to community concerns, solicit input, and exchange discussions (French et al., 2020). According to one study, health care providers may acquire a community's trust by being modest, truthful, and open-minded (Marcelin et al., 2021).

Public health researchers collaborated with African American pastors in a communityengaged research study in Baltimore City to respond to the local black community's concerns and mistrust about the COVID-19 vaccination (Privor-Dumm and King, 2020). In the same study, researchers observed that black community members prefer to get information about COVID-19

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vaccines from trusted messengers, such as pastors, rather than from medical experts (Privor-Dumm and King, 2020). Partnerships with pastors and religious institutions aided trusted messengers to bridge the gap between health professionals and community members. Moreover, community health workers are critical because they understand the needs of their respective communities and can explain health practices to them.

One publication highlighted the important role trusted messengers played when Latinx community members made the decision to visit community vaccination clinics (Marquez et al., 2021). Members of the Latinx community believed that obtaining information and recommendations from someone they trust was preferable to receiving information and guidance from flyers or other forms of media (Marquez et al., 2021). According to another study, individuals are more trusting of sources apart from healthcare professionals. Teachers, neighbors, and community leaders are examples of reliable sources (Strulley et al., 2021). As a result, approaches in which the community can be involved in COVID-19 vaccine communication initiatives are highlighted.

### Discussion

The strengths and limitations of the comprehensively examined publications in the literature review will be discussed in the following sections.

## Strengths

Most of the publications analyzed in this literature review utilize qualitative research methodologies such as focus groups, interviews, and surveys. Researchers can use these study methodologies to assess aspects linked to vaccine hesitation based on people's opinions and experiences. Qualitative data focusing on individual experience is highly effective and can be thoroughly examined. Furthermore, research on vaccine hesitancy will aid in influencing future vaccination uptake initiatives.

The research publications that focused on the concepts from the Vaccine Hesitancy Matrix identified the complexity of vaccine hesitancy and how the three major influences intersect with each other. In terms of effective communication, one of the strengths of the emotional and motivational interviewing strategies is that it allows those who are still hesitant about receiving the vaccine to learn more about the vaccine's benefits and how they can help themselves and their community minimize the COVID-19 pandemic burden. Furthermore, literature on vaccine hesitancy underlined the need of community health workers or "trusted messengers" in offering culturally appropriate and sensitive health communication methods and community engagement.

# Limitations

In general, there is currently relatively little research on how to help and support Latinx and African American people who are vaccine hesitant. One drawback of several of the publications is that the vaccinations were still in the process of being made available to the general population in 2020. Most of the research was completed in 2020 and published in 2021. Additional qualitative data on vaccine hesitancy in the two populations in the current year of 2021 would be more informative. Despite its advantages, using trusted messengers as part of a community engagement communication plan has some drawbacks. Considering the historical context of minority groups' mistrust of medical institutions, there may be instances when trusted messengers are unable to persuade community members who are cautious of anything health-related to change their opinions.

Another prevalent weakness in the publications is that they lack emphasis on the significant variations in vaccine hesitation behaviors between African American and Latinx populations.

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Future research should look at the differences amongst communities, which could lead to the development of intervention programs dedicated to specific groups. Additionally, the communication techniques lacked strategies that are designed for minority groups. Some of the health communication tactics appeared to be overly broad and simplistic.

#### Conclusion

For the most part, COVID-19 vaccine hesitancy is still a significant challenge among the African American and Latinx populations in the United States. This review of the literature emphasizes the importance of community health workers in facilitating communication between healthcare institutions and community members. Future vaccine hesitancy research should concentrate on how African American and Latinx populations differ in terms of their community needs. This will improve prospective interventions because communication tactics will be specialized to African Americans, Latinx, and possibly other minority populations. Moreover, future research should investigate how vaccine hesitancy changes over the course of the COVID-19 pandemic.

It is important to understand the intersectionality between contextual, individual and group, and vaccine-specific influences pertaining to vaccine hesitancy as it showcases the barriers African Americans and Latinx populations face throughout the pandemic. This subject offers public health professionals an opportunity to better grasp the implications and complexities of such attitudes among different communities. When establishing regulations corresponding to the COVID-19 vaccine and public health campaigns, healthcare professionals and policymakers should be mindful of what causes vaccination hesitancy in those specific populations as well as current health communication approaches.

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