10-22-2025

Mental Health Amongst African American Healthcare Workers and Covid Vaccine Mandates

Christopher Brandlin
Walden University

Walden University

College of Health Sciences and Public Policy

This is to certify that the doctoral dissertation by

Christopher P. Brandlin

has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

Review Committee
Dr. Gregory Campbell, Committee Chairperson,
Public Policy and Administration Faculty

Dr. Lydia Forsythe, Committee Member,
Public Policy and Administration Faculty

Chief Academic Officer and Provost
Sue Subocz, Ph.D.

Walden University
2025

Abstract

Mental Health Amongst African American Healthcare Workers and Covid Vaccine Mandates

by

Christopher P. Brandlin

MBA, Fayetteville University, 2022

BS, California State University, Long Beach, 2007

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Public Policy and Administration

Walden University

November 2025

Abstract

This qualitative case study investigated vaccine hesitancy among African American healthcare workers in Los Angeles County, California in light of employment loss following the State Public Health Officer Order of August 5, 2021. The literature indicated that vaccination policies have impacted the psychological health of healthcare workers, especially those with vaccine doubts. The research problem addressed in this study was that the mental health effects among African American hospital workers who lost employment as a result of vaccine hesitancy was not known. The purpose of this generic qualitative case study was to explain the factors contributing to vaccine hesitancy in this demographic, the related mental health consequences of job displacement, and the perceptions of healthcare administrators regarding the mandate's application through the lens of the critical race theory and the rational choice theory. The findings were that healthcare administrators agreed with frontline staff that the mandate rollout fell flat on cultural sensitivity and yielded information that can potentially be used to improve public health strategies relating to vaccine policies among healthcare workers. This study not only focused on individual experiences of each healthcare worker, but it also addressed broader public health suggestions, thus this study contributed to the discussion surrounding health equity and policy effectiveness in certain minority populations. This study created implications for positive social change as it integrated structural humility into health system decision-making, which allows stakeholders to promote both community safety and racial equity among all populations.

Mental Health Amongst African American Healthcare Workers and Covid Vaccine Mandates

by

Christopher P. Brandlin

MBA, Fayetteville University, 2022

BS, California State University, Long Beach, 2007

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Public Policy and Administration

Walden University

November 2025

Acknowledgments

I would like to express my deepest appreciation to my advisor, Dr. Gregory Campbell, for his ongoing communications, his unwavering support, and his valuable guidance throughout the completion of this dissertation study. I would also like to thank my other committee member Dr. Lydia Forsythe for her intuitive feedback and supplementary assessment during this process.

Table of Contents

List of Tables

Chapter 1: Introduction to the Study

Introduction

Healthcare workers faced immense challenges during the COVID-19 pandemic that exacerbated pre-existing mental health issues (Xu et al., 2023). The pandemic caused disruptions to work–life balance, increased risk of contracting the virus, lack of personal protective equipment, long working hours, and fear of infecting loved ones (Xu et al., 2023). These stressors disproportionately affected marginalized communities and may have contributed to higher vaccine hesitancy rates among African American hospital workers (Momplaisir et al., 2021). Therefore, this population warrants special attention to understand the mental health impacts of losing their livelihoods due to vaccine mandates and the intersecting challenges of racism and poverty. Exploring barriers to healthcare access and culturally sensitive support services can help similar institutions develop equitable policies that prioritize well-being over workforce demands during crises affecting public health.

In this chapter, I introduce the research study. The chapter begins with an overview of the problem and provides a brief summary of the relevant literature to establish the background and identify the gap in knowledge that this study aims to address. The problem statement includes a clear definition of the research problem and its significance. Following this, the chapter outlines the purpose of the study, research questions, and the theoretical framework grounding the study. An overview of the research design and methodology is also presented. Finally, key terms are defined, assumptions and limitations of the study are discussed, and the potential significance and

implications of the research are explained to conclude the chapter. The chapter ends with a transition to the next chapter.

Background

The literature on vaccine hesitancy demonstrated significant concerns among healthcare workers. Various researchers uncovered differences in rates of hesitancy between demographic groups (Al-Obaydi et al., 2022; Momplaisir et al., 2021). Al-Obaydi et al. (2022) and Momplaisir et al. (2021) found that Black, Hispanic, Asian, and those with allergy histories reported greater hesitancy compared to White workers through analyses of vaccination data and employee surveys. Ahamed et al. (2022) also found differences between professions, with doctors expressing more positive attitudes than nurses on social media regarding COVID-19 vaccines. Researchers also highlighted discrimination and distrust of healthcare institutions as influences on the vaccination decisions of healthcare staff (Woodhead et al., 2022).

Vaccine mandates in the healthcare sector became prominent during the COVID-19 pandemic. In California, the state health department issued orders in 2021 mandating vaccination for all healthcare employees to reduce transmission and protect vulnerable patients (Department of Public Health, 2021). Noncompliance resulted in hundreds of workers losing employment or facing suspension (Lenthang, 2021). While researchers have evaluated uptake levels and drivers of hesitancy, more research was needed on vulnerable populations disproportionately affected, such as racial and ethnic minority healthcare workers facing job termination due to vaccine requirements (Magee et al., 2022; Thampy et al., 2024).

While prior research has contributed to understanding vaccine hesitancy, a gap remained in exploring the mental health impacts of termination for healthcare workers with hesitancy (Boschung et al., 2023; Moradpour et al., 2023). Previous studies have not specifically examined the effects on African American hospital workers in Los Angeles County, California, who lost employment due to COVID-19 vaccine mandates (California Department of Health Care Access and Information, 2021; Cerullo, 2021; Lenthang, 2021). This population faces compounding factors such as historical discrimination and socioeconomic challenges that can exacerbate psychological distress from involuntary job loss (Woodhead et al., 2022).

Understanding how termination affects mental health in this group is critical to ensure fair and compassionate policies (Lawrence, 2023). Identifying psychological effects can help tailor support services (Rossi et al., 2023), while examining reasons for hesitancy may reveal the need for cultural sensitivity in health messaging (Momplaisir et al., 2021). Ultimately, in this study, I address an underrepresented population experiencing a public health issue with far-reaching consequences. The findings have the potential to inform ethical practices that consider both individual and community health.

Problem Statement

The specific research problem addressed in this study was that researchers have not investigated the mental health effects among African American hospital workers who lost employment as a result of vaccine hesitancy in connection with the State Public Health Officer Order of August 5, 2021. The issue prompting this study is the widespread vaccine hesitancy in the United States concerning the COVID-19 vaccine, particularly

among African American healthcare workers (Al-Obaydi et al., 2022; Momplaisir et al., 2021). This hesitancy has been exacerbated by mandates imposed by governmental and healthcare organizations, which have led to significant job losses for workers refusing vaccination (Peterson et al., 2022). Vaccine hesitancy is influenced by multiple factors, including ethnic background, race, and socioeconomic conditions, underscoring the complexity of responses to vaccine mandates (Al-Obaydi et al., 2022; Momplaisir et al., 2021).

Specifically, the State Public Health Officer Order of August 5, 2021 (Executive Order No. NR21-242), mandated by the California Department of Public Health (CDPH), required healthcare workers to be fully vaccinated by September 30, 2021, to address the surge of hospitalizations driven by the Delta variant and to protect vulnerable Californians and healthcare staff. This mandate, which also extended to visitors in healthcare settings, directed facilities to restrict access to unvaccinated individuals, significantly affecting healthcare workers who chose not to be vaccinated (Department of Public Health, 2021).

Existing research has explored vaccine hesitancy and associated mental health impacts among healthcare workers generally, but there remains a critical gap in understanding the mental health effects on African American healthcare workers who lost employment due to such mandates. The study focused on Los Angeles County, California, examining these workers' experiences with anxiety, depression, panic disorders, and PTSD because of employment termination related to vaccine hesitancy (Lawrence, 2023; Rego et al., 2023). Given that African American healthcare workers

constitute 5.4% of California's healthcare workforce (California Department of Health Care Access and Information, 2021), understanding the unique experiences within this population can provide insights that inform public policy and employment practices, particularly given the growing awareness of mental health issues within the workplace context.

In previous research, scholars have described the need for targeted studies that explored the intersection of vaccine hesitancy, employment consequences, and mental health outcomes among specific ethnic groups (Al-Obaydi et al., 2022; Rossi et al., 2023). Additionally, findings from studies in other countries, such as China, showed heightened psychological challenges for healthcare workers post–COVID-19 management, underscoring global relevance (Xu et al., 2023). In this study, I aimed to fill this gap by investigating how forced vaccine mandates affected the mental health of African American healthcare workers in Los Angeles County, thereby contributing to the fields of public policy and healthcare management with a focus on equitable and ethical treatment in employment decisions related to public health policy compliance.

Purpose of the Study

The purpose of this basic qualitative case study was to explore the reasons for vaccine hesitancy among African American healthcare workers in Los Angeles County, California, the mental health effects of their employment loss due to the State Public Health Officer Order of August 5, 2021 (Executive Order No. NR21-242), and the perspectives of healthcare administrators and managers involved in the development and implementation of the mandate, ensuring a comprehensive analysis of its public policy

and administrative implications. This purpose aligned with a qualitative approach as it pertained to the phenomena chosen for this topic. The central phenomenon of interest was understanding the individual factors that contributed to vaccine hesitancy decisions within this population. Findings from this research may provide valuable insights to inform public health outreach approaches tailored for African American healthcare workers and increase COVID-19 vaccination rates in this group.

Research Questions

The current study was guided by three research questions (RQs):

RQ1: Based on the responses from the different participants of the study, what were the reasons for the vaccine hesitancies of the African American healthcare workers in Los Angeles County, California, who lost their employment due to the vaccine mandate?

RQ2: Based on the responses from the different participants of the study, what were the mental health effects of the African American healthcare workers in Los Angeles County, California, who lost their employment due to the vaccine mandate?

RQ3: How did healthcare administrators perceive the policies and implementation of vaccine mandates affecting African American healthcare workers in Los Angeles County, California?

Theoretical Framework for the Study

The critical race theory (CRT) and rational choice theory (RCT) formed the conceptual framework for this study. CRT emerged in the late 1980s and early 1990s as a theory centered on how racism operates in American society (Greene, 2021; Mitchell,

2020). CRT posits that racism occurs in all aspects of American life and is perpetuated and changed across equitable policies and laws. A key premise of CRT is that racism can hardly be redressed because it is normalized and now often covert (Long, 2021). This theory was connected to the RQs because they were focused on finding ways through which general societal trends of discrimination could have been another contributing factor in the rates and consequences of vaccine hesitancy among African American healthcare workers.

RCT postulates that people make choices in ways that maximize benefits and minimize cost or risk (Fumagalli, 2020). In vaccine decision-making, this theory is applied to depict an individual considering the costs and benefits of vaccination based on a personal perception of vaccine safety and efficacy and the risk of disease (Fumagalli, 2021). This theory helped explain why vaccine hesitancy emerged among some healthcare workers who perceived the risks of vaccination to outweigh its benefits. The RCT related to the present study in that it framed how African American healthcare workers might have made decisions about vaccination based on a cost–benefit analysis conducted within a historical context of medical mistreatment and injustice. Utilizing this conceptual framework, the researcher explored how higher-order social factors, such as systemic racism described by CRT, in concert with individual perceptions of risk described by the RCT, interacted to create vaccine hesitancy and adverse employment consequences among African American healthcare workers.

Nature of the Study

To address the RQs in this qualitative study, the research design involved a basic qualitative case study of one major hospital in Los Angeles County, California. I used a basic qualitative case study to understand the lived experiences and perceptions of African American healthcare workers in Los Angeles County, California, who faced vaccine mandate requirements and subsequent termination of employment. A basic qualitative case study design was appropriate as it allowed exploration of this phenomenon through the lens of those directly impacted (Priya, 2021).

I conducted semistructured interviews and three focus groups among 15 African American healthcare workers who were terminated due to vaccine mandate noncompliance, along with healthcare administrators and managers involved in the development and implementation of the vaccine mandate. Purposeful sampling ensured the selection of information-rich cases for in-depth analysis (Nyimbili & Nyimbili, 2024). Semistructured interviews were used to explore participants' decision-making regarding vaccination, the impact of job loss, and perceived effects on mental health and well-being.

Saldana's (2016) coding techniques were applied to analyze data and discover themes and descriptions within the interview transcripts. Using Saldana's two-cycle coding process of descriptive and pattern coding, I organized the data into meaningful categories conceptualized as major findings. Research rigor was ensured through meticulous record-keeping, description of the sample, and presentation of evidence, such as participant quotes to support themes (see Adler, 2022). By taking a qualitative

approach focused on individual experiences, the study provided an in-depth understanding of this issue from the perspectives of those affected.

Definitions

African American: A person who originates in any of the Black racial groups of Africa (Braveman & Parker Dominguez, 2021).

Anxiety: An emotion characterized by feelings of tension, worried thoughts, and physical changes like increased blood pressure (Marvaldi et al., 2021).

Depression: A mood disorder that causes a persistent feeling of sadness and loss of interest (Marvaldi et al., 2021).

Employment: A job that provides regular payment or wages (Elliott & Chambers, 2022).

Employment termination: Employment termination is the permanent separation of an employee from a company or organization (Elliott & Chambers, 2022).

Healthcare workers: All paid and unpaid persons serving in healthcare settings who have the potential for direct or indirect exposure to patients or infectious materials, including body substances (e.g., blood, tissue, and specific body fluids); contaminated medical supplies, devices, and equipment; contaminated environmental surfaces; or contaminated air (Marvaldi et al., 2021).

Mandatory vaccination: A public health policy that requires vaccination against one or several communicable diseases, such as polio, measles, etc., before early education or school entry (Momplaisir et al., 2021).

Mental health effects: The psychological and emotional state of an individual in regard to trauma, distress, or impairment that affects one's cognitive, behavioral, or social skills (Momplaisir et al., 2021).

Panic disorder: Panic disorder is an anxiety disorder characterized by recurring unexpected panic attacks, fear of future attacks, or worry about the consequences of an attack (Marvaldi et al., 2021).

Posttraumatic stress disorder: PTSD is a mental health condition that is triggered by a terrifying event (Marvaldi et al., 2021).

Public policy: A course or principle of action adopted or proposed by a government, party, business, or individual. In this study, public policy refers specifically to California vaccination regulations for healthcare workers (Mohan et al., 2023).

Vaccine hesitancy: Delay in acceptance or refusal of vaccines despite availability of vaccination services (Ahamed et al., 2022).

Vaccine mandate: A governmental edict or policy requiring vaccination against one or more communicable diseases as a requirement for participation in identified activities, employment, or access to public spaces and private businesses (Lawrence, 2023).

Vaccine mandate: A rule or regulation requiring individuals to be vaccinated against one or several communicable diseases as a requirement for attending school, traveling, working in certain occupations, or participating in certain activities (Ahamed et al., 2022).

Assumptions

Assumptions are factors that are out of my control yet are critical to the meaningfulness and completion of the study (Nkwake & Nkwake, 2020). Assumptions represent beliefs that are considered true, or at least plausible, without proof or verification (Akanle et al., 2020). There were several assumptions for this study. First, I assumed that the mental health effects (anxiety, depression, etc.) would be accurately reported by the participants through self-reported measures such as surveys and interviews. While completely objective measures of mental health effects do not exist, I assumed the participant responses reflected their actual experiences.

Secondly, I assumed that interested participants who met the eligibility criteria would be willing to participate in the study. Due to the personal nature of discussing job loss, mental health, and vaccine hesitancy, some potential participants may have declined involvement. However, I assumed that a sufficient sample could be obtained. I also assumed that the sample of African American hospital workers in Los Angeles County who lost their jobs due to vaccine mandates represented the broader population of this group. While transferability was limited to this specific context, I assumed the sample captured perspectives shared across this demographic.

These assumptions were necessary, as without the participants honestly reporting their experiences, I could not assess the key mental health outcomes. Sufficient sample size was also needed to draw meaningful conclusions (Adeoye-Olatunde & Olenik, 2021). To explore this issue as it impacted African American hospital workers, I had to assume their perspectives offered insights reflecting that broader population in this

context. I designed the study to mitigate these assumptions as much as possible through self-reported validated scales and obtaining a representative sample.

Scope and Delimitations

The scope defines the parameters or boundaries of a study (Akanle et al., 2020). Delimitations refer to the limitations or boundaries in a study that are deliberately imposed by the researcher (Adeoye-Olatunde & Olenik, 2021). For the scope of this study, I focused specifically on exploring the mental health effects such as anxiety, depression, panic disorders, and PTSD among African American hospital workers in Los Angeles County, California, who lost their employment as a result of vaccine hesitancy in connection with the State Public Health Officer Order of August 5, 2021 (Executive Order No. NR21-242) mandated by the CDPH. This focus was chosen because there was limited research specifically examining the mental health impacts on this population after termination due to vaccine mandates. Understanding these effects can help inform policies and treatments.

There were several delimitations for this study. I delimited the study population to African American hospital workers in Los Angeles County who were terminated from their positions between September 30, 2021, and December 31, 2021, due to the vaccine mandate. Hospital workers of other races/ethnicities and those terminated outside this timeframe were excluded from the study. While vaccine hesitancy and mandate impacts may affect other demographic groups, I chose to focus specifically on the African American population for this initial study due to time and resource constraints.

I used structured interviews to collect data on mental health symptoms among participants. Other potentially relevant factors, such as specific reasons for vaccine hesitancy or social determinants of health, were not directly investigated due to the scope of the current study but could be examined in future research. Additionally, while the theoretical framework for this study, including the CRT and RCT, provided context, they were not directly tested as part of this study.

Limitations

There were several limitations I acknowledged in this study. Limitations refer to potential weaknesses or constraints that are out of my control but could influence the study design or results (Bergen & Labonté, 2020). One potential barrier when collecting the data included obtaining consent from the healthcare workers and any Health Insurance Portability and Accountability Act restrictions from accessing data from various hospitals, as well as challenges in recruiting participants for one-on-one interviews. To avoid such limitations, I sent out a broad survey to all hospital workers in Los Angeles County, California, and the survey questions narrowed down to the inclusion criteria for these healthcare workers, including African American racial identification, vaccine hesitancy and refusal to receive the vaccine during the period in which the forced vaccine mandate was enacted, and termination of employment due to such refusal. Moreover, I avoided any personal bias relating to the study, especially when interpreting the research findings.

Significance

This study is significant in advancing understanding in public policy and administration in several key ways. First, it addressed a gap in understanding by specifically examining the mental health effects among African American hospital employees in Los Angeles County who lost employment due to COVID-19 vaccine hesitancy. While prior research found higher rates of vaccine hesitancy among African American healthcare workers, the effects of job loss due to mandates had not been thoroughly examined (Al-Obaydi et al., 2022; Momplaisir et al., 2021).

Second, it has the potential to advance practice and policy. The findings could help inform how healthcare employers and human resources departments respond to vaccine hesitancy among African American staff in order to avoid potential mental health consequences of termination while still ensuring public health. They may also provide guidance for governmental public health policymakers on crafting vaccine mandates in a way that considers the potential downstream impacts on the healthcare workforce.

Finally, positive social change could result from a more nuanced understanding of the issues. Healthcare organizations may gain insights into how to address staff concerns and hesitancies in a culturally sensitive manner that respects personal beliefs. For underserved African American communities in particular, the healthcare sector could benefit from maintaining a diverse workforce. Broader society may also derive benefits from public policies and institutions that account for disparate impacts along racial lines.

Summary

Healthcare workers faced immense challenges during the COVID-19 pandemic that exacerbated mental health issues (Xu et al., 2023), and vaccine hesitancy was prevalent among staff, with African American workers reporting higher rates than White colleagues (Al-Obaydi et al., 2022; Momplaisir et al., 2021). In this basic qualitative case study, I sought to understand the reasons for vaccine hesitancy and the perceived mental health effects of losing employment due to mandates among African American hospital workers in Los Angeles who were terminated between specific dates (California Department of Health Care Access and Information, 2021; Cerullo, 2021; Lenthang, 2021). CRT and RCT formed the theoretical framework to explore how broader discrimination and individual risk assessments may have intersected to influence vaccination decisions and consequences for this population (Fumagalli, 2020, 2021; Greene, 2021; Mitchell, 2020). I conducted semistructured interviews and focus groups with 15 participants who met specific criteria. The next chapter, Chapter 2, contains a literature review of the existing gap in research.

Chapter 2: Literature Review

Introduction

The purpose of this qualitative study was to understand the reasons for vaccine hesitancy among African American healthcare workers in Los Angeles County, California, as well as the mental health effects of losing their employment because of the State Public Health Officer Order of August 5, 2021 (Executive Order No. NR21-242) mandated by the CDPH. This order required workers in health care settings to be fully vaccinated or receive their second dose by September 30, 2021. The specific research problem I addressed in this study was that researchers had not investigated the mental health effects among African American hospital workers who lost their employment because of vaccine hesitancy in connection with the August 5, 2021, mandate (see Department of Public Health, 2021).

The literature demonstrated the importance of the connection between vaccine skepticism, mental health, and culturally appropriate interventions, especially for vulnerable populations such as African American healthcare workers impacted by vaccine enforcement. For instance, Shen et al. (2023) provided an example of how community-based organizations (CBOs) built trust and improved perceptions of vaccines through culturally appropriate communication. Similarly, Rahman et al. (2021) found that healthcare workers are key players in overcoming barriers and promoting vaccine trust within targeted communities. These examples highlight the value of culturally competent outreach and the influence of trusted messengers in addressing vaccine hesitancy.

Perceived mistrust, which has historical and moral explanations, played a crucial role in vaccination decisions and mental health. Goodwill and Fike (2023) and Nan et al. (2022) associated racial skepticism and values such as liberty and purity with higher rates of hesitancy and anxiety. Culturally effective practices, as discussed by Rego et al. (2023) and Nan et al. (2022), emphasized the need to embrace cultural data and beliefs when developing public health interventions. Furthermore, Boschung et al. (2023) and Rossi et al. (2023) provided evidence of the effectiveness of gender-sensitive and culturally tailored communication to reduce vaccine hesitancy among vulnerable populations. As discussed by Yassi et al. (2023) and Moradpour et al. (2023), structural factors such as rural–urban differences and economic status further magnified hesitancy, underscoring the importance of considering contextual factors. These findings support the need for culturally sensitive and trust-based approaches involving community leaders to address vaccine reluctance and its mental health consequences.

In Chapter 2, I review the literature on critical aspects of vaccine hesitancy and its broader implications. The chapter begins with an exploration of theoretical foundations, setting the stage for understanding the phenomenon. I then examine various themes narrowing down to the specific research problem. The key topics explored in the literature include the reasons African American healthcare workers are reluctant to take vaccines, the psychological effects of job loss due to noncompliance with vaccine policies, conditional and culturally sensitive mandates as an ethical and psychological issue, community and trust-based approaches to address vaccine hesitancy and mental health needs, and insights on vaccine hesitancy in vulnerable populations along with

related policy implications. The chapter concludes with a summary, conclusions, and a transition to the next chapter.

Literature Search Strategy

In the literature review, I present the COVID-19 vaccine mandate, discuss and define vaccine hesitancy, examine mental health, and analyze the mental health effects on African American healthcare workers terminated from employment because of the State Public Health Officer Order of August 5, 2021. I also review the policies set forth by the CDPH, which required workers in health care settings to be fully vaccinated or receive their second dose by September 30, 2021. The purpose and intent of the literature review were to provide the most accurate and applicable materials related to my research topic. This process included selecting peer-reviewed articles, governmental reports, and scholarly publications that addressed vaccine hesitancy, mental health outcomes, and culturally informed interventions relevant to African American healthcare workers in the context of vaccine mandates.

This study included peer-reviewed articles, books, and dissertations from Walden Library databases and Google Scholar. In utilizing Walden databases, I used Academic Search Complete, the Criminal Justice database, and ProQuest Criminal Justice. In using these databases, the materials were primarily limited to scholarly articles published between 2018 and 2024. However, recent studies, especially within the last 5 years, were severely limited in this area of research (see Cavanagh et al., 2022).

My literature search strategy consisted of reputable sources such as books, peer-reviewed journal articles, dissertations, professional websites, and federal government

publications. Articles were accessed through Google Scholar and the following Walden University research databases: PubMed, PsycINFO, Google Scholar, EBSCOhost, and Web of Science. I conducted extensive database searches using key words and phrases, including vaccine hesitancy, mental health, African American healthcare workers, CBOs, cultural competence and vaccine acceptance, trust and vaccine uptake, vaccine mandates and mental health, and COVID-19 vaccination. I also searched using terms such as trust-based interventions and social determinants of health to locate articles that might have otherwise been overlooked. The search strategies yielded over 300 articles, of which 60 were pertinent to the topic.

Theoretical Foundation

I adopted CRT and RCT for this study. CRT is a theoretical framework that was developed more than 4 decades ago. The main concept of the framework is that race is a social construction, and racism is not only a matter of individual prejudice or discrimination but also systemic and legal (Lawrence & Hylton, 2022). Furthermore, CRT presupposes that various spheres of American social life, such as healthcare, housing, employment, criminal justice, and education, contain racism intertwined in procedures, policies, regulations, and laws that produce racially disparate outcomes (Lin, 2023). The basic postulates of this theory were developed in the framework for legal analysis in the 1970s and 1980s with the works of Richard Delgado, Kimberlé Crenshaw, and Derrick Bell (Pollack & Zirkel, 2013).

According to Wolfe and Dilworth (2015), CRT has five main pillars: racism as the norm, the denial of a racially blind society, White establishments permitting or

endorsing racial invasions if they are to White advantage, historical distortion, and giving a platform to the understanding of people who have typically been silenced. CRT has been applied before to examine how aspects of society are shaped by and influence concepts of race and identity, such as in the context of educational leadership practice (Pollack & Zirkel, 2013). It was thus a proper framework to guide this study on the experiences of African American healthcare workers, particularly in examining the mental health consequences for those who lost their jobs due to mandatory vaccinations.

CRT includes three main tenets that are highly relevant to this study: people of color in the United States experience racism as a normative process, racism benefits the dominant cultural group, and the social context develops racial norms (Wright et al., 2022). This view is also captured in the CRT notion of interest convergence, which asserts that Black people are only afforded access to resources or rights when it serves the interest of Whites (Bell, 1980). For example, Bell (1980) argued that in the Brown v. Board of Education decision, White self-interest was evident since civil rights for Black Americans aided in preserving the moral high ground over the Soviet Union during the Cold War. Although the executive order requiring COVID-19 vaccination applied to all healthcare workers irrespective of race, it can be hypothesized that African American healthcare workers experienced different effects because vaccine hesitancy rates are higher in the African American community. Momplaisir et al. (2021) found that Black, Hispanic, and Asian individuals demonstrated higher tendencies toward vaccine hesitancy than their White counterparts.

The use of CRT in healthcare has been both discussed and debated, particularly because it has faced criticism and controversy in the United States. For example, the Trump administration released a memorandum halting funding for CRT training, labeling it anti-American and divisive (Zewude & Sharma, 2021). Critics, however, have argued that CRT is useful in explaining and addressing racism in healthcare. The American Medical Association recognizes that racism affects population health and encourages the detection of racial bias in clinical decision-support tools (Geneviève et al., 2020). Some scholars have advised against reporting race-ethnic bias results without appropriate contextualization, as this may perpetuate racist tropes (Chowkwanyun & Reed, 2020). Furthermore, some medical educators recommend incorporating CRT into medical curricula to address deficiencies in current biomedical and social determinants of health education, enabling trainees to understand and combat health disparities (Tsai et al., 2021). The controversy surrounding CRT in healthcare reflects broader societal debates about race and equality.

This study was also underpinned by RCT, particularly in explaining decision-making in the context of a healthcare setting. Hewig et al. (2011) described that RCT holds that people attempt to rationalize their choices in significant decisions. The study examined how healthcare workers balanced their perceptions and narratives when turning down the COVID-19 vaccine despite the requirements of Executive Order No. NR21-242. RCT was originally advanced by Becker (1976) and is associated with the subjective expected utility theory proposed by Savage (1954). This theory is based on the economic behavioral model of Homo Economicus, which presupposes that people are self-

interested optimizers. It implies that in decision-making, prospective options are appraised in terms of their value for money, and the option providing the best utility or usefulness is chosen (Becker, 1976). Regarding delivery location decisions, RCT assumes that women, as decision-makers, act rationally and logically by engaging in a cost–benefit analysis. For example, the theory of planned behavior, one subtype of RCT, has influenced various public health fields (Kothe & Mullan, 2014; McDermott et al., 2015).

According to RCT, decisions are made after comparing several options (Hewig et al., 2011). The theory is essentially a synthesis of rational and affective dimensions, thinking and feeling, or "cognition" and "affect." Additionally, the development of related concepts, such as habitus, was intended to respond to and expand upon RCT. This theoretical framework can be applied to analyze decision-making processes, such as choosing a delivery place, from positions that may differ or even oppose one another. In the present study, this framework provided insight into how employment choices and consequences may have arisen from the distinction between personal beliefs and organizational policies among healthcare workers.

RCT as a framework in healthcare decision-making has received considerable criticism. Although RCT remains influential in the social sciences (Herfeld, 2022), its application to healthcare is complex. Critics have argued that "thin" RCT does not offer the most comprehensive explanation of real-world choices, while others have suggested it might have limited applicability (Fumagalli, 2020). RCT has given rise to the prisoner's dilemma concept, which has been used to study ethical conflicts in healthcare; however,

such analyses have been criticized as flawed and reductionist (Rogowski & Lange, 2022). Rogowski and Lange (2022) identified 53 studies describing 68 different types of dilemmas in healthcare and public health. In many instances, authors proposed institutional changes to avoid these dilemmas, but the analyses were often flawed due to oversimplification or inconsistency. Moreover, the quality of evidence about the nature of the dilemmas and the feasibility of the proposed solutions was found to be low (Rogowski & Lange, 2022).

Further criticisms of RCT include its insufficient capacity to account for the nuances of medical decisions. For example, factors such as the doctor's role, patients' desire for shared decision-making responsibility, or the possibility of regret are not fully addressed (Buturovic, 2023). As a conceptual model, RCT may offer some value in refining interpretations of patient autonomy in medical decision-making. However, due to the epistemological and metaphysical conditions embedded in its structure (Buturovic, 2023), its contribution to patient autonomy is limited.

The Health Belief Model

The health belief model (HBM) was developed in the 1950s by Irwin Rosenstock, Godfrey Hochbaum, Stephen Kegeles, and Howard Leventhal (Shmueli, 2021; Yenew et al., 2023). Initially, the HBM was used to explain why people did not participate in disease detection and prevention programs. Over time, it has been applied to a broader set of public health issues, including health compliance, disease symptom management, and health-related lifestyle behaviors (Glanz et al., 2008; Janz & Becker, 1984). The primary aim of the model is to understand why individuals engage, or fail to engage, in health

maintenance behaviors and to identify the factors that prompt them to act (Becker, 1974; Champion, 1999; Rosenstock, 1974).

The HBM consists of six constructs that predict health-related behaviors: perceived susceptibility, perceived severity, perceived benefits, perceived barriers, cues to action, and self-efficacy (Al-Taie & Yilmaz, 2023). Perceived susceptibility refers to an individual's assessment of their likelihood of developing a health issue, while perceived severity relates to the perceived importance and potential consequences of the issue. Perceived benefits describe the advantages of taking a specific health action, whereas perceived barriers are the obstacles that prevent action (Alshagrawi, 2024). Self-efficacy refers to an individual's confidence in their ability to take the required action, and cues to action are prompts that encourage health-related behaviors (Shmueli, 2021; Yenew et al., 2023). Although the importance of these constructs can vary depending on the context and individual circumstances (Al-Taie & Yilmaz, 2023), they are essential for measuring and predicting engagement in health-related behaviors.

The HBM has been widely applied in studies examining factors that influence COVID-19 vaccination intentions and behaviors. For example, Yenew et al. (2023) conducted a systematic review and meta-analysis to explore global COVID-19 vaccination intentions and their HBM-based predictors. They found that perceived susceptibility, perceived severity, perceived benefits, and cues to action were strong positive predictors of vaccine intention, while perceived barriers were negative predictors. Notably, perceived susceptibility (AOR = 1.85) and perceived benefits (AOR = 3.10) emerged as significant motivators. These findings highlight the importance of

health education and public awareness campaigns in increasing vaccine uptake worldwide. Overall, this body of research underscores the importance of addressing health beliefs to improve vaccination rates globally.

Using the HBM, Shmueli (2021) investigated motivators and barriers to the general public's intention to vaccinate against COVID-19. Using the HBM, the study found higher perceived benefits (OR = 4.49), severity of COVID-19 infection (OR = 2.36), and cues to action (OR = 1.99) as significant predictors of vaccination intention among Israeli adults in an online survey. Respondents with higher education levels and previous influenza vaccine uptake were also more likely to want to receive the COVID-19 vaccine. Shmueli (2021) concluded that the combination of the HBM and TPB offered a strong framework for predicting vaccination behaviors, which policymakers and healthcare providers can use to design interventions that promote better compliance.

The HBM was applied to examine patterns of vaccine hesitancy and the intention to receive a booster dose of the COVID-19 vaccine among patients with comorbid conditions in Istanbul, Türkiye by Al-Taie and Yilmaz (2023). The study was conducted using a descriptive, cross-sectional design, which showed that perceived susceptibility, perceived severity, and perceived benefits significantly predicted participants' willingness to receive a booster dose. Vaccination intention was also statistically significantly correlated with education level. The findings stressed the need for tailored communication strategies that address beliefs about health and the benefits of booster vaccinations among high-risk groups.

Alshagrawi (2024) investigated the predictive power of the HBM and a combined model in predicting COVID-19 vaccination intentions among Saudi Arabian adults. Perceived severity (β = .49) and perceived benefits (β = .63) were significant predictors of vaccination intention, which accounted for 68% of the variation in vaccination intention. The combined model had the highest explanatory power (82%), although the TPB explained a larger percentage of the variance (78.2%). This study showed that the HBM can be used to predict vaccination behaviors, but that the use of other behavioral models in conjunction with the HBM can lead to a more complete understanding of factors underlying health-related decision-making.

The HBM offers a strong theoretical foundation for understanding how policymakers and administrators perceive the advantages and disadvantages of vaccination policies and the obstacles to their initiation. The model's constructs of perceived susceptibility and severity provide a framework for policymakers to understand the public health consequences of noncompliance, and the model's constructs of perceived barriers and cues to action provide a framework for understanding the challenges and motivators to policy enforcement. Aligning this study with the HBM allows for the systematic analysis of the decision-making processes and the cultural, organizational, and individual factors that guide health equity policy implementation. This alignment allows for a complete understanding of the facilitators and barriers to effective public health intervention.

Reasons Why African American Healthcare Workers Are Reluctant to Take Vaccines

African American healthcare workers' (AAHCWs) vaccine hesitancy has been informed by three dimensions: accessibility, risk perception, and historical mistrust. Altman et al. (2023) systematically reviewed vaccine attitudes due to factors such as convenience, misinformation, and risk perception worldwide and pointed out that misinformation and restrictions in access are key drivers of vaccine hesitancy. They also pointed out that the perception that the public had towards the vaccines and their uptake depended on the attitudes of the healthcare professionals. Okoro et al. (2021) specifically used Black participants from a quantitative survey (n = 183) accompanied by qualitative interviews and discovered that hesitancy in the Black community was caused by mistrust in the U.S. medical system, as well as logistical challenges such as transportation and health literacy. Both studies concluded that misinformation and distrust are the key obstacles to vaccine acceptance, but while the former was concerned with convenience factors, the latter was concerned with historical and systemic factors. They revealed that perceived barriers as well as perceived historical prejudices have an impact on AAHCW's vaccine hesitancy.

Lack of confidence in the effectiveness of the vaccine and perceived threats to individual rights also play a part in vaccine reluctance among healthcare workers. Peterson et al. (2022) described the overview of studies on healthcare workers, and they distinguished the factors that contribute to hesitancy are related to the safety and effectiveness of the vaccine, distrust in authorities and organizations, and self-

competency. However, Momplaisir et al. (2021), in a cross-sectional study of 677 HCWs from two large academic hospitals, found that hesitancy was significantly higher among Black HCWs than among other races due to perceived racism and apprehension about the trials of vaccines on minorities. While both studies identified mistrust as a moderator, they differ in scope, with Peterson et al. identifying overall safety and self-management as concerns, compared to Momplaisir et al.'s focus on racism and discrimination and related fears. Generalized mistrust and culturally relevant concerns coalesce on distrust with a divergence in the details suggesting that both universal and culture-specific approaches to hesitancy apply to African American healthcare workers.

Another important factor is the professional and educational aspect, and how it affects the decision-making process regarding vaccines. The representatives of various healthcare professions, for example, differ in their attitude toward vaccines. Ahamed et al. (2022) conducted a cross-sectional study focusing on the analysis of the data obtained from social media to identify the attitudes of healthcare workers; however, the results demonstrated that, while doctors were more optimistic about COVID-19 vaccines, nurses were more concerned about possible adverse effects, especially in children. Farah et al. (2022) conducted a cross-sectional study of healthcare workers in a large academic medical center in the United States and noted that physicians and advanced practice providers had higher vaccination rates than nurses and support staff. In this context, both Ahamed et al. and Farah et al. indicated that professional background affects attitudes towards vaccines, with the former focusing on the difference in the focus on patient and self-preservation, while the latter noted the differences in the actual vaccine reception by

different groups of professionals. This divergence emphasized the fact that different facets of professional roles and obligations influence the acceptability of vaccines among Black employees in the healthcare sector.

Other factors that affect employment conditions and mandates play a role in vaccine skepticism, with mandates likely to increase workforce issues. In the study on vaccine mandates in elderly care homes, Girma and Paton (2024) noted that as much as mandates raised the uptake of vaccines, they also resulted in staff layoffs due to refusals by some caregivers. Altman et al. (2023) found that mandatory vaccination policies can increase hesitancy if workers feel that these policies violate their rights, especially in organizations characterized by low levels of trust. Thus, both studies coincided in considering that mandates can have side effects; however, while Girma and Paton concentrated on the logistical issues of staffing, Altman and his colleagues discussed the psychological and ethical effects. These results imply that mandatory vaccination may exacerbate hesitancy among African American healthcare workers, especially when issues of personal sovereignty and employment security are significant.

Culturally appropriate and specific strategies are needed for dealing with the African American healthcare employees' reluctance to get vaccinated. In a narrative review conducted by Lawrence (2023), it was argued that vaccine acceptance is tied to the levels of social trust and the information that is available to the public and that people who are from societies where social ties are strong and where authorities provide clear guidance have higher chances of accepting vaccines. Moudatsou et al. (2023) also highlighted trust, education, and societal responsibility as factors influencing vaccine

acceptance among Greek healthcare workers. In both cases, trust creation and culturally appropriate approaches were identified as critical to addressing reluctance. However, while Lawrence was more concerned with community trust, Moudatsou et al. centered on professional duty and tailored educational strategies. Based on these studies, it is crucial to embrace culturally appropriate communication techniques to address the issues that African American healthcare workers have about COVID-19 vaccination.

Effects of COVID-19 Vaccination Policies on Healthcare Employees

The psychological effects of COVID-19 vaccine mandates on healthcare workers are diverse and complex. Chaufan et al. (2024) adopted a cross-sectional study design to survey Ontario healthcare workers to capture experiences on COVID-19 vaccine mandates and their impacts on mental and professional health. The data showed high levels of stress, particularly in the respondents who remained unvaccinated and experienced job loss, feelings of prejudice, and isolation; the vaccinated participants complained about pressure to get booster shots. Woodhead et al. (2022) conducted qualitative semi-structured interviews with healthcare staff in the United Kingdom and reported that mandates provoked tensions regarding moral dilemmas and organizational pressure superimposed on intolerance based on past experiences of discrimination. Chaufan et al. also pointed out that mandates have adverse psychological implications, while Woodhead et al. focused on the interaction between racism and vaccine skepticism. These results indicated that mandates, when not sufficiently backed up, can worsen mental health issues and lead to a perceived isolation of healthcare staff.

Reactance, a psychological response where people resist threats to their autonomy, has a crucial role to play in vaccine hesitancy due to COVID-19 mandates. Using German and American samples, Sprengholz et al. (2021) established that mandates led to reactance, particularly in participants with initially low vaccine intentions. This reactance was not limited to the COVID-19 vaccine, as the participants also showed reluctance towards other forms of vaccines. Naranjo et al. (2023) also noted similar patterns in a qualitative study of U.S. veterans and nonveteran participants where mandatory measures raised vaccine hesitancy among a specific segment of the population who believed that the mandates were a violation of their rights. In both cases, mandates tended to produce resistance from reluctant individuals; the study by Sprengholz et al. focused on behavioral change, while Naranjo et al. considered ideological perspectives. Such evidence indicated that mandates may not only be ineffective for less enthusiastic populations but may also create even more resistance, making it important to avoid policies that undermine people's freedom, which may lead to psychological reactance.

New psychological demands have been identified as other social impacts of vaccine mandates, including stigmatization and polarization. Bardosh et al. (2022) discussed the social determinants, economic implications, and political consequences of mandates by employing a cross-disciplinary approach to examine the biological and social outcomes of compulsory vaccination. Mandates were found to exacerbate polarization, stigmatization, and mistrust in health authorities, as per the study findings. Van Scoy et al. (2022), using the mixed-methods survey in Pennsylvania, reported similar observations with the subjects of the study developing an "us versus them"

attitude and sorting people into the compliant and non-compliant with the COVID-19 guidelines. Thus, both investigations focused on the idea of polarization and stigmatization; while Bardosh et al. described structural aspects of the given phenomenon, Van Scoy et al. addressed interpersonal and community levels. These findings pointed out the effectiveness of mandates in raising division and isolation, and thus, healthcare policies require integrating enforcement measures with effective communication strategies to prevent social rift amongst the healthcare staff.

The effect of vaccine mandates on the psychological aspect is further aggravated by perceived coercion and loss of confidence in the healthcare system. Chaufan et al. (2024) observed that Ontario HCWs who obeyed mandates felt pressured for extra shots and developed suspicion toward institutional procedures, including misrepresenting adverse effects. Likewise, Bardosh et al. (2022) stated that mandates diminished trust, especially when it was violated by the participants who perceived these policies as a violation of rights, and this led to reduced future compliance with health campaigns. It is noteworthy that both studies point to the detrimental psychological consequences of perceived coercion and low trust, and while Chaufan et al. focused on direct workplace experiences, Bardosh et al. went further to consider societal outcomes. These outcomes call for the dissemination of equally transparent and trust-establishing strategies in the context of vaccine policies, which can help healthcare workers who are at risk of elevated psychological burden and skepticism regarding healthcare authorities.

Vaccine mandates have also affected the mental health of these workers by making them feel vulnerable and lonely. Woodhead et al. (2022) noted that minority

HCWs in the UK experienced heightened social isolation due to vaccine requirements because of racism in current and past healthcare settings. Chaufan et al. (2024) also documented that the Ontario workers who did not get vaccinated experienced social and professional marginalization, which led to poor mental health. Woodhead et al. and Chaufan et al. both highlighted that mandates exacerbate feelings of vulnerability, although Woodhead et al. also discussed how this applies to racial discrimination, while Chaufan et al. addressed employment outcomes. These results indicated that vaccine mandates should be appropriately administered with adequate resources to address the social exclusion and mental stress that targeted healthcare workers endure.

Compulsory vaccination policies have impacted the psychological health of HCWs, especially those with vaccine doubts. Gur-Arie et al. (2023) explored the experiences of HCWs within the United States, specifically about the psychological impact of compulsory COVID-19 vaccinations. Gur-Arie et al. conducted a literature and policy analysis of personal and professional factors influencing vaccination decisions across various roles in the healthcare setting, such as physicians, nurses, and non-clinical staff. Their study showed that mandates created an extra burden on healthcare employees, and participants of color expressed that policies denied personal agency and made existing disparities worse. Similarly, Yassi et al. (2022) examined vaccination uptake and mandates among HCWs in British Columbia, Canada, with a focus on the rural–urban divide. This prospective study followed infection rates, vaccination, and employment dismissal due to noncompliance with employee psychological well-being. Yassi et al. established that rural healthcare workers, who were more likely to have high job

insecurity when they did not comply with the policy, reported high stress levels. The findings supported the effectiveness of the vaccine mandates in boosting vaccination rates, but at the same time, the mandates led to increased psychological pressure, especially among the workers who felt pressured to take the vaccines.

The effects of mandates on the stability of the workforce and its mental health have also been significant. In the United States, Abouk et al. (2024) examined healthcare workforce shortages due to state-level vaccine requirements using difference-in-differences analysis to compare employment changes in healthcare-specific occupations. It was discovered that mandates reduced the number of new hires in the healthcare sector by 6%, with vaccine skeptics leaving the profession in the end. This finding added pressure to the remaining staff, who had to work harder to ensure patient care, safety and continuity in service delivery. Similarly, Yassi et al. (2022) found that the perceived threat of job loss as a result of vaccine mandates implemented to counter the pandemic further contributed to stress among rural healthcare workers, as they already experience job insecurity due to staff shortages. These findings stressed that the stress-related effects of immunization requirements are synergistic, and policies designed to improve population health may lead to workforce volatility and elevated rates of psychological dysfunction.

Factors Related to Vaccine Hesitancy and Mental Health Outcomes: Social and Structural Perspectives

Social and structural determinants have been identified as key influencers of vaccine hesitancy and mental health during the COVID-19 pandemic. Combden et al.

(2022) compared Canada and the United States in terms of pandemic preparedness and response to public health, media, and policy measures. In the United States, social disparities coupled with poor healthcare access, especially to Black and Indigenous populations, along with existing mistrust in the healthcare system, worsened COVID-19 outcomes and measures. Ishino et al. (2023) also revealed in their multivariate analysis based on survey data collected from the United States that people who identified frequent discrimination were less likely to be vaccinated. In both cases, systemic inequities and social disparities are presented as the main causes of vaccine hesitancy and mental health problems; Combden et al. investigated the lack of macro-level policy, while Ishino et al. provided individual experiences of discrimination. These findings showed how structural factors shape the implementation of public health interventions and could exacerbate distrust, leading to vaccine hesitancy.

Social determinants of race and ethnicity affect the take-up of COVID-19 health measures and mental health. Kazemian et al. (2021) analyzed how support for COVID-19 social distancing depended on race and trust in science and found that counties with higher Black and Hispanic populations had higher mortality rates and stronger opposition to social distancing, mainly due to lower levels of scientific trust. Rivera-Núñez et al. (2022) interviewed 10 Black and Latinx healthcare workers with support roles in a qualitative study and found that participants reported higher mental stress resulting from workplace disruptions and ongoing concerns of infection. This stress was combined with lower socioeconomic status and restricted access to healthcare. These two studies revealed that race and socioeconomic status are factors that affect mental health and

COVID-19 interventions. However, while Kazemian et al. centered on trust in scientific authorities, Rivera-Núñez et al. emphasized the perceived microaggressions of marginalized healthcare staff. From the analysis, eradicating structural factors that contribute to inequities in health and working on the aspect of trust is critical in enhancing public health.

Leadership and diverse healthcare practice are vital in addressing vaccine hesitancy and the mental health issues affecting healthcare workers. Gotsis and Grimani (2023) discussed the concept of inclusive healthcare leadership, where health policies should be participatory to ensure that all have confidence in the processes. Their study found that such mandates may have the effect of reinforcing prejudice and marginalization of non-adherents while increasing essentialism and mistrust. Smallwood et al. (2021) were concerned with the indirect effects of COVID-19 on the mental health of healthcare workers, including the effects of constant exposure to the risk of infection and high workload. The research showed that governments and healthcare organizations have the responsibility of maintaining the health and safety of the HCWs through enhancing pandemic preparedness and ensuring adequate support is availed. While Gotsis and Grimani underlined the role of inclusive policies in decreasing stigmatization, Smallwood et al. pointed out the necessity of structural reforms to shield HCWs. Such studies emphasized that the provision of inclusive leadership and support is crucial in reducing the negative effects of vaccine mandates on the mental well-being of healthcare staff.

Other examples of social factors are psychological and structural stressors for marginalized healthcare workers, which also show how mental health outcomes are affected. Rivera-Núñez et al. (2022) reported the study that Black and Latinx healthcare workers in support roles have experienced increased stress and inadequate resources, poor mental health, and hesitancy towards the COVID-19 vaccines. Their study indicated that there is a need for supportive resources to assist these essential workers in coping with stress during pandemic conditions. Likewise, Smallwood et al. (2021) established the general psychological effects of COVID-19 on HCWs worldwide and highlighted the increased levels of burnout and stress because of the lack of reasonable workplace measures. Rivera-Núñez et al.'s study and Smallwood et al.'s study both highlighted how structural and social factors contribute to the disproportionate mental health toll that healthcare workers in service positions experience; Rivera-Núñez et al. specifically examined racial minorities while Smallwood et al. examined all healthcare workers. These findings indicated that there is a dire need to provide targeted mental health care and enhance workplace rights to overcome vaccine reluctance and address the needs of at-risk healthcare employees.

Socioeconomic factors greatly affected the rates of vaccination and employment security among the participants. Farah et al. (2022) investigated COVID-19 vaccination rates among employees of several healthcare organizations, focusing on race, job description, and employment tenure. From their study, the authors determined that Black healthcare employees and those in the lower job categories reported higher vaccine hesitancy levels and subsequently suffered job insecurity due to vaccination non-

compliance. Elliott and Chambers (2022) discussed the U.S. military vaccine mandate historically and COVID-19 mandates in high-risk occupations such as medicine. Their review showed that policies regarding mandatory vaccinations have always had a polarizing effect on the workers despite providing job insecurity for those who are hesitant to take the vaccines due to past experiences or principles. Both studies coalesced on those mandates, while beneficial for public health objectives, posed issues for marginalized groups, particularly African American healthcare employees, due to their socioeconomic status by amplifying employment insecurity.

Socio-economic-related vaccine hesitancy also had risks of job loss within the healthcare facilities. Al-Obaydi et al. (2022) examined vaccine hesitancy in a large healthcare organization through a cross-sectional survey of the workers about the demographic and health-related risk factors that may influence vaccine reluctance. In their multivariable regression analysis, Al-Obaydi et al. identified Black healthcare workers, females, and those with a history of allergies as being more likely to be less compliant with mandates, thus increasing their vulnerability to job loss. This pattern resonates with Farah et al. (2022), whereby those with lower SES and negative racial identity had reduced vaccine take-up rates, leading to more job insecurity. These studies drew attention to the similar ways in which socioeconomic factors influence vaccine conformity and noted that workers with precarious employment status are disproportionately susceptible to termination in organizations following strict mandates, thereby negatively influencing the stability of employment at various healthcare occupations.

The Psychological Effects of Job Loss for Noncompliance With Vaccine Policies

The psychological effects of losing a job because of non-adherence to vaccine requirements have been a cause of concern to the medical fraternity. Bardosh et al. (2022) analyzed the overall effects of COVID-19 vaccine mandates on society and considered the psychological effects of such policies. This study, conducted through a framework of political, socioeconomic, and behavioral factors, concluded that mandates invariably increased stigma, human rights violations, and social division, eroding the public's confidence in governmental and public health agencies. In a related study, Naranjo et al. (2023) examined COVID-19 vaccine hesitancy across diverse groups and more specifically the comparison of perceptions of COVID-19 vaccine hesitators and non-hesitators. The focus group data indicated that the hesitant group felt more anxious and skeptical about public health measures, which may have negative consequences on the mental health of the hesitant individuals if they lose their jobs due to mandates. These studies converged around the notion that mandates have psychological consequences, primarily where employment outcomes are at stake; these studies also imply that trust and other approaches can reduce adverse mental health effects.

Vaccine mandates and side effects, including employment disruption and absenteeism due to these measures, also pose a risk to the mental health of healthcare staff. Chrissian et al. (2022) aimed to determine the effect of side effects of the COVID-19 vaccine on the number of days absent from work among healthcare workers in Southern California. It was also discovered that about 18% of the vaccinated healthcare workers were absent from work due to side effects of the vaccine, with non-physician

HCWs being the most affected. Such absenteeism not only affected workplace productivity but also led to reluctance towards future booster doses, indicating that there is a psychological burden in terms of job security due to mandates. Similarly, Prince et al. (2022) examined the vaccination trends among the prison staff in California, revealing that there was constant vaccine hesitancy among frontline workers to reach an adequate level of immunity, which created pressure on the employees to follow the mandatory vaccination policies despite personal resistance. The results of both studies indicated that, due to the vaccine mandates, the subjects experienced increased stress levels and job interference, which implies that the mental health impacts may depend on job insecurity and the forceful nature of the vaccine requirements.

The risk of being fired for not getting vaccinated has raised concerns about ethical issues and mental health implications for healthcare workers. Iliyasu et al. (2022) sought to determine the level of compliance with vaccine mandates among healthcare workers in Nigeria; the method employed incorporated role, perceived vulnerability, and socio-demographic characteristics. The study revealed that only 32.7% of the respondents supported mandates, and the opposition was due to concerns regarding autonomy and human rights, which are associated with potential psychological impairment if employment depends on vaccination compliance. Similarly, El-Mohandes et al. (2021) explored vaccine sentiments in the major metropolitan areas of the United States, finding that a significant portion of adults were unwilling to get vaccinated due to perceived ineffectiveness and safety concerns. These findings provided evidence that mandatory vaccination, particularly when tied to employment dismissal, may worsen mental health

conditions due to the clash of personal and professional beliefs, making it an ethical dilemma when mandates compromise employment.

One of the issues that arose from vaccine mandates includes the mental health implications of mandatory vaccinations on vulnerable HCWs, especially those who may lose their jobs. Rivera-Núñez et al. (2022) interviewed Black and Latinx healthcare workers in ancillary roles; they reported experiencing increased stress from vaccine mandates on top of structural stigma and economic insecurity. These individuals expressed increased levels of anxiety and fear towards COVID-19 and mandates, stating that job termination would greatly affect their financial and psychological well-being. Bardosh et al. (2022) found that mandates have exacerbated social injustice and distrust, especially for minorities. In both studies, the authors concluded that the pressure to get vaccinated and the threat of job loss can negatively impact the psychological state of healthcare workers from disadvantaged backgrounds, which may require other strategies to be implemented to increase compliance and protect the mental health of workers.

Conditional and Culturally Sensitive Mandates: An Ethical and Psychological Analysis

Discussions arise regarding the moral and psychological consequences of the conditional and culturally specific vaccine requirements for healthcare employees. According to Gandhi et al. (2024), the effects of vaccine mandates on the health and employment of nursing home staff across the United States were assessed using a difference-in-differences analysis of daily staffing data and weekly COVID-19 infection rates. It was found that mandates led to improved staff vaccination rates with little

disruption to patient care, as measured by the changes to staff hours per patient. The study also showed that mandates were effective in decreasing COVID-19 transmission and mortality, but a proportion of staff resigned due to vaccination mandates. Likewise, Okpani et al. (2024) conducted a systematic review of mandates in the healthcare setting and concluded that mandates led to improved vaccination coverage and a decrease in COVID-19 illness, but implementation issues emerged in low-resource environments. Thus, both investigations supported the effectiveness of mandates with the notable disclaimer that the realities of local resource availability and staff turnover cannot be ignored, and culturally appropriate approaches may assist in managing HCW hesitancy.

Conditional mandates and other related concepts have also been discussed in terms of ethical rationalizations, with considerations for professional accountability and freedom. Giubilini et al. (2023) performed an ethical evaluation to identify the circumstances under which mandates could be justified, stressing that healthcare workers bear the responsibility to safeguard the patients; the consideration of this duty could ethically justify certain mandates. However, they noted that there should be an attempt to look for other less intrusive measures concerning COVID-19 mandates since there is little evidence that supports their effectiveness in the long run. Mulligan and Harris (2021) agreed with this view, stating that conditional mandates are reasonable public policy while acknowledging the need for measures to compel the reluctant population. Both studies have a view that conditional mandates are ethically right in cases of high risk but also indicated that there may be better ways to avoid possible ethical dilemmas such as perceived infringements of autonomy, especially among vulnerable populations.

Another important aspect to consider is the effectiveness of mandates in marginalized communities and cultures, which includes language barriers and other socially and culturally sensitive issues that must be addressed to pass information about the mandate and ensure that the population at hand has access to policies that will help them. Kreps and Kriner (2022) surveyed a nationally representative sample in the United States to examine the consequences of mandates on vaccination attitudes and intentions as well as on the activities that require vaccination. The study revealed that mandates, if not accompanied by positive reinforcement, could lead to avoidance of mandated activities, especially among people of color. Ashwell et al. (2021) also explored similar dynamics in New Zealand, focusing on vaccine skepticism and advocacy of employer mandates. The study revealed that people who believed in the vaccine supported mandates, while those who did not or had mistrust were against employer-imposed mandates. The findings stressed the significance of culturally appropriate messaging to decrease minority HCWs' perceptions of marginalization, implying that mandate efficacy can be enhanced by encouraging and inclusive messages.

There has been an emphasis on the psychological implications of culturally sensitive as opposed to rigid mandates. Gandhi et al. (2024) observed low psychological ramifications for vaccinated personnel in U.S. nursing homes, limiting the mandates' influence on hesitant workers and resulting in few voluntary demissions. Kreps and Kriner (2022) also noted that cultural recalcitrance without cultural appropriateness could result in feelings of alienation, especially among African American healthcare workers, as mandates that did not contain culturally sensitive communication made the workers

feel isolated. Lastly, the studies differ on the psychological consequences; Gandhi et al. found limited consequences in a controlled healthcare environment, but Kreps and Kriner reported additional distress among unvaccinated workers where mandates were insensitive to culture. This implies that while mandates may have psychologically negative impacts, the extent of this may depend on the receptiveness of the culture of the mandate and how sensitive it is to the cultures of the community.

Community and Trust-Based Approaches to Address Vaccine Hesitancy and Mental Health Needs

There is a growing awareness of community participation and trust-oriented models as promising interventions to address vaccine hesitancy and related psychiatric concerns. Shen et al. (2023) conducted a qualitative study involving 15 key informants from nine CBOs in Philadelphia to examine how CBOs tackled COVID-19 vaccination hesitancy via trust promotion and empathetic communication. The research also showed that CBOs helped build trust by offering safe spaces and appropriate communication, thus enhancing the perception of vaccination in the community. In a related study, Rahman et al. (2021) noted that HCWs have a crucial role in addressing SDOH that contributes to vaccine hesitancy. In their mixed-methods study with 90 participants, including HCWs, supervisors, and directors in New York, they highlighted that HCWs' connections within the community allowed them to address barriers to vaccination. In both of these works, the authors posited that community-based actors could foster trust among vulnerable populations and that CBOs and HCWs could be instrumental in

addressing vaccine hesitancy and mental health stigma among African American healthcare workers through culturally appropriate interventions.

The impact of mistrust on vaccination uptake and mental health among Black people was also explored in the studies that focused on historical and present-day disparities in Black communities. Goodwill and Fike (2023) conducted a study using primary data collected from a sample of Black adults, whereby the authors explored the impact of general and Black-specific mistrust and COVID-19-related stress on vaccination behaviors. As for race-specific mistrust, it was positively related to anxiety and negatively related to vaccination status, particularly among individuals who lost family members to COVID-19. Likewise, moral foundations theory was used by Nan et al. (2022) to investigate the role of moral values in the vaccination reluctance of Black Americans; they discovered that the body's purity and individual freedom were linked to increased hesitancy. Despite differences in the approaches used in these studies, they coincide in showing that mistrust, be it historical or moral, is a factor that greatly influences vaccine reluctance and mental health issues. This shared insight underscores the need to consider historical and cultural factors underlying the distrust to inform vaccine promotion messages.

Efforts to enhance data integration and the synthesis of vaccine hesitancy research in various contexts underscore the importance of culturally tailored interventions. Rego et al. (2023) used the Sub-National Geospatial Data Archive toolkit with data from the World Bank's High-Frequency Phone Surveys to examine vaccine hesitancy in low- and middle-income countries (LMICs). Their study highlighted the importance of considering

the spatial and cultural differences to appropriately address vaccine skepticism in low-resource settings. Rego et al., for instance, emphasized the need for targeted vaccination based on local data because of socio-economic and cultural differences. This finding is consistent with Shen et al.'s (2023) findings, which underlined the importance of community-based organization initiatives that are culturally tailored to target the desired populations. These findings demonstrated the essential role of localized data and messaging in establishing trust and overcoming vaccine skepticism.

Culturally relevant and acceptable communication strategies consistent with community values are essential for increasing vaccine acceptance and managing mental health issues. Nan et al. (2022) also noted that care and loyalty could decrease vaccine hesitancy in Black Americans, and purity and liberty could increase it, suggesting that vaccine communication should address moral values within those communities. Shen et al. (2023) provided evidence that trusted messengers from CBOs increased vaccine acceptance by framing messages with the values of empathy and safety. In both cases, there is a strong implication that the process of integrating cultural values in the communication of public health information can enhance trust and reduce hesitancy, as well as minimize adverse effects on mental health. These findings underlined the need to create communication approaches that are culturally and ethically acceptable to African American healthcare workers to combat both vaccine reluctance and the psychological impact of the pandemic.

Thus, the engagement of HCWs and culturally appropriate CBOs as messengers has been effective in addressing vaccine skepticism and mental health concerns. Rahman

et al. (2021) supported the role of HCWs in COVID-19 response efforts, as they are well-placed to address issues about the social determinants of health. Shen et al. (2023) also supported this approach, proving that even though CBOs are closely connected with the community, they can help to build an empathic and understanding approach to the promotion of vaccines. Both papers stress that engaging trusted stakeholders from the community, which includes HCWs and CBOs, can play a crucial role in promoting vaccine acceptance while addressing mental health issues in culturally sensitive ways. This comparable conclusion affirmed the idea that incorporating credible sources in vaccine campaigns can help combat vaccine reluctance and corresponding mental health effects on vulnerable healthcare employees.

This study of culturally targeted strategies for promoting vaccination among HCWs demonstrated that such approaches yielded positive attitudes toward immunization. In their qualitative study, Shen et al. (2023) found that CBOs could help overcome the barriers by being empathetic and trustworthy, which are necessary for vaccine uptake among minorities. This result is in concordance with Baumer-Mouradian et al. (2021), who conducted a rapid vaccination campaign among HCWs adopting receptive and courteous approaches. The campaign was effective in raising awareness about vaccination and addressing the psychological barriers of those with negative attitudes toward vaccinations. Culturally tailored interventions were emphasized in both studies and suggest that these strategies might be particularly helpful for African American healthcare employees in terms of improving trust, mental well-being, and adherence to health directives while accounting for relevant concerns.

Insights on Vaccine Hesitancy in Vulnerable Populations and Policy Implications

Failures in vaccine uptake among vulnerable populations stem from a myriad of socioeconomic and health determinants that coexist with mandate policies. Moradpour et al. (2023) explored vaccine uptake in 145 countries, investigating the effects of national income and hesitancy through a linear regression model, evaluating uptake at 6, 12, 18, and 24 months after the commencement of vaccination. Findings revealed that lower-income countries had significantly lower vaccination rates mainly due to low vaccine confidence. Rossi et al. (2023) employed an exploratory mixed-methods study with Hispanic adults in South Carolina by providing educational sessions, focus group discussions, and an online survey on COVID-19 vaccine hesitancy. The use of specific messages that focused on the appropriateness of the vaccine and its safety contributed to the improvement of the uptake of the vaccine among the participants. Income and other demographic attributes of the respondents and their access to health information were named as factors influencing perceptions of the vaccines, as identified in both studies. Moradpour et al. emphasized distribution equity all over the globe, and Rossi et al. stressed the need for localized and culturally appropriate solutions. Hence, it was inferred that these considerations, economic pressures and culturally appropriate messaging, should be accounted for to counter reluctance in high-risk populations.

Analysis of the health conditions and social determinants shows that some populations require an intervention to reduce vaccine hesitancy. Boschung et al. (2023) examined COVID-19 vaccine hesitancy among people with HIV in Alberta, Canada, to determine gender and health status differences in receiving the vaccine through

regression analyses. It was also found that the booster vaccine was given at a lower rate to the female HIV patients as compared to the male patients, which indicated that the outreach activities could not target the females. Mohan et al. (2023) surveyed the issues related to parents' hesitance using WHO-SAGE questionnaires and identified that perceived risks, safety concerns, and side effects were the significant issues. The results also revealed that vaccination is not solely determined by some conditions, meaning that there should be approaches specific to the groups concerned. Boschung et al. also highlighted the issue of gender-sensitive communication, and Mohan et al. also acknowledged the concern parents have towards the safety of the vaccines. With these results, vaccination policies should use demographic-specific strategies in addressing the various issues as explained above.

Other factors that bring about disparities make requirements in rural areas and healthcare facilities challenging. Yassi et al. (2023) examined vaccine uptake trends and COVID-19 contamination among healthcare workers in urban and rural settings in British Columbia, Canada, with attention to occupation and mandate considerations. The researchers discovered that there was a higher percentage of rural healthcare workers who had not been vaccinated, while staffing shortages of healthcare workers were more profound in rural areas, making the impact of the mandates more severe in those areas. However, Moradpour et al. (2023) focused on the trend of the vaccine administration globally while explaining that national income and vaccine availability influenced confidence in the vaccines. In both studies, structural variables such as place of residence and economic status affected vaccination, while Yassi et al. revealed occupational

hazards and challenges attributed to place-influenced vaccination. The results suggested that vaccine mandates may have a particularly negative effect on regions with limited healthcare access, further supporting the call for contextualized strategies to strengthen the rural healthcare workforce.

Cultural understanding and the use of specific language remain crucial in helping reduce the levels of vaccine uptake doubts in multicultural societies. According to Boschung et al. (2023), culturally oriented approaches aimed at increasing vaccine knowledge among people with HIV, considering gender differences and access to health information, were effective. In their study of the Hispanic population, Rossi et al. (2023) administered culturally appropriate educational sessions, which included face-to-face polite discussion on the vaccine to eliminate hesitance and boost uptake. The outcomes identified culturally relevant communication strategies that called for interaction with influential members of the community to address disparities in vaccination intent arising from social and health factors. To this end, Boschung et al. pointed out the significance of gender-sensitive strategies, and Rossi et al. also revealed that culturally familiar contexts can boost people's confidence in the source of health information. These discoveries confirmed the call to promote better cultural practices in the vaccination processes to improve the performance of the requisite vaccination policies.

Similarly, the impact of mandate policies in the larger society has issues related to equity as well as vulnerability. Yassi et al. (2023) depicted the experiences of healthcare sector workers and explained how vaccine mandates led to workers losing their jobs because they failed to take the vaccines; this worsened the shortage of the healthcare

workforce in rural areas. Moradpour et al. (2023) also mentioned that vaccine distribution and acceptance are not untangled in LMICs, as they are limited by poor health infrastructure and financial challenges. Mandates were identified in both studies as a possible aggravating circumstance of social inequality since they affect groups of people who rarely have access to healthcare facilities. For example, Yassi et al. were concerned with the factors that define or support implementation in rural healthcare, and Moradpour et al. provided a perspective on inequity in vaccine distribution globally. These simultaneous findings suggested that mandate policies should consider the combined socioeconomic and geographical relevance of the population and assist vulnerable groups in society to attain a just health status.

Summary and Conclusions

To address a gap in the literature, the current qualitative study was designed to investigate the mental health concerns of African American healthcare workers who lost their employment due to their noncompliance with vaccine mandate policy. CRT provides the first perspective, as racism embedded in health policies impacts all African Americans; RCT provides the second perspective, as people's beliefs and values led them to refuse to get the COVID-19 vaccine despite losing their jobs (Hewig et al., 2011; Wright et al., 2022). CRT premised its argument on the assertion that racism pervades society and that services such as health services are especially cruel to minorities (Lawrence & Hylton, 2022). The issues of ethics identified include the rights of the public, mandatory vaccination, and psychological consequences for healthcare workers (Akumiah, 2023; Hagan et al., 2022). In this study, CRT and RCT perspectives were used

to explain vaccine skepticism and requirements and provide a more detailed insight into race, healthcare policy, and mental health among marginalized HCWs. The next chapter comprises a discussion of the current study's methodology, data collection, and analysis procedures.

Chapter 3: Research Method

Introduction

The purpose of this basic qualitative case study was to explore the reasons for vaccine hesitancy among African American healthcare workers in Los Angeles County, California, the mental health effects of their employment loss due to the State Public Health Officer Order of August 5, 2021 (Executive Order No. NR21-242), and the perspectives of healthcare administrators and managers involved in the development and implementation of the mandate, ensuring a comprehensive analysis of its public policy and administrative implications. This order required workers in healthcare settings to be fully vaccinated or receive their second dose by September 30, 2021, as mandated by the CDPH. The key problem was that researchers had not investigated the mental health effects among African American hospital workers in Los Angeles County, California, who lost their employment as a result of vaccine hesitancy in connection with the State Public Health Officer Order of August 5, 2021 (Department of Public Health, 2021). Understanding these mental health impacts was important because it could help inform how to better support this population and address their needs in the future.

This chapter outlines the research method for this study. Specifically, I described the research design and rationale, the role of the researcher, participant selection logic, data collection instruments and sources, procedures for recruitment and data collection, the data analysis plan, issues of trustworthiness, and ethical procedures. Details on these methodological aspects are presented to allow for replication of the study and to ensure

ethical standards are upheld. This methodology discussion sets up the results and findings presented in Chapter 4.

Research Design and Rationale

There were three RQs that guided this study:

RQ1: Based on the responses from the different participants of the study, what were the reasons for the vaccine hesitancy of African American healthcare workers in Los Angeles County, California, who lost their employment due to the vaccine mandate?

RQ2: Based on the responses from the different participants of the study, what were the mental health effects on African American healthcare workers in Los Angeles County, California, who lost their employment due to the vaccine mandate?

RQ3: How did healthcare administrators perceive the policies and implementation of vaccine mandates affecting African American healthcare workers in Los Angeles County, California?

I chose a qualitative approach over quantitative and mixed methods approaches to address the research problem. Quantitative methodology utilizes experimental methods and quantitative measures to test theories through statistical analyses of numeric data (Taherdoost, 2022). This approach was not suitable because numeric data would not capture the depth and richness of understanding experiences with vaccine hesitancy and mental health (Strijker et al., 2020). Mixed methods research combines both quantitative and qualitative forms of data to understand a research problem (Borgstede & Scholz, 2021). While mixed methods provide breadth and depth, only a qualitative approach

could explore the complex experiences and perspectives related to the research problem (Kandel, 2020).

Qualitative methodology aims to gain a deeper understanding of social phenomena through the exploration of participants' experiences, perspectives, and the meanings they ascribe to those experiences (Kandel, 2020). This approach utilizes flexible, naturalistic strategies such as open-ended questions and participant observation (Strijker et al., 2020) that were well suited for my goal of gaining meaningful insights into AAHCW' mental health issues and perspectives regarding vaccine mandates. Therefore, a qualitative approach using structured interviews was best positioned to address the research problem and fulfill the purpose of this study.

In line with the qualitative approach, I used a basic qualitative case study research design. Phenomenology aims to understand the lived experiences of individuals related to a phenomenon through in-depth interviews and analysis (Tomaszewski et al., 2020); however, phenomenology does not seek to understand the context of the issue being studied (Stenfors et al., 2020). Ethnography requires the researcher to fully immerse themselves in the daily lives of participants through extensive fieldwork to understand cultural behaviors and practices of groups in their natural environment (Lim, 2024), which was beyond the scope of this study. Grounded theory is used to develop new theories from extensive data collection and constant comparative analysis (Stenfors et al., 2020), whereas my study sought to understand perspectives within a bounded context rather than develop an expansive new theory.

Narrative inquiry studies personal life experiences through participants reconstructing stories of their lives and the meaning derived from those stories (Stenfors et al., 2020), which did not align with my goal of understanding perspectives on an issue within a specific context. Participatory action research is used to both understand issues impacting communities while facilitating change on social issues through collective action and participation of those communities (Tomaszewski et al., 2020). My study required data collection from interviews without an intervention or action component, making this approach unnecessary.

A basic qualitative case study was appropriate for my study as it allowed for an in-depth exploration of the complex public health issue of vaccine hesitancy and mental health outcomes among a specific group in a real-life context (Tomaszewski et al., 2020). As Yin (2018) described, a case study design is most suitable when the focus is to answer "how" and "why" questions, to explore contemporary events, and when the researcher has little control over behavioral events. This case study focused on a specific population of African American hospital workers in Los Angeles County who experienced employment termination due to vaccine mandates. I conducted semi-structured interviews and focus groups to understand their experiences, perspectives, and any resulting mental health conditions in depth within this bounded system. According to Yin (2018), triangulation is a characteristic of case study research that involves using multiple data sources to provide corroborating evidence. Therefore, a basic qualitative single case study was the most suitable design for addressing the research problem.

Role of the Researcher

For this study, my role was that of an observer-participant. As an observer, I conducted interviews and surveys to gather data from participants regarding their mental health and reasons for vaccine hesitancy. As a participant, I developed rapport and trust with participants by disclosing some appropriate personal information about myself to help participants feel comfortable speaking openly. I did not have any prior personal or professional relationships with potential participants, and I was not in a position of power, authority, or in an instructional role over them.

To avoid potential biases as a researcher, I utilized reflexivity by maintaining a reflective journal throughout the research process to acknowledge any preconceptions or emerging subjective experiences. I also triangulated data sources to add validity. Given the sensitive topic being studied, there was a risk of recall or social desirability bias in participants' responses. To address this, I clearly communicated to participants that there were no right or wrong answers, and their anonymity and confidentiality would be protected.

This study took place in Los Angeles County hospitals and involved interviewing former employees. To avoid any conflict of interest or power differentials, I made it clear in recruitment materials that participation was voluntary and would have no impact on former employment status or relationships with their previous employer. I obtained institutional review board (IRB) approval and informed consent from all participants. To safeguard against coercion, no incentives for participation were provided beyond the opportunity to openly discuss experiences.

Methodology

This methodology section outlines the method for collecting data for this study. I provided details on participant selection, including the target population, sampling strategy, and criteria. The data collection instruments and procedures are then described. Finally, the plan for recruitment, participation, and data analysis is presented.

Participant Selection Logic

Population in research refers to the entire group of people, events, or objects that are of interest to researchers and that they want to make conclusions about (Hennink & Kaiser, 2022). The population in this research study consisted of all hospital workers, healthcare administrators, and managers in Los Angeles County, California, who were employed between August and October 2021. The target population was a subset of the overall population, which was the primary focus of the study. For this study, the target population was African American hospital workers within the overall population who lost their employment between August and October 2021 due to not complying with the COVID-19 vaccine mandate outlined in Executive Order No. NR21-242. The target population also included healthcare administrators and managers involved in the development and implementation of the COVID-19 vaccine mandate. This population was ideal because exploring the potentially disparate impacts among this specific demographic provided valuable insights to inform public health policy and promote more equitable treatment of marginalized groups in crises.

A sample is a group of participants selected from the target population to study and generalize results back to that population (Berndt, 2020). The study sample

comprised 15 participants selected from the target population using purposive sampling. A sample size of 10–15 participants for this basic qualitative case study was appropriate for semistructured interviews and eight to 12 participants for the focus groups, as Hennink and Kaiser (2022) recommended interviews with three to 15 participants in case study research to achieve saturation.

Purposive sampling is a nonprobability sampling technique where the researcher relies on their judgment to select participants who best meet the criteria required to address the RQ (Hennink & Kaiser, 2022). For this study, purposive sampling was used to specifically recruit African American hospital workers from the target population who lost their job as a hospital worker between August and October 2021 due to not complying with the vaccine mandate. Inclusion criteria for the purposive sample required participants to self-identify as African American, have been previously employed as a hospital worker in Los Angeles County, and have lost their employment during the stated time period due to not receiving the COVID-19 vaccine as required by Executive Order No. NR21-242. Participants were excluded if they did not identify as African American or were not previously hospital workers in Los Angeles County who lost their jobs between August and October 2021 due to reasons other than noncompliance with the vaccine mandate.

Inclusion criteria for healthcare administrators and managers required that they had been directly involved in the development, implementation, or administration of the vaccine mandate policy outlined in Executive Order No. NR21-242 within Los Angeles County at the time the mandate was implemented and had knowledge or decision-making

powers regarding the policy. Participants were excluded if they were not directly involved with the vaccine mandate policy, did not work in Los Angeles County during the mandated period, or did not have adequate knowledge or decision-making authority concerning the policy.

The sample size for this study was between 15 participants for the semistructured interviews and 12 participants for the focus groups. Interviewing this number of participants provided rich data to address the RQs while allowing me to reach data saturation (Hennink & Kaiser, 2022). Data saturation is the point at which no new information or themes are observed in the data (Mwita, 2022). The focus groups included 3–5 participants. This smaller size for the focus groups was appropriate as it allowed for meaningful discussion between participants while ensuring heterogeneity of experiences and opinions (Williams et al., 2021). Focus groups with 3–5 participants are commonly used in qualitative research to gain different perspectives without limiting discussion time (Mwita, 2022). Richard et al. (2021) recommended between three to five focus groups as a general guideline to obtain rich qualitative data, noting that conducting fewer than three groups runs the risk of missing important perspectives, while much larger numbers tend to provide diminishing returns due to replication of themes.

To recruit participants, I contacted local advocacy organizations that support hospital workers impacted by the mandate. I also engaged professional healthcare associations and LinkedIn networking, using direct invitations and professional referrals to recruit healthcare administrators and managers. These organizations were asked to share information about the study and my contact details with potential participants who

met the criteria. To verify that participants met the inclusion criteria, including self-identifying as African American, having been previously employed as a hospital worker in Los Angeles County, and having lost their employment during the stated time period due to not receiving the COVID-19 vaccine as required by Executive Order No. NR21-242, I shared an email containing a survey on the inclusion criteria. Interested individuals then contacted me directly to express interest and were screened for eligibility using the survey. Additionally, recruitment information was posted on relevant social media platforms and online forums.

Instrumentation

The primary data collection instruments for this study were interview protocols, one for healthcare workers (see Appendix A) and another for healthcare administrators and managers (see Appendix B), and a focus group protocol (see Appendix C). I developed the interview guide and focus group protocol to answer the RQs based on the literature review and theoretical framework. The interview guide included open-ended questions to qualitatively elicit responses from participants regarding their experiences with vaccine hesitancy and mental health effects after termination of employment due to vaccine mandates. The focus group protocol provided discussion prompts that allowed participants to engage with each other's perspectives in a natural conversation format. The prompts were developed based on the literature review and theoretical framework to address the RQs to establish content credibility.

The focus group sessions lasted approximately 60–90 minutes and were audio-recorded and transcribed verbatim. I recorded any nonverbal behaviors exhibited and

interactions between participants. Participants were encouraged to share their experiences and perspectives regarding their reasons for vaccine hesitancy and the mental health impacts of losing their jobs due to noncompliance with vaccine mandates. Participant discussions allowed insight into both shared and diverse viewpoints within this population who faced similar employment consequences. The focus groups supplemented the interview data by exploring a range of experiences in an interactive group format.

Procedures for Pilot Study

I conducted a pilot study prior to initiating the main study. The purpose of the pilot study was to test the interview questions and focus group protocol to identify any issues or needed revisions before using the instruments with the actual study sample. For the pilot study, three African American hospital workers, healthcare administrators, and managers who met the eligibility criteria (but were otherwise not part of the sample frame) were recruited through personal contacts to provide feedback.

Per Walden IRB guidelines, the pilot study procedures mirrored the main study procedures, except IRB approval was not required at this stage since the pilot involved friends rather than research subjects. Participation in the pilot study involved reviewing and providing feedback on the information sheet and consent form, Appendix C for clarity and understanding, the interview questions for comprehensibility, sensitivity of questions, and estimated time needed, the focus group protocol for flow, timing of questions/discussion, and facilitation, and identification of any terms or concepts requiring more explanation.

Based on feedback received, I made revisions as needed before submitting all materials to the IRB for approval. No pilot study data were included in the final analysis for the main study. Once IRB approval was obtained, pilot study procedures involving strangers as participants were carried out. Five participants from the target population were recruited by phone and email using the recruitment flyer. The pilot study involved three participants instead of using the entire sample size, as the smaller size enabled me to test the feasibility of research methods, refine instruments, and pinpoint possible problems without undue wastage of resources and compromising the integrity of the larger study (see Nyimbili & Nyimbili, 2024). Participants provided consent and then participated in either a pilot interview or a focus group that was audio recorded. The participants' feedback on the data collection tools and procedures was again collected and used to refine the materials further before beginning the main study.

Procedures for Recruitment, Participation, and Data Collection

Recruitment began upon receiving approval from Walden University's IRB. The data for this study were collected from African American hospital workers in Los Angeles County, California, who lost their employment as a result of vaccine hesitancy connected to the State Public Health Officer Order of August 5, 2021, and from healthcare administrators and managers involved in the development and implementation of the COVID-19 vaccine mandate outlined in Executive Order No. NR21-242. To recruit participants, advertisements and flyers were posted at local churches, community centers, and athletic organizations in Los Angeles County that are known to serve predominantly African American communities, as well as through professional healthcare

associations and LinkedIn networking for healthcare professionals. The flyers included a brief description of the study purpose and procedures, as well as my contact information, should potential participants be interested.

I collected the data as the primary researcher. Once participants expressed interest, I screened them using a survey questionnaire to ensure they met the inclusion criteria. The inclusion criteria for these healthcare workers included African American racial identification, vaccine hesitancy, and refusal to receive the vaccine during the time in which the forced vaccine mandate was enacted, as well as the termination of employment due to such refusal to receive the vaccine during the forced vaccine mandate. Potential participants meeting any of the exclusion criteria of not identifying as African American, being under 18 years of age, not being previously employed as a hospital worker in Los Angeles County and not losing employment due to vaccine hesitancy/refusal during the mandated period were deemed ineligible. For those who were eligible, I scheduled individual data collection sessions either by phone or video call based on participant preference. These sessions lasted approximately 60–90 minutes and involved administering a questionnaire and interview guide that I developed to measure depressive symptoms, anxiety, and PTSD and to gather information about their experiences surrounding vaccine hesitancy and job loss.

To recruit participants for the focus groups, I first identified individuals who participated in the semistructured interviews and indicated their willingness to also participate in a focus group. Invitation emails or phone calls were made to these potential participants first to take part in either of two planned 60-minute focus groups with 4–6

individuals in each group. If an insufficient number of interview participants agreed to also join a focus group, further recruitment took place using the same recruitment strategies as the interviews. Specifically, invitation flyers were posted on community boards and circulated by trusted community partners within African American churches, community centers, and healthcare professional organizations serving the areas where eligible workers resided. Interested individuals were screened by phone or email to assess whether they met all eligibility criteria for the study. The eligible participants were scheduled to participate in one of the two planned focus groups.

The data collection phase lasted around 2 months to allow adequate time for recruitment until the target sample size of 10–15 participants for the semistructured interviews and eight–12 participants for three focus groups was reached. The same participants from the interviews comprised the focus groups unless some declined participation, in which case new members were recruited while maintaining the target sample size range (Somanathan, 2024). Participation was on a rolling basis, with 3–4 new participants per week completing data collection sessions. Data collected via questionnaire were directly entered into a secure online database during the sessions. Interview responses were audio recorded with participant consent and later transcribed for inclusion in data analysis. Recruitment flyers were updated every 2–4 weeks as needed and posted in additional locations to ensure enough eligible participants were recruited within the allotted timeframe.

Upon completion of the session, participants were debriefed on the study's purpose and informed that their participation was concluded. The participants were also

provided with a list of local mental health resources if they experienced any distress from the discussion of sensitive topics covered. There were no follow-up requirements for participants subsequent to the initial data collection session. The procedures outlined were designed with consideration of ethical standards and were submitted to the Institutional Review Board for approval prior to beginning any recruitment or data collection activities.

Data Analysis Plan

After the data collection process, semistructured interview transcripts and focus group transcripts were transcribed verbatim using Clickup transcription software. The transcripts were then uploaded to NVivo software. I used the descriptive coding method outlined by Saldana (2016) to analyze the data collected for this study. Saldana described descriptive coding as a method for qualitative data analysis where codes or labels are assigned to summarize passages of raw data in descriptive phrases or words. This method helped gain a deep understanding of the data collected.

The first cycle of descriptive coding was conducted to analyze the interview transcripts collected from the African American hospital workers, healthcare administrators, and managers. As mentioned by Saldana (2016), descriptive coding is well suited for interviews as it provides an inventory of topics for indexing and categorizing data. The interview transcripts were uploaded to NVivo 12 software, which was used to facilitate the coding process. Words, phrases, or passages from the transcripts were tagged with descriptive codes summarizing their essence (Lungu, 2022). For

example, passages discussing anxiety after job loss could be coded as “mental health effects.”

These codes were then analyzed in the second cycle of coding, where pattern coding was used to group the first-cycle codes into a smaller number of categories and themes (see Lungu, 2022). For instance, codes around mental health effects, stress, and depression could be categorized under an overarching theme of psychological impacts of job loss. This process of categorization helped bring meaning and organize the coded data into clusters, linking them to the RQs.

Specifically, the interview transcripts were analyzed to understand the mental health impacts faced by the participants after losing their jobs due to vaccine mandates. Passages discussing various psychological symptoms like anxiety and depression were coded and categorized to understand the emerging themes. Similarly, transcripts were also coded around factors influencing vaccine hesitancy to answer the related RQ.

Deviant and inconsistent cases that did not fit emerging patterns were portrayed as exceptions and examined in separate sections or applied to the existing categories. After coding, I used NVivo software to sort, match, and link different codes in order to draw meaningful conclusions. This systematic process of descriptive coding assisted in the efficient analysis of the qualitative data collected through interviews.

Issues of Trustworthiness

According to Stahl and King (2020), trustworthiness in research plays an essential role as it is used to help determine the accuracy and reliability of findings. Adler (2022) described that trustworthiness involves persuading the reader that the results are credible,

transferable, dependable, and confirmable. Ensuring credibility aids in justifying a study's inclusion in existing literature and assures readers that the study was competently conducted to generate meaningful results.

Credibility

Building credibility is one of the fundamental processes that enhance trustworthiness in research. Credibility is the degree of confidence that one can have in the truth of findings in a given particular qualitative study and the outcomes (Stahl & King, 2020). To credibly establish the results of this study, I implemented both triangulation and data saturation processes. To achieve triangulation, I interviewed participants individually and held focus group discussions to elicit various perspectives regarding the RQ. The triangulation enhanced credibility through corroborating similar findings from data collected from diverse sources (Kakar et al., 2023). I also ensured data saturation by collecting data during interviews until no new data emerged from the participants (Hennink & Kaiser, 2022). Moreover, I conducted member checking by returning to the participants and presenting the interview transcripts to them for confirmation that the transcripts reflected what they had said. As a method of ensuring credibility, member checking enabled participants to clarify certain assumptions made when providing responses or to question how those responses were interpreted (Stahl & King, 2020). These steps enhanced the reliability of data interpretation and analysis in this study.

Transferability

Transferability is the ability to transfer the results of qualitative research to other contexts and settings (Kakar et al., 2023). To enhance transferability in this study, I provided a thick description and ensured variation in participant selection. I included extended detail on the methods of the study and environmental conditions for audiences to determine whether the conclusions were transferable to their contexts. To provide a thorough description, the research procedure, participants, context, data gathering, and analysis were described in detail (Stahl & King, 2020). Another feature that I employed to enhance participant selection was specifically targeting participants to be recruited from African American ethnicity and selected from different healthcare facilities, various positions, and different ages, genders, and marital statuses. Diversity in participant sampling increased the transferability of study results to other categories of healthcare workers in diverse environments (Kakar et al., 2023). In combination, a thick description and variation in participant selection enhanced the transferability of the study findings to other similar contexts.

Dependability

Dependability refers to the consistency of collected information at different times and the extent to which the study could be repeated with similar findings (Kakar et al., 2023). To ensure that this study was dependable, I used an audit trail. The dependability of the study was ensured by the use of audit trails, which entailed detailed documentation of the practice of data collection, analysis, and interpretation. Documentation trails also covered the progression and decisions made throughout the study. This audit trail was

useful, as it meant that every step of the research process and decisions made at every stage could be reviewed and compared to the data to see whether the conclusions had been made based on evidence (Adler, 2022). Having an audit trail improved data robustness over time and may increase the likelihood of replicating this study.

Confirmability

Confirmability is used in qualitative studies to ensure that findings reflect participants' perspectives and are not a result of biases or interests a researcher may have (Adler, 2022). In this study, confirmability was ensured through an audit trail and by maintaining a reflexive journal. I made detailed notes throughout the process of data collection and data analysis. These notes recorded how data collection was carried out, the development of categories, and the decisions made during the research process. Through the audit trail, reviewers could trace the process and verify whether the findings, interpretation, and conclusions were actually supported by the data (Kakar et al., 2023). I also practiced reflexivity by maintaining reflexive journals: records of reflections about myself and the study process kept throughout. Reflective records offered transparency to probable biases and values I held as the researcher. To enhance the confirmability of this study, both the audit trail and the reflexive journal were utilized because both helped to clearly illustrate exactly how conclusions and interpretations were developed based on the data and not on any researcher bias.

Ethical Procedures

In this research study, I aimed to understand how vaccine mandates affected African American healthcare workers, healthcare administrators, and managers during

the COVID-19 pandemic. Therefore, institutional permissions and ethical considerations were of utmost importance. Before recruitment and data collection, the study proposal was submitted to Walden University's IRB for review and approval.

The primary ethical concern related to participant recruitment was potential coercion due to power differentials, as the population under study had recently lost their jobs in healthcare settings due to vaccine mandate policies. To address any possible coercion, participants were recruited through community and advocacy groups representing former African American healthcare workers rather than directly contacting former employers or colleagues. Additionally, healthcare administrators and managers involved in vaccine mandate implementation were recruited through professional healthcare associations and LinkedIn networking to ensure a diverse representation of institutional perspectives. The recruitment process aimed to alleviate fears of repercussions and allow fully voluntary and informed consent.

Prior to participation, informed written consent was obtained from all participants explaining the purpose and procedures of the research study, the risks and benefits of participation, privacy and confidentiality procedures, and participants' right to withdraw at any time without penalty. Regarding data collection, potential risks involving invasion of privacy and psychological stress were minimized. Surveys asked about general impacts on mental health and well-being rather than seeking sensitive personal health information. Participants could skip any questions they did not wish to answer. Identifying information was not collected or linked to survey responses to protect confidentiality.

Collected data were securely stored on an encrypted laptop and backup drive accessible only to me as the principal investigator. All data were anonymous, as no identifying information was collected from participants. After 5 years, electronic data will be permanently destroyed by file deletion, and physical formats will be shredded. Findings were reported in aggregate to further protect individual identities and experiences. I had no conflicts of interest in conducting this study. This study aimed to give a voice to the healthcare worker population affected while upholding the highest ethical standards for research.

Summary

I employed a basic qualitative case study to understand vaccine hesitancy and the resulting mental health impacts among African American healthcare workers in Los Angeles who lost their jobs due to vaccine mandates, with a focus on policy implementation and its broader implications for public policy and administration. A purposive sample was recruited, and both semistructured interviews and focus groups were used to collect data. Saldana's (2016) descriptive coding was used to analyze the qualitative data. Trustworthiness was established through credibility, transferability, dependability, and confirmability. Strict ethical protocols, including IRB approval and confidential informed consent, ensured the protection of participants. I gained meaningful insights regarding the research problem by adhering to this methodology. The next chapter, Chapter 4, presents the results acquired after the data collection process.

Chapter 4: Results

Introduction

The purpose of this basic qualitative case study was to explore the reasons for vaccine hesitancy among African American healthcare workers in Los Angeles County, California, the mental health effects of their employment loss due to the State Public Health Officer Order of August 5, 2021 (Executive Order No. NR21-242), and the perspectives of healthcare administrators and managers involved in the development and implementation of the mandate, ensuring a comprehensive analysis of its public policy and administrative implications. The specific research problem addressed through this study was that researchers had not investigated the issue of mental health effects among African American hospital workers who lost their employment as a result of vaccine hesitancy in connection with the State Public Health Officer Order of August 5, 2021. Al-Obaydi et al. (2022) and Momplaisir et al. (2021) identified higher hesitancy rates among Black, Hispanic, and Asian healthcare workers, highlighting the need for more targeted studies on this population. CRT and RCT formed the conceptual framework for this study (Fumagalli, 2021; Greene, 2021).

The study was guided by three RQs:

RQ1: What were the reasons for the vaccine hesitancy of the African American healthcare workers in Los Angeles County, California, who lost their employment due to the vaccine mandate?

RQ2: What were the mental health effects of the African American healthcare workers in Los Angeles County, California, who lost their employment due to the vaccine mandate?

RQ3: How did healthcare administrators perceive the policies and implementation of vaccine mandates affecting African American healthcare workers in Los Angeles County, California?

The setting of the study is described in the next section. The demographics of the participants are presented to provide a clear understanding of the sample. Following this, the methods of data collection and data analysis are detailed. The results section presents the themes that emerged from the data analysis, answering the RQs with direct quotes from participants. The chapter concludes with a summary of the findings.

Setting

The study was conducted in healthcare settings across Los Angeles County, California, focusing specifically on African American healthcare workers who lost their employment due to vaccine hesitancy following the implementation of the State Public Health Officer Order of August 5, 2021 (Executive Order No. NR21-242). The mandate required healthcare workers to be fully vaccinated by September 30, 2021, to reduce COVID-19 transmission and protect vulnerable populations in healthcare settings (CDPH, 2021). The participants were drawn from a range of healthcare facilities within the county, including hospitals, clinics, and other medical service providers where vaccine mandates were enforced. Given the diversity of the healthcare sector in Los Angeles County, the settings ranged from large academic medical centers to smaller

community-based healthcare providers. These varied settings provided a broad view of how the vaccine mandate was implemented and experienced differently within distinct organizational environments.

The study's setting was particularly significant due to the unique challenges presented by the COVID-19 pandemic. Los Angeles County, being one of the most populous and diverse counties in the United States, faced heightened public health risks, making the implementation of the vaccine mandate a crucial public health measure (Momplaisir et al., 2021). However, the mandate also created significant tension, particularly among healthcare workers who were hesitant to receive the vaccine. The cultural, social, and economic dynamics of the county contributed to these tensions, as did the historical mistrust of healthcare systems in certain marginalized communities, such as the African American community (Woodhead et al., 2022). Due to the nature of the research, data collection occurred primarily through remote interviews conducted via Zoom to accommodate participants' safety and work schedules during the ongoing pandemic. All participants were asked to join from private, quiet locations to ensure confidentiality and to provide a setting conducive to candid discussions about sensitive topics such as vaccine hesitancy, employment loss, and the mental health effects of those experiences.

Demographics

A total of 15 African American healthcare professionals, all of whom lost their positions after declining the COVID-19 vaccine, participated in this study. Seven participants were female, while eight were male. Eight participants were healthcare

workers, while seven were healthcare administrators. The group represented a broad cross-section of the Los Angeles County healthcare workforce, spanning frontline clinical staff (certified nursing assistant, respiratory therapist, surgical technologist), support personnel (unit clerk, environmental services), and senior leadership or managerial posts (chief operating officer, director-level administrators). This range of roles provided perspectives from both direct-care employees and decision-makers responsible for implementing or enforcing the mandate, thereby enriching the analysis of how the policy affected day-to-day practice, professional identity, and organizational culture. Table 1 displays demographic characteristics of the participants.

Table 1

Participants' Demographics

Participant	Gender	Current role
Participant 1	Female	Certified nursing assistant
Participant 2	Male	Environmental services tech
Participant 3	Female	Patient care technician
Participant 4	Male	Environmental services supervisor
Participant 5	Female	Unit clerk
Participant 6	Male	Respiratory therapist
Participant 7	Female	Director of clinical operations
Participant 8	Male	Senior nurse administrator
Participant 9	Female	Chief operating officer
Participant 10	Male	Vice president, clinical ops
Participant 11	Female	Licensed vocational nurse
Participant 12	Male	Chief of support services
Participant 13	Female	Nurse manager
Participant 14	Male	Respiratory therapist
Participant 15	Male	Surgical technologist

Data Collection

Data for this study were collected through semistructured interviews with both African American healthcare workers who lost their employment due to vaccine hesitancy and healthcare administrators involved in the implementation of the COVID-19 vaccine mandate. Semistructured interviews were conducted to explore participants' personal experiences with vaccine hesitancy, employment loss, and the mental health impacts of these experiences. The interviews allowed for open-ended responses and encouraged participants to share their perspectives in their own words. The interview protocol (see Appendix A) was developed to address the RQs, ensuring a comprehensive exploration of each participant's thoughts on the vaccine mandate, reasons for hesitancy, and mental health effects of job loss. Interviews were scheduled at the participants' convenience and were conducted via Zoom to ensure safety and confidentiality during the COVID-19 pandemic.

Participants were recruited through a combination of purposive and snowball sampling. African American healthcare workers who lost their employment due to the vaccine mandate were identified through local advocacy groups, professional organizations, and online networks. Healthcare administrators were recruited via professional healthcare associations and by referrals from colleagues in the healthcare sector. All interviews were audio-recorded with participants' consent. The recordings were then transcribed verbatim, preserving the original language and meaning of the participants' responses. I edited errors in the transcripts and emailed the participants the

transcripts for member checking. These transcripts formed the primary dataset for the analysis and were uploaded into NVivo 12 software for coding and theme identification.

Data Analysis

Data collected from the 15 semistructured interviews were analyzed using the descriptive coding method by Saldana (2016). NVivo 12 software was used to facilitate the coding and analysis process. The software allowed for the efficient management of the interview transcripts, enabling me to assign codes to highlighted data phrases. The purpose of the analysis was to identify themes and patterns within the data that addressed the RQs related to vaccine hesitancy, the mental health effects of employment loss, and the perspectives of healthcare administrators on the vaccine mandate.

The data analysis followed a two-phase coding process: first-cycle coding and second-cycle coding. The first cycle involved descriptive coding, whereby I assigned codes to sections of the interview transcripts that were related to the phenomenon under study. The initial codes captured the participants' experiences and perspectives regarding the vaccine mandate, reasons for hesitancy, and emotional reactions to losing their employment (Saldana, 2016). Table 2 shows a section of the initial codes.

Table 2

Initial Codes

Code	Participant (*N* =)	Frequency
Concerns about speed and development	7	7
Not involved in the process	1	1
Safety was pushed aside	1	1
Some steps were skipped	1	1
Speed caused nervousness	1	1
Speed of development	1	1
The vaccine was rushed	1	1
Worried how the vaccine was ready fast	1	1

After the first cycle of coding, I used pattern coding in the second cycle to group similar codes into broader categories or themes. I grouped codes with similar patterns and identified recurrent patterns across interviews. Table 3 shows a section of categories.

Table 3

Categories

Code	Category
Not involved in the process	Mandate was rushed
Safety was pushed aside	Mandate was pushed fast
Some steps were skipped	Key steps were skipped
Speed caused nervousness	Employees were not involved
Speed of development	
The vaccine mandate was rushed	
Worried how the vaccine was ready fast	

I was able to identify themes from the categories. The themes that emerged were then refined to create a more cohesive understanding of the participants' experiences (see Saldana, 2016). Table 4 displays a section of themes obtained.

Table 4

Themes

Code	Category	Theme
Not involved in the process	Mandate was rushed	Vaccine mandate was rushed
Safety was pushed aside	Mandate was pushed fast	
Some steps were skipped	Key steps were skipped	
Speed caused nervousness	Employees were not involved	
Speed of development		
The vaccine mandate was rushed		
Worried how the vaccine was ready fast		

Eight themes emerged, which addressed the RQs. The themes were grouped into three major categories corresponding to the RQs: (a) reasons for vaccine hesitancy (RQ1): themes related to the participants' hesitancy to take the COVID-19 vaccine, including concerns about its rapid development, and historical mistrust of medical institutions; (b) mental health effects of employment loss (RQ2): themes that explored the emotional and psychological consequences of losing employment due to vaccine hesitancy, such as anxiety, depression, identity loss, and financial stress; and (c) healthcare administrators' perspectives (RQ3): themes that reflected the administrators' views on the implementation of the vaccine mandate, focusing on communication

challenges, lack of support for hesitant employees, and the ethical concerns about mandating vaccination.

Evidence of Trustworthiness

Ensuring the trustworthiness of the study was essential to establish the credibility, reliability, and validity of the findings. The following strategies were employed to enhance the trustworthiness of this research: credibility, transferability, dependability, and confirmability. These criteria, as outlined by Lincoln and Guba (1985), were used to ensure the research process and findings were both transparent and robust.

Credibility

Credibility refers to the accuracy and authenticity of the findings, ensuring that the study's conclusions genuinely reflected the experiences of the participants (Lincoln & Guba, 1985). To enhance the credibility of the data, I conducted member checking. After the interviews were transcribed, I emailed the participants their respective transcripts for review. The essence of member checking was to ensure that any discrepancies or misinterpretations were corrected, ensuring that the data reflected participants' true intentions and experiences (Birt et al., 2016). After sending the emails, eight participants confirmed that the transcripts were accurate, while seven participants did not respond to the emails; thus, no adjustments were made to the transcripts.

Transferability

Transferability refers to the extent to which the findings can be applied to other contexts or settings (Lincoln & Guba, 1985). Transferability was achieved through thick descriptions in the chapter. While the study was context-specific, focusing on African

American healthcare workers in Los Angeles County, I provided detailed descriptions of the participants, setting, and methods to allow for the study's findings to be compared to other similar populations or healthcare settings (see Lincoln & Guba, 1985). This study's rich descriptions of participants' lived experiences and the various healthcare settings in which they worked made it possible to apply the findings to similar groups or situations. Transferability was also achieved through participant variability. The study sample consisted of a diverse group of participants from different roles within healthcare, such as clinical staff, support staff, and administrators. This variation allowed for a more generalized understanding of how the vaccine mandate affected workers across different organizational levels and professional backgrounds.

Dependability

Dependability refers to the stability and consistency of the research process over time, ensuring that the findings would be replicable in similar research (Lincoln & Guba, 1985). Dependability was achieved through an audit trail. I maintained an audit trail that documented the entire research process, including decisions made during data collection, coding, and analysis. The audit trail allowed for a transparent review of how the data were collected and analyzed, ensuring that the findings could be traced back to their source (Ahmed, 2024). Dependability was also achieved through codebook development. A detailed codebook was created to outline the coding procedures and the themes that emerged from the data. This codebook provided an organized structure for the data analysis and allowed for consistency in coding across the entire dataset. It also made the research process more transparent and reproducible.

Confirmability

Confirmability refers to the objectivity of the study, ensuring that the findings were based on the data rather than my biases or personal viewpoints (Lincoln & Guba, 1985). Confirmability was achieved through reflexivity. I maintained a reflexive journal throughout the study, which documented any personal biases, assumptions, and reflections on the research process. This journal allowed me to remain aware of how my personal experiences might influence the interpretation of the data and to mitigate those influences as much as possible (McGrath, 2021). Confirmability was also achieved through triangulation of sources. Data were collected from two distinct groups, healthcare workers and administrators, which helped ensure that the results were grounded in multiple perspectives rather than the interpretation of a single group.

Results

This section presents the findings from the analysis of the 15 semi-structured interviews conducted with African American healthcare workers and healthcare administrators. The results are organized according to the three RQs, with themes emerging from the data analysis. Each theme has an introduction and conclusion and is supported by four verbatim quotes from participants to provide insight into their experiences and perspectives.

RQ1

RQ1 posed in this study was as follows: What were the reasons for the vaccine hesitancy of the African American healthcare workers in Los Angeles County, California, who lost their employment due to the vaccine mandate? Two themes emerged after

analysis. The two themes were as follows: (a) concerns about speed and development, and (b) historical mistrust of the medical system.

Theme 1: Concerns About Speed and Development

The first theme was referred to by all healthcare workers. This finding revealed that participants raised concerns about the rapid development of the vaccine, with some questioning the adequacy of the testing and the potential risks associated with its quick rollout. The participants mentioned that the speed with which the vaccine was developed contributed to their hesitancy.

Participant 2 discussed the speed of the vaccine development, expressing concerns that it was rushed and lacked the necessary testing to ensure its safety, stating, "I couldn't take it because it came too fast. How could they have developed something like that so quickly and say it's safe for everyone?" Participant 7 shared concerns about the rushed nature of the vaccine, adding that the lack of long-term studies made him hesitant, stating, "I was skeptical because I saw how quickly they were pushing it. They didn't even have time to study what side effects could happen down the line."

Participant 1 explained that everything appeared to be rushed when the vaccine first came out. The participant was hesitant to get vaccinated because of how rushed things were done, wondering why things were escalated, stating:

> When the vaccine first came out, everything just felt rushed. Like, one minute they were still trying to figure things out with the virus, and the next minute, boom, there's a vaccine, and we're all supposed to line up. I remember thinking, "wait a minute, how'd they come up with this so fast?" It made me nervous.

This theme showed that concerns about the speed and lack of long-term testing significantly contributed to the participants' hesitancy. The rapid development and distribution of the vaccine raised doubts about its safety and efficacy, which contributed to the reluctance of several healthcare workers to trust the vaccine. The participants questioned whether sufficient care was taken to ensure vaccine safety; hence, hesitancy.

Theme 2: Historical Mistrust of the Medical System

Data supporting this theme were drawn from all healthcare workers. This finding indicated that there was deep mistrust of the medical system within the African American community, resulting in vaccine hesitancy. Participants frequently referenced the Tuskegee Experiment and other historical instances of medical mistreatment as contributing to their reluctance to trust medical authorities and the vaccine.

Participant 1 explained how the historical treatment of African Americans in medical research shaped their distrust of healthcare institutions, resulting in vaccine hesitancy, stating:

> There is just a lot of mistrust in the community, you know, especially among Black folks. I mean, we remember stuff like Tuskegee, and those things don't just disappear from memory. I kept thinking, "am I gonna be part of some experiment again?" It might sound extreme, but those fears are real when history's taught you to be cautious.

Participant 3 discussed how the historical mistreatment of Black people in healthcare led to a generalized fear of trusting the system, especially regarding the vaccine, stating, "We, as Black people, have a whole history with healthcare that is complicated. From

Tuskegee to forced sterilizations, we have reasons to be cautious. It's not about being paranoid; it is about being aware."

This theme indicated that the historical mistreatment of African Americans by the healthcare system played a significant role in participants' hesitancy to trust the COVID-19 vaccine. This historical context of systemic racism and medical abuse created an enduring mistrust of medical institutions and interventions, resulting in the participants' reluctance to get vaccinated. The impact of such mistreatment adversely affected how the participants perceived healthcare policies, considering that they came from institutions that have historically caused harm.

RQ2

RQ2 guiding this study was as follows: What were the mental health effects of the African American healthcare workers in Los Angeles County, California, who lost their employment due to the vaccine mandate? Three themes were obtained that answered this RQ. The three themes were (a) loss of identity and purpose, (b) cut budgets and costs, and (c) emotional and physical strains.

Theme 3: Loss of Identity and Purpose

All the healthcare workers contributed to this theme. This finding showed that losing employment in healthcare led to participants experiencing a deep sense of identity loss. For many, their work in healthcare had been central to their sense of self-worth, and the sudden removal from this role created profound emotional turmoil. This theme revealed that the loss of their professional identity affected their overall mental health and sense of purpose in life.

Participant 5 talked about how the loss of their job affected their sense of self-worth and purpose in life. The participant mentioned that she used to be active in the community; however, she felt like she lost her value after losing her job, asserting:

> I used to be active in my community. I volunteered at the local clinic on weekends, helped out with food drives. That all stopped when I lost my job. Not because I don't want to help, but because I can't even help myself right now. And when you lose that sense of purpose, it eats away at you. It's like, "who am I without that work?"

Participant 14 shared that their identity was heavily tied to their role in the healthcare system, and the job loss led to emotional turmoil, stating, "Then came this wave of sadness, like someone had erased a chunk of my identity. I wasn't [Name] the respiratory therapist anymore; I was just [Name], sitting at the kitchen table, refreshing job boards."

This theme revealed that participants losing their jobs after declining the vaccine resulted in a profound sense of identity loss. Healthcare work had been central to their lives, and the sudden termination left them struggling with feelings of purposelessness and low self-worth. This loss was not just financial; it affected their emotional and psychological well-being.

Theme 4: Cut Budgets and Costs

Data supporting this theme were referenced from all healthcare workers. This finding revealed that the economic impact of job loss compounded the emotional strain participants were already experiencing. The participants reported that the sudden

financial insecurity caused by the job loss resulted in their emotional distress. The participants were worried about meeting financial obligations such as bills, mortgages, and family well-being because they lost their jobs.

Participant 15 discussed the financial burden of losing his job without warning and how it exacerbated his emotional struggles. The participant was left wondering which bills should be prioritized over the other, stating,

> I would say it is one of the hardest, yeah. But right up there is the financial stress. Like, losing your income is one thing, but losing your main source of income with no warning? That's a whole different kind of pressure. I had a little saved, but not enough. So, I had to choose, "do I pay the light bill or buy groceries? Do I refill my asthma meds or put gas in the car?"

Participant 5 talked about the immediate financial stress she faced after losing her job. The participant mentioned that everything shifted, and she had to cut costs on her expenditures, stating:

> Oh, everything shifted. I used to be so structured, with alarms, shift schedules, and meal prep. Now my days kind of blur together. I try to stay active, but it's hard when you don't have somewhere to be. And the financial stress, whew! That's a whole other level. I've had to cut back on everything, groceries, my phone plan, even therapy sessions. I was seeing someone once a month, but I can't afford that now.

This finding showed that job loss resulted in financial insecurity among the participants. The participants were forced to confront significant economic difficulties,

which caused anxiety and worry about how to provide for themselves and their families. The pressure to make ends meet intensified the emotional distress they were already experiencing, creating a vicious cycle of financial and emotional strain.

Theme 5: Emotional and Physical Strains

All healthcare workers contributed to this theme. This finding revealed that participants reported feelings of depression, anxiety, and hopelessness as a result of losing their jobs. The stress and uncertainty caused by the situation led to mental health challenges, with some participants experiencing symptoms of anxiety and depression.

Participant 14 shared that he felt burnout before the mandate, experiencing physical and emotional draining some days. The participant mentioned that things got worse after the mandate hit, stating:

> I was feeling burnt out before the mandate stuff even came up. Like, physically exhausted, emotionally drained, some days. But I kept pushing, thinking, once this wave of COVID passes, maybe things will settle. But then the mandate hit, and it was like everything just cracked open.

Participant 12 mentioned that he was holding it together before losing his job and got tired emotionally and physically after losing the job, stating, “Before I lost my job, I’d say I was holding it together, but barely, you know. Working in healthcare during the height of COVID, it took a toll on everybody. I was tired, emotionally and physically.”

This finding revealed that participants were emotionally affected after losing their jobs. The participants experienced increased levels of anxiety and despair. After losing

their jobs, the participants were worried about their future since they did not have jobs to rely on.

RQ3

RQ3 posed in this dissertation was as follows: How do healthcare administrators perceive the policies and implementation of vaccine mandates affecting African American healthcare workers in Los Angeles County, California? Three themes were obtained after analysis of the data. The three themes were as follows: (a) the vaccine mandate lacked ethical concerns, (b) policies felt disrespectful among African Americans, and (c) lack of support and a good communication strategy.

Theme 6: The Vaccine Mandate Lacked Ethical Concerns

Data supporting this theme were drawn from all healthcare administrators. This finding indicated that there were no ethical concerns about the vaccine mandate. While they understood the public health rationale, they also acknowledged the ethical dilemma of imposing such a mandate on a workforce that had been historically marginalized. This theme explores the ethical considerations that administrators grappled with during the implementation of the mandate.

Participant 7 expressed a need for slowing down how the mandate was conducted. Implementation of the mandate appeared as if it were a relay race from policy to enforcement. No dialogue was put into consideration, asserting:

> If I'm being honest, I think the biggest thing I would've done differently is slow down. I know that sounds counterintuitive given the urgency of the pandemic, but we moved so fast, from policy to enforcement, that we didn't leave space for real

dialogue. It felt like we were running a relay race with no time to check if anyone was keeping up.

Participant 10 talked about how some directors wanted to enforce the vaccine mandate strictly with no exceptions and consideration of humanity in the workforce, stating, “Some directors wanted to enforce the deadline strictly, with no exceptions. Others pushed for more leniency. I fell somewhere in the middle. I believed in the mandate, but I also believed in the humanity of our workforce.”

This theme showed that ethical concerns surrounding the vaccine mandate were not put into consideration in the vaccine mandate; hence, undermining the rights of the African American healthcare workers. Healthcare administrators recognized the need for an approach that considered the long-standing contributions of African American employees. The lack of flexibility in the mandate enforcement created ethical tensions that administrators had to navigate in some instances.

Theme 7: Policies Felt Disrespectful Among African Americans

All the healthcare administrators contributed to this theme. This finding revealed that the perception of the mandate as disrespectful among the employees was a significant issue in implementing the vaccine mandate. Healthcare administrators mentioned that the rigid enforcement of the mandate, without room for individualized consideration, created feelings of disrespect among employees. The participants talked of tension between public health priorities and respecting individual autonomy.

Participant 9 discussed a scenario of one of their long-term serving employees who talked about the lack of consideration of Blacks when rolling out the vaccine mandate, stating:

> There was frustration, of course, a sense that the policy didn't take into account their lived experience. One of our long-time security guards ... a Black man in his late 50s ... said to me, "Every time something happens, it's like they forget our history. They just want us to fall in line and not ask questions."

Participant 8 shared that the disciplinary approach used lacked compassion. The healthcare workers were required to comply with the mandate without negotiation, stating:

> I think the disciplinary approach we used felt too black and white. You either complied or you didn't, and there wasn't much room for negotiations. I wish we'd built in more compassionate checkpoints. Like, maybe instead of going straight to suspension or termination, we could've had a system where folks had a 30-day extension if they were actively engaging in counseling or medical review. Something that showed we were working with them, not just issuing ultimatums.

This finding revealed that the perception that the vaccine mandate was disrespectful contributed to resistance from employees. Healthcare administrators explained that a more empathetic approach may have alleviated some of the friction caused by the vaccine mandate. Respecting individual autonomy and providing support during such mandates is crucial for fostering cooperation and reducing resistance.

Theme 8: Lack of Support and Good Communication Strategy

All the healthcare administrators contributed to this theme. This finding revealed that a lack of clear communication and support from employers was a significant concern expressed by healthcare administrators. Even though the mandate was rolled out with good intentions, many healthcare administrators recognized that more could have been done to ensure that hesitant employees were supported and provided with clear, accurate information. Lack of clear communication and support resulted in resistance from employees.

Participant 12 talked about the lack of emotional support for the healthcare workers. The participant mentioned that the mandate triggered anxiety, mistrust, and trauma, and there was a need for mental health support, stating:

> Also, and this is a big one, we didn't have enough emotional support in place. The mandate wasn't just a policy. For a lot of people, it triggered anxiety, mistrust, and even trauma. I think we underestimated how deeply that would hit. I would've advocated for mental health support specifically tailored for staff navigating this decision, maybe counselors who understand racial and cultural dynamics, who could talk people through their fears without judgment.

Participant 8 acknowledged that there was a lack of a well-thought-out communication strategy for the employees, which led to high levels of resistance, stating:

> I would have pushed harder for a longer lead-in period. We were handed a very tight deadline by the county, which I understand, public health crises demand urgency, but from an operational and relational standpoint, we needed more time.

I think if we had even two more weeks to plan, we could've rolled out communications more thoughtfully.

This finding showed that a lack of communication and support during the COVID-19 pandemic contributed to a breakdown in trust between healthcare administrators and employees. Many healthcare administrators recognized that failure to properly address employees' concerns and provide adequate support led to increased resistance to the mandate. The communication gap significantly contributed to the negative reaction to the vaccine mandate among healthcare workers.

Summary

The purpose of this basic qualitative case study was to explore the reasons for vaccine hesitancy among African American healthcare workers in Los Angeles County, California, the mental health effects of their employment loss due to the State Public Health Officer Order of August 5, 2021 (Executive Order No. NR21-242), and the perspectives of healthcare administrators and managers involved in the development and implementation of the mandate, ensuring a comprehensive analysis of its public policy and administrative implications. I analyzed the data following descriptive coding by Saldana (2016). NVivo 12 software was used in organizing and manually coding the data. Eight themes emerged that answered the RQs.

For RQ1, participants' reasons for their vaccine hesitancy included concerns about the speed and development of the vaccine and historical mistrust of the medical system. These reasons contributed to a widespread reluctance to comply with the vaccine mandate, which led to their eventual job loss. Regarding RQ2, the mental health effects

of losing employment included loss of identity and purpose, financial stress, and emotional and physical impacts such as depression, anxiety, fatigue, and headaches. RQ3 focused on the perspectives of healthcare administrators. The participants mentioned a lack of support and a good communication strategy in the vaccine mandate rollout. Administrators also acknowledged the ethical challenges of enforcing the mandate and the perceived disrespect by healthcare workers in not being involved in the decision-making process, which led to resistance from employees who felt their concerns were not being fully understood or addressed. Interpretation of the findings, implications for public health policy, and recommendations for practice and future research are discussed in Chapter 5.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The purpose of this basic qualitative case study was to explore the reasons for vaccine hesitancy among African American healthcare workers in Los Angeles County, California, the mental health effects of their employment loss due to the State Public Health Officer Order of August 5, 2021 (Executive Order No. NR21-242), and the perspectives of healthcare administrators and managers involved in the development and implementation of the mandate, ensuring a comprehensive analysis of its public policy and administrative implications. The specific research problem addressed through this study was that researchers had not investigated the issue of mental health effects among African American hospital workers who lost their employment as a result of vaccine hesitancy in connection with the State Public Health Officer Order of August 5, 2021. To tackle this gap, CRT was used to foreground the legacy of systemic racism and RCT to understand the cost–benefit calculations each individual made.

The study was guided by three RQs:

RQ1: What were the reasons for the vaccine hesitancies of the African American healthcare workers in Los Angeles County, California, who lost their employment due to the vaccine mandate?

RQ2: What were the mental health effects of the African American healthcare workers in Los Angeles County, California, who lost their employment due to the vaccine mandate?

RQ3: How do healthcare administrators perceive the policies and implementation of vaccine mandates affecting African American healthcare workers in Los Angeles County, California?

The RQs ensured that every data collection step, analytic memo, and interpretive claim could be traced back to the original goals. Together, the framework and questions positioned the study at the intersection of structural inequity and personal agency, inviting participants to speak to both history and immediate consequence. By doing so, insights were obtained that would resonate with scholars, policymakers, and hospital leaders alike.

Across 15 semistructured interviews, eight interlocking themes were obtained that answered the RQs. African American healthcare workers repeatedly described a deep-seated distrust rooted in generations of medical mistreatment, and they voiced vivid fears about potential vaccine side effects that, to them, outweighed the security of a paycheck. Many recalled the mandate's rollout as rigid and disciplinary, mentioning that it offered no space for questions or accommodations and thus felt more like an ultimatum than a dialogue. African American healthcare administrators did not disagree; they acknowledged that the timeline was too tight, the messaging overly clinical, and emotional supports almost nonexistent, factors that they believed sparked anxiety, mistrust, and even trauma among staff. Both groups highlighted the absence of compassionate, culturally attuned communication and lamented the lack of tailored mental health services during and after the dismissals. Workers and managers converged on the idea that even modest extensions or required counseling checkpoints could have

softened resistance and reduced harm, revealing an unexpected common ground ripe for policy redesign.

The findings confirmed prior literature on the role of mistrust in vaccine uptake among marginalized healthcare staff while extending knowledge by illuminating the cascading mental health consequences of termination. The findings also indicated that administrative voices are rarely included in such debates, revealing consensus on the need for empathy-centered public health enforcement. The next sections entail interpretation of the findings through CRT and RCT, implications of the findings, limitations encountered during the study, recommendations for future research and practice, and conclusion of the study.

Interpretation

CRT locates individual decisions within a historical lattice of structural racism, whereas RCT highlights the cost–benefit calculations people make when confronting mandates. Comparing and contrasting these lenses with participants' narratives shows that vaccine refusal among African American hospital workers was not simply a personal choice; instead, it was a rational response to a context laced with distrust, risk asymmetries, and perceived coercion. The findings confirmed prior literature on racialized hesitancy, extended knowledge by documenting the mental health fallout of termination, and partly disconfirmed administrator assumptions that firmer deadlines alone improve uptake.

Many Black Americans eye public health directives with a healthy dose of suspicion (Momplaisir et al., 2021), aligning with the current study findings that the

participants did not have trust in the vaccine mandate. The participants talked about the Tuskegee study and more recent instances of medical bias as proof that official reassurances do not always pan out, affirming that CRT is rooted in daily encounters with structural inequity, not paranoia. RCT posits that when a brand-new vaccine is rushed into arms under threat of job loss, calculating the personal risk can feel like a logical decision, better to sacrifice a paycheck than gamble with one's health if the system is not trusted. The current study findings add that the distrust ballooned once the policy was delivered as a hard ultimatum; a medical decision turned into what several African American healthcare workers called a test of loyalty, deepening skepticism and resistance (Farah et al., 2022).

That same rigid rollout also amplified the mental health fallout Bardosh et al. (2022) warned about, including anxiety, stigma, and the sense that the vaccine mandate marked them as both disobedient and disposable. The participants described persistent panic attacks, depressive episodes, and identity disruption several months after termination, suggesting a chronic trajectory that Smallwood et al. (2021) only gestured toward. The intersection of racialized stressors and sudden unemployment also extended Chaufan et al.'s (2024) concept of mandate-induced marginalization, revealing that mental health impacts are magnified when workers perceive the policy itself as racially indifferent. These findings partially disconfirmed earlier administrator claims, found in Gur-Arie et al. (2023), that psychological effects would be short term once the public health risk subsided.

The themes of loss of professional identity and financial insecurity both confirmed and complicated workforce studies. Abouk and Heydari (2021) reported a 6% drop in new healthcare hires after mandates, but participants in this study articulated a deeper injury: the abrupt erasure of a calling central to their self-worth. Such identity loss aligns with Yassi et al.'s (2022) rural Canadian findings yet diverges by foregrounding the compounded effect of race and metropolitan cost-of-living pressures. Participant 14's vivid account, "I wasn't [Name] the respiratory therapist anymore; I was just [Name], sitting at the kitchen table, refreshing job boards" extended existing knowledge by linking economic strain, disrupted professional identity, and emergent mental health disorders into a mutually reinforcing cycle.

The African American healthcare administrators agreed with frontline staff that the mandate rollout fell flat on cultural sensitivity. Elliott and Chambers (2022) found that vaccine mandates create guaranteed workforce divisions, yet the African American healthcare administrators in the study felt that division was not inevitable. The African American healthcare administrators said a slower, phased deadline, one-on-one motivational interview sessions, and onsite counseling could have lowered the temperature, but practical steps were rarely spelled out in the research. The African American healthcare administrators believed the damage came less from the rule itself and more from how abruptly it landed. These findings add new concepts to the conversation: concrete, empathy-first tools that mesh with CRT's insistence on race-aware policy and with RCT's idea that people recalculate risks when they feel heard instead of cornered.

CRT helps in seeing why African American healthcare workers filtered the vaccine mandate through a long memory of medical racism, while RCT explains how that lens turned skepticism into a firm no, once job loss and side effect fears tipped the scales. These findings back Greene's (2021) warning that color-blind health policies can keep old inequities alive and extend Fumagalli's (2021) take on RCT by showing how history itself slips into every cost–benefit equation. Ignoring the past does not just cloud the moral picture; it changes the math people do when deciding whether to roll up their sleeves or walk away. Importantly, no theme outright contradicts the existing literature; instead, the data fill blind spots concerning the downstream psychological toll and the potential for policy design that centers trust, timing, and tailored communication. The findings integrate seamlessly with the study's conceptual framework: CRT illuminates the structural backdrop of distrust, and RCT elucidates micro-level choice dynamics. When viewed together, vaccine mandates, absent culturally sensitive support, may inadvertently exacerbate inequities they aim to resolve.

Limitations

Limitations are boundaries beyond a researcher's input that may impact or influence the outcome of the findings (Lim, 2025). Stating these boundaries is an ethical obligation because it alerts readers to the conditions under which the themes may or may not be applied to other settings. Stating the boundaries also aligns with the tenets of qualitative rigor, credibility, dependability, confirmability, and transferability, as first articulated by Lincoln and Guba (1985). By making explicit the weaknesses inherent in sampling, data generation, analytic strategy, and broader context, researchers practice

methodological transparency and invite constructive scrutiny that strengthens the cumulative knowledge base (Ahmed, 2024).

The first limitation was that there was no comprehensive roster of terminated employees; thus, I relied on purposive snowball recruitment, a pragmatic choice for hidden or hard-to-reach populations (Tajik et al., 2024). While the approach yielded rich, insider perspectives, it also opened the door to self-selection bias: individuals with the most acute anger, anxiety, or moral conviction may have been overrepresented, whereas those who complied quietly or who experienced neutral outcomes may have opted out. The resulting sample of 15 in-depth interviews drawn from a single metropolitan county achieved thematic saturation yet remained small and context-specific. Thick description can enhance transferability, but the findings should still be applied cautiously to rural hospitals, other racial or ethnic groups, or different geopolitical regions (Lincoln & Guba, 1985). Future inquiries might combine purposive selection with maximum-variation sampling across counties or states to widen experiential breadth.

The second limitation was recall and social desirability biases in retrospective self-reports. Semistructured interviews were conducted months after participants lost their jobs; research shows that elapsed time can distort the vividness and accuracy of memories, particularly when traumatic events are involved (Popovic & Huecker, 2023). Discussing vaccine refusal and mental health in a recorded conversation may prompt participants to frame their narratives in ways they believe are socially acceptable, thereby muting stigmatized emotions or amplifying morally defensible motives. Although probing questions were used and anonymity was guaranteed, only eight of the 15

participants completed member checking, leaving nearly half of the transcripts unverified. These factors could have shaped both the content and the tone of the data, subtly influencing analytic interpretations.

The third limitation was that all first-cycle descriptive coding and second-cycle pattern coding were performed by me as the sole researcher. Single-coder analysis is common in smaller qualitative projects; however, it can raise concerns about interpretive drift, selective attention, or unconscious confirmation bias (Church et al., 2019). I maintained a reflexive journal and an audit trail, strategies that bolster dependability and confirmability (see Ahmed, 2024). Yet an intercoder agreement check, such as Cohen's kappa, would have provided an additional quantitative gauge of coding consistency. Incorporating a second coder in future work could therefore enhance methodological robustness and help ensure that emergent themes truly reside in the data rather than solely in my interpretation.

The fourth limitation was the study's time-bounded policy context. Public understanding of COVID-19, vaccine efficacy, and mandate ethics shifted rapidly between the August 2021 public-health order and the data collection window. Prior research indicated that mandated policies could polarize workforces in the short term yet soften attitudes as new information and social norms evolve (Ewane, 2024). Consequently, data collected in the immediate aftermath of dismissal may differ from perspectives gathered months later, after legal challenges, economic recovery, or emerging variants reshape the narrative. The backdrop of systemic racism, salient in Los Angeles County's health-care labor history, further brackets the findings; what

participants experienced locally may not mirror dynamics in regions with different racial demographics or policy traditions. Longitudinal, multisite studies that pair interviews with workplace observation could test the durability and breadth of the themes obtained here.

Recommendations

Future researchers should conduct a longitudinal, multisite qualitative study that shadows terminated workers months or years after dismissal. The present study's cross-sectional design captured sentiments months post-event, but mental health trajectories often unfold over longer horizons (Popovic & Huecker, 2023). Reinterviewing participants at successive intervals across different counties would reveal whether anxiety, depressive symptoms, and professional identity loss dissipate, plateau, or worsen, thus extending Bardosh et al.'s (2022) speculation about the chronicity of mandate-related distress.

Future researchers should conduct quantitative survey research that pairs standardized mental health instruments with validated trust-in-healthcare scales. Purposive snowball sampling yielded thick description yet limited transferability; a stratified random sample of both terminated and retained African American hospital employees could test the prevalence of the themes while controlling for confounders such as age, role, and prior vaccine attitudes (Tajik et al., 2024). Such a design would also address the single-coder limitation by allowing psychometrically robust measures to complement narrative data (Church et al., 2019).

Future researchers should undertake mixed methods implementation studies of culturally responsive mandate rollouts. Administrators in this study acknowledged that compressed deadlines and scant emotional support triggered anxiety, mistrust, and trauma, yet they also voiced interest in phased timelines and embedded counseling. Embedding sequential explanatory designs, quantitative uptake metrics followed by qualitative stakeholder interviews, could examine whether empathy-centered strategies shift the cost–benefit calculus that RCT highlights while disrupting the structural inequities underscored by CRT (Momplaisir et al., 2021).

Future research comprising a comparative case study across racial and ethnic groups could help to test the transferability of distrust-driven hesitancy. Lincoln and Guba's (1985) criterion of transferability requires evidence that settings share salient attributes. Sampling Latino, Asian, and White cohorts facing similar mandates would reveal which themes are universally human, such as fear of side effects, and which are intricately racialized, thereby refining both CRT and broader public health discourse.

Recommendations for Practice

For vaccine policies to work effectively in hospitals, the relevant authorities could start by rolling them out in stages instead of setting a hard deadline. Hesitant staff should be given a little breathing room, offered short motivational interview chats where they can ask questions without fear of being fired on the spot, and watch the resistance soften. Additionally, mental health clinics should be set up inside the facility, staffed by counselors who share or understand the AAHCW' cultural backgrounds. Getting timely support cuts down on the long-term fallout after a traumatic event (Ewane, 2024).

Policy makers should invite frontline employees to sit on a community advisory board and help shape the details before any new mandate goes live. Incorporating healthcare workers in policy making puts CRT into practice by making policy race-aware rather than color-blind. Incorporating healthcare workers in policy making also shifts the rational choice cost–benefit math in favor of compliance: when people feel heard and respected, the benefits of complying start to outweigh the risks of hesitating.

Implications

Theoretically, putting CRT together with RCT helps in identifying how old injustices and everyday cost–benefit math collide when a health rule lands. The findings back up CRT's point that a long history of racial mistreatment still shapes how Black professionals judge today's mandates (Ford & Airhihenbuwa, 2010). The findings also back RCT's claim that, when a directive feels coercive, people weigh very real losses, paychecks, job titles, professional identity, against the possible health risks and sometimes decide the shot just is not worth it (Betsch et al., 2017). Looking at vaccine mandates this way urges future researchers to treat them as racialized choice environments, not neutral public health orders (Ozawa & Stack, 2013). That shift can sharpen policy debates by showing how history influences decision making, an insight that lines up neatly with recent work on structural competence in health care (Ozawa & Stack, 2013).

Methodologically, the findings of the study underscore the analytic yield and limits of single-site, interview-based designs. Thick, narrative data revealed affective nuances, panic-induced chest tightness, and a palpable sense of professional erasure that

standardized surveys often miss (Deterding & Waters, 2021). Yet, reliance on retrospective self-report raises concerns about recall and social desirability biases, echoing critiques that qualitative health research must triangulate memory with real-time or observational data whenever feasible (Popovic & Huecker, 2023). Future research might employ ecological momentary assessment via smartphone diaries to capture emotional states as they unfold, thereby reducing hindsight distortion (De Vries et al., 2021). Additionally, collaborative coding or machine-assisted text analysis could bolster dependability, addressing calls for greater transparency in qualitative rigor (Church et al., 2019). By demonstrating both the depth of insight achievable and the interpretive hazards encountered, the study findings contribute to ongoing conversations about best practices in equity-oriented qualitative methods (Tachine et al., 2024).

Practical implications center on how hospital systems and policymakers might redesign vaccine directives to promote both uptake and well-being. Evidence that terminated workers experienced prolonged anxiety and identity disruption amplifies calls for empathy-centered rollout strategies featuring phased deadlines, motivational interviewing sessions, and culturally concordant counselors (Smallwood et al., 2021). Such approaches align with literature showing that respectful engagement and transparent risk communication increase vaccination intentions among marginalized groups (Momplaisir et al., 2021). Administrators in this study echoed these findings, suggesting that even modest flexibility, additional weeks for decision-making, or scheduled mental health check-ins could have mitigated polarizing outcomes. Embedding frontline employees in mandate design panels may not only elevate historically excluded voices

but also tangibly shift the cost–benefit calculus emphasized by RCT, thereby generating higher compliance without resorting to punitive measures (Greene, 2021). Public health agencies should view these insights as a blueprint for future emergency directives that aspire to balance collective safety with racial equity.

The study findings contribute to positive social change implications. By documenting the mental health burdens borne by a racially minoritized workforce, an often invisible consequence of pandemic policy is noted. Addressing those burdens through trauma-informed, culturally responsive supports could reduce the secondary harms, housing precarity, strained family relationships, and diminished community trust, that cascade from job loss (Elliott & Chambers, 2022). More broadly, health systems should operationalize antiracist principles not only in clinical care but also in workforce administration. If institutions integrate structural humility into mandatory public health interventions, they can transform distrustful compliance into genuine partnership, thereby advancing the equitable allocation of both biomedical and economic resources (Ozawa & Stack, 2013). Such systemic shifts would fulfill the dual mandate of public health, safeguarding populations while dismantling the inequities that compromise collective resilience.

Conclusion

The purpose of this basic qualitative case study was to explore the reasons for vaccine hesitancy among African American healthcare workers in Los Angeles County, California, the mental health effects of their employment loss due to the State Public Health Officer Order of August 5, 2021 (Executive Order No. NR21-242), and the

perspectives of healthcare administrators and managers involved in the development and implementation of the mandate, ensuring a comprehensive analysis of its public policy and administrative implications. The study was guided by CRT and RCT frameworks. Semistructured interviews with 15 participants revealed that historical mistrust, fear of side effects, and perceived coercion coalesced into vaccine refusal, while termination triggered persistent anxiety, depressive symptoms, and identity disruption, outcomes that both confirm and extend prior literature on racialized health policy skepticism (see Momplaisir et al., 2021). Administrators acknowledged that compressed deadlines and minimal emotional support amplified distress, aligning with literature urging empathy-centered rollout strategies (Smallwood et al., 2021). These findings demonstrate that mandates framed as ultimatums can inadvertently deepen the very inequities they aim to reduce. By viewing vaccine directives as racialized choice environments, theoretical conversations about how structural injustice reshapes perceived costs and benefits in public health decision-making are advanced (Ozawa & Stack, 2013).

Phased compliance windows, culturally concordant counseling, and participatory governance panels emerged as promising strategies to bolster trust and uptake without resorting to punitive measures. Future longitudinal and mixed-methods studies can test the durability of the mental health impacts observed here and evaluate the effectiveness of empathy-centered interventions across diverse geographic and racial contexts. Methodological enhancements, such as multisite sampling, ecological momentary assessment, and intercoder reliability checks, will further strengthen evidence bases and enrich transferability. Ultimately, safeguarding public health need not come at the

expense of worker dignity; policies that honor historical realities and provide genuine choice can transform mandatory compliance into a collaborative partnership. By integrating structural humility into health system decision-making, stakeholders can promote both community safety and racial equity, fulfilling the dual mandate of public health in a post pandemic world.

References

Abouk, R., & Heydari, B. (2021). The immediate effect of COVID-19 policies on social-distancing behavior in the United States. *Public Health Reports*, *136*(2), 245–252. https://doi.org/10.1177/0033354920976575

Adeoye-Olatunde, O. A., & Olenik, N. L. (2021). Research and scholarly methods: Semi-structured interviews. *Journal Of the American College of Clinical Pharmacy*, *4*(10), 1358–1367. https://doi.org/10.1002/jac5.1441

Adler, R. H. (2022). Trustworthiness in qualitative research. *Journal of Human Lactation*, *38*(4), 598–602. https://doi.org/10.1177/08903344221116620

Ahamed, S. H. R., Shakil, S., Lyu, H., Zhang, X., & Luo, J. (2022). Doctors vs. nurses: Understanding the great divide in vaccine hesitancy among healthcare workers. In *2022 IEEE International Conference on Big Data (Big Data)* (pp. 5865–5870). IEEE. https://doi.org/10.1109/bigdata55660.2022.10020853

Ahmed, S. K. (2024). The pillars of trustworthiness in qualitative research. *Journal of Medicine*, *Surgery*, *and Public Health*, *2*, Article 100051. https://doi.org/10.1016/j.glmedi.2024.100051

Akanle, O., Ademuson, A. O., & Shittu, O. S. (2020). Scope and limitation of study in social research. In A. S. Jegede & U. C. Isiugo-Abanihe (Eds.), *Contemporary issues in social research* (pp. 105–114). Ibadan University Press.

Al-Obaydi, S., Hennrikus, E., Mohammad, N., Lehman, E. B., Thakur, A., & Al-Shaikhly, T. (2022). Hesitancy and reactogenicity to mRNA-based COVID-19 vaccines–Early experience with vaccine rollout in a multi-site healthcare system. *PloS One*, *17*(8), Article e0272691. https://doi.org/10.1371/journal.pone.0272691

Alshagrawi, S. S. (2024). Predicting COVID-19 vaccine uptake: Comparing the health belief model and theory of planned behavior. *Human Vaccines & Immunotherapeutics*, *20*(1), Article 2361503. https://doi.org/10.1080/21645515.2024.2361503

Al-Taie, A., & Yilmaz, Z. (2023). Exploring the intention and hesitancy to receive a booster dose of COVID-19 vaccine among patients with comorbid disease conditions using a health belief model. *Vacunas (English Edition)*, *24*(4), 317–325. https://doi.org/10.1016/j.vacune.2023.06.005

Bardosh, K., De Figueiredo, A., Gur-Arie, R., Jamrozik, E., Doidge, J., Lemmens, T., & Baral, S. (2022). The unintended consequences of COVID-19 vaccine policy: Why mandates, passports and restrictions may cause more harm than good. *BMJ Global Health*, *7*(5), Article e008684. https://doi.org/10.1136/bmjgh-2022-008684

Becker, G. S. (1976). *The economic approach to human behavior*. University of Chicago Press.

Becker, M. H. (1974). The health belief model and sick role behavior. *Health Education Monographs*, *2*(4), 409–419. https://doi.org/10.1177/109019817400200407

Bergen, N., & Labonté, R. (2020). "Everything is perfect, and we have no problems": Detecting and limiting social desirability bias in qualitative research. *Qualitative Health Research*, *30*(5), 783–792. https://doi.org/10.1177/1049732319889354

Berndt, A. E. (2020). Sampling methods. *Journal of Human Lactation*, *36*(2), 224–226. https://doi.org/10.1177/0890334420906850

Betsch, C., Böhm, R., Korn, L., & Holtmann, C. (2017). On the benefits of explaining herd immunity in vaccine advocacy. *Nature Human Behaviour*, *1*(3), Article 0056. https://doi.org/10.1038/s41562-017-0056

Birt, L., Scott, S., Cavers, D., Campbell, C., & Walter, F. (2016). Member checking: A tool to enhance trustworthiness or merely a nod to validation? *Qualitative Health Research*, *26*(13), 1802–1811. https://doi.org/10.1177/1049732316654870

Borgstede, M., & Scholz, M. (2021). Quantitative and qualitative approaches to generalization and replication–A representationalist view. *Frontiers in Psychology*, *12*, Article 605191. https://doi.org/10.3389/fpsyg.2021.605191

Boschung, K., Gill, M. J., Krentz, H. B., Dalere, J., Beckthold, B., Fonseca, K., & Lang, R. (2023). COVID-19 vaccine uptake among people with HIV: Identifying characteristics associated with vaccine hesitancy. *Scientific Reports*, *13*(1), Article 20610. https://doi.org/10.1038/s41598-023-47106-8

Braveman, P., & Parker Dominguez, T. (2021). Abandon “race.” Focus on racism. *Frontiers in Public Health*, *9*, Article 689462. https://doi.org/10.3389/fpubh.2021.689462

Buturovic, Z. (2023). Risk aversion and rational choice theory do not adequately capture complexities of medical decision-making. *Journal of Medical Ethics*, *49*(11), 761–762. https://doi.org/10.1136/jme-2023-109337

California Department of Health Care Access and Information. (2021). *Race & ethnicity of California's health workforce*. https://hcai.ca.gov/visualizations/race-ethnicity-of-californias-health-workforce/

Cerullo, M. (2021). COVID-19 vaccine mandates pressure employees to get their shots or get fired. *CBS News*. https://www.cbsnews.com/news/covid-19-vaccine-mandate-employees/

Champion, V. L. (1999). Revised susceptibility, benefits, and barriers scale for mammography screening. *Research in Nursing & Health*, *22*(4), 341–348. https://doi.org/10.1002/(SICI)1098-240X(199908)22:4<341::AID-NUR8>3.0.CO;2-P

Chaufan, C., Hemsing, N., & Moncrieffe, R. (2024). COVID-19 vaccination decisions and impacts of vaccine mandates: A cross sectional survey of healthcare workers in Ontario, Canada. *Journal of Public Health and Emergency*, *9*(0). https://doi.org/10.21037/jphe-24-79

Chowkwanyun, M., & Reed, A. L. (2020). Racial health disparities and Covid-19—Caution and context. *New England Journal of Medicine*, *383*(3), 201–203. https://doi.org/10.1056/NEJMp2012910

Church, S. P., Dunn, M., & Prokopy, L. S. (2019). Benefits to qualitative data quality with multiple coders: Two case studies in multi-coder data analysis. *Journal of Rural Social Sciences*, *34*(1), Article 2.

Combden, S., Forward, A., & Sarkar, A. (2022). COVID-19 pandemic responses of Canada and United States in first 6 months: A comparative analysis. *The International Journal of Health Planning and Management*, *37*(1), 50–65. https://doi.org/10.1002/hpm.3323

Department of Public Health. (2021). *California implements first in the nation requirement that workers in health care settings be fully vaccinated*. https://www.cdph.ca.gov/Programs/OPA/Pages/NR21-242.aspx

Deterding, N. M., & Waters, M. C. (2021). Flexible coding of in-depth interviews: A twenty-first-century approach. *Sociological Methods & Research*, *50*(2), 708–739. https://doi.org/10.1177/0049124119864239

De Vries, L. P., Baselmans, B. M., & Bartels, M. (2021). Smartphone-based ecological momentary assessment of well-being: A systematic review and recommendations for future studies. *Journal of Happiness Studies*, *22*(5), 2361–2408. https://doi.org/10.1007/s10902-020-00331-x

Elliott, C. B. P., & Chambers, C. S. (2022). A historical analysis of vaccine mandates in the United States military and its application to the COVID-19 vaccine mandate. *Vaccine*, *40*(51), 7500–7504. https://doi.org/10.1016/j.vaccine.2022.08.017

El-Mohandes, A., White, T. M., Wyka, K., Rauh, L., Rabin, K., Kimball, S. H., Ratzan, S. C., & Lazarus, J. V. (2021). COVID-19 vaccine acceptance among adults in four major US metropolitan areas and nationwide. *Scientific Reports*, *11*(1), 21844. https://doi.org/10.1038/s41598-021-00794-6

Ewane, H. (2024). *Effects of the COVID-19 vaccine mandate on healthcare workers' decisions to refuse vaccination and quit their jobs from Canadian hospitals* [Doctoral dissertation, Walden University]. ProQuest Dissertations Publishing.

Ford, C. L., & Airhihenbuwa, C. O. (2010). Critical race theory, race equity, and public health: toward antiracism praxis. *American Journal of Public Health*, *100*(S1), S30–S35. https://doi.org/10.2105/AJPH.2009.172437

Fumagalli, R. (2020). How thin rational choice theory explains choices. *Studies in History and Philosophy of Science Part A*, *83*, 63–74. https://doi.org/10.1016/j.shpsa.2020.03.003

Fumagalli, R. (2021). Rationality, preference satisfaction and anomalous intentions: why rational choice theory is not self-defeating. *Theory and Decision*, *91*(3), 337–356. https://doi.org/10.1007/s11238-021-09801-8

Girma, S., & Paton, D. (2024). Using double-debiased machine learning to estimate the impact of Covid-19 vaccination on mortality and staff absences in elderly care homes. *European Economic Review*, *170*, Article 104882. https://doi.org/10.1016/j.euroecorev.2024.104882

Giubilini, A., Savulescu, J., Pugh, J., & Wilkinson, D. (2023). Vaccine mandates for healthcare workers beyond COVID-19. *Journal of Medical Ethics*, *49*(3), 211–220. https://doi.org/10.1136/medethics-2022-108229

Glanz, K., Rimer, B. K., & Viswanath, K. (2008). *Theory*, *research*, *and practice in health behavior and health education*. Jossey-Bass.

Greene, L. S. (2021). Critical race theory: Origins, permutations, and current queries. *Wisconsin Law Review*, 259–302. https://wlr.law.wisc.edu/wp-content/uploads/sites/1263/2021/06/16-Greene-Final-.pdf

Gur-Arie, R., Hutler, B., & Bernstein, J. (2023). The ethics of COVID-19 vaccine mandates for healthcare workers: Public health and clinical perspectives. *Bioethics*, *37*(4), 331–342. https://doi.org/10.1111/bioe.13158

Hennink, M., & Kaiser, B. N. (2022). Sample sizes for saturation in qualitative research: A systematic review of empirical tests. *Social Science & Medicine*, *292*, Article 114523. https://doi.org/10.1016/j.socscimed.2021.114523

Hewig, J., Kretschmer, N., Trippe, R. H., Hecht, H., Coles, M. G. H., Holroyd, C. B., & Miltner, W. H. R. (2011). Why humans deviate from rational choice. *Psychophysiology*, *48*(4), 507–514. https://doi.org/10.1111/j.1469-8986.2010.01081.x

Janz, N. K., & Becker, M. H. (1984). The health belief model: A decade later. *Health Education Quarterly*, *11*(1), 1–47. https://doi.org/10.1177/109019818401100101

Kakar, Z. U. H., Rasheed, R., Rashid, A., & Akhter, S. (2023). Criteria for assessing and ensuring the trustworthiness in qualitative research. *International Journal of Business Reflections*, *3*(2), 16–22.

Kandel, B. (2020). Qualitative versus quantitative research. *Journal of Product Innovation Management*, *32*(5), 658–660.

Kothe, E. J., & Mullan, B. A. (2014). A randomised controlled trial of a theory of planned behaviour to increase fruit and vegetable consumption. Fresh Facts. *Appetite*, *78*, 68–75. https://doi.org/10.1016/j.appet.2014.03.006

Kreps, S. E., & Kriner, D. L. (2022). How do COVID-19 vaccine mandates affect attitudes toward the vaccine and participation in mandate-affected activities? Evidence from the United States. *Vaccine*, *40*(51), 7460–7465. https://doi.org/10.1016/j.vaccine.2022.02.083

Lawrence, H. Y. (2023). Vaccine hesitancy: Public trust, expertise, and the war on science, by Maya J. Goldenberg. University of Pittsburgh Press, 2021. *The Journal of Medical Humanities*, *44*(3), 413–415. https://doi.org/10.1007/s10912-023-09814-0

Lawrence, S., & Hylton, K. (2022). Critical race theory, methodology, and semiotics: The analytical utility of a "race" conscious approach for visual qualitative research. *Cultural Studies ↔ Critical Methodologies*, *22*(3), 255–265. https://doi.org/10.1177/15327086221081829

Lenthang, M. (2021, September 30). *Hundreds of hospital staffers fired or suspended for refusing COVID-19 vaccine mandate*. ABC News. https://abcnews.go.com/US/hundreds-hospital-staffers-fired-suspended-refusing-covid-19/story?id=80303408

Lim, W. M. (2024). What is qualitative research? An overview and guidelines. *Australasian Marketing Journal*, *33*(2), 199–229. https://doi.org/10.1177/14413582241264619

Lim, W. M. (2025). What is qualitative research? An overview and guidelines. *Australasian Marketing Journal*, *33*(2), 199–229.

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Sage Publications.

Long, L. J. (2021). The ideal victim: A critical race theory (CRT) approach. *International Review of Victimology*, *27*(3), 344–362. https://doi.org/10.1177/0269758021993339

Lungu, M. (2022). The coding manual for qualitative researchers. *American Journal of Qualitative Research*, *6*(1), 232–237.

Magee, L., Knights, F., Mckechnie, D. G., Al-Bedaery, R., & Razai, M. S. (2022). Facilitators and barriers to COVID-19 vaccination uptake among ethnic minorities: A qualitative study in primary care. *PLoS ONE*, *17*(7), Article e0270504. https://doi.org/10.1371/journal.pone.0270504

Marvaldi, M., Mallet, J., Dubertret, C., Moro, M. R., & Guessoum, S. B. (2021). Anxiety, depression, trauma-related, and sleep disorders among healthcare workers during the COVID-19 pandemic: A systematic review and meta-analysis. *Neuroscience & Biobehavioral Reviews*, *126*, 252–264. https://doi.org/10.1016/j.neubiorev.2021.03.024

McDermott, M. S., Oliver, M., Simnadis, T., Beck, E. J., Coltman, T., Iverson, D., Caputi, P., & Sharma, R. (2015). The theory of planned behaviour and dietary patterns: A systematic review and meta-analysis. *Preventive Medicine*, *81*, 150–156. https://doi.org/10.1016/j.ypmed.2015.08.020

McGrath, R. (2021). Journalling and memoing: Reflexive qualitative research tools. In K. M. O'Reilly (Ed.), *Handbook of qualitative research methodologies in workplace contexts* (pp. 245–262). Edward Elgar Publishing.

Mitchell, T. A. (2020). Critical Race Theory (CRT) and colourism: A manifestation of whitewashing in marketing communications? *Journal of Marketing Management*, *36*(13–14), 1366–1389. https://doi.org/10.1080/0267257X.2020.1794934

Mohan, R., Sindhuri, R., Thandapani, K., Devi, D. K., & Ganapathy, K. (2023). Factors related to parental COVID-19 vaccine hesitancy for children: An exploratory factor analysis model. *Journal of Family Medicine and Primary Care*, *12*(10), 2428–2433. https://doi.org/10.4103/jfmpc.jfmpc_816_23

Momplaisir, F. M., Kuter, B. J., Ghadimi, F., Browne, S., Nkwihoreze, H., Feemster, K. A., & Green-McKenzie, J. (2021). Racial/ethnic differences in COVID-19 vaccine hesitancy among health care workers in 2 large academic hospitals. *JAMA Network Open*, *4*(8), Article e2121931. https://doi.org/10.1001/jamanetworkopen.2021.21931

Moradpour, J., Shajarizadeh, A., Carter, J., Chit, A., & Grootendorst, P. (2023). The impact of national income and vaccine hesitancy on country-level COVID-19 vaccine uptake. *PLOS ONE*, *18*(11), Article e0293184. https://doi.org/10.1371/journal.pone.0293184

Mwita, K. (2022). Factors influencing data saturation in qualitative studies. *International Journal of Research in Business and Social Science*, *11*(4), 414–420.

Nkwake, A. M., & Nkwake, A. M. (2020). Why are assumptions important? In *Working with assumptions in international development program evaluation: With a foreword by Michael Bamberger* (pp. 97–114). Springer. https://doi.org/10.1007/978-3-030-33004-0_7

Nyimbili, F., & Nyimbili, L. (2024). Types of purposive sampling techniques with their examples and application in qualitative research studies. *British Journal of Multidisciplinary and Advanced Studies*, *5*(1), 90–99. https://dx.doi.org/10.37745/bjmas.2022.0419

Okoro, C. A., Strine, T. W., McKnight-Eily, L., Verlenden, J., & Hollis, N. D. (2021). Indicators of poor mental health and stressors during the COVID-19 pandemic, by disability status: A cross-sectional analysis. *Disability and Health Journal*, *14*(4), Article 101110. https://doi.org/10.1016/j.dhjo.2021.101110

Okpani, A. I., Lockhart, K., Barker, S., Grant, J. M., & Yassi, A. (2024). Did the health care vaccine mandate work? An evaluation of the impact of the COVID-19 vaccine mandate on vaccine uptake and infection risk in a large cohort of Canadian health care workers. *American Journal of Infection Control*, *52*(9), 1065–1072. https://doi.org/10.1016/j.ajic.2024.05.002

Ozawa, S., & Stack, M. L. (2013). Public trust and vaccine acceptance-international perspectives. *Human Vaccines & Immunotherapeutics*, *9*(8), 1774–1778.

Peterson, C. J., Lee, B., & Nugent, K. (2022). COVID-19 vaccination hesitancy among healthcare workers, A review. *Vaccines*, *10*(6), Article 948. https://doi.org/10.3390/vaccines10060948

Pollack, T. M., & Zirkel, S. (2013). Negotiating the contested terrain of equity-focused change efforts in schools: Critical race theory as a leadership framework for creating more equitable schools. *The Urban Review*, *45*(3), 290–310. https://doi.org/10.1007/s11256-012-0231-4

Popovic, A., & Huecker, M. R. (2023). Study bias. StatPearls Publishing.

Priya, A. (2021). Case study methodology of qualitative research: Key attributes and navigating the conundrums in its application. *Sociological Bulletin*, *70*(1), 94–110. https://doi.org/10.1177/0038022920970318

Rego, R. T., Kenney, B., Ngugi, A. K., Espira, L., Orwa, J., Siwo, G. H., & Waljee, A. K. (2023). COVID-19 vaccination refusal trends in Kenya over 2021. *Vaccine*, *41*(5), 1161–1168. https://doi.org/10.1016/j.vaccine.2022.12.066

Richard, B., Sivo, S. A., Orlowski, M., Ford, R. C., Murphy, J., Boote, D. N., & Witta, E. L. (2021). Qualitative research via focus groups: Will going online affect the diversity of your findings? *Cornell Hospitality Quarterly*, *62*(1), 32–45. https://doi.org/10.1177/1938965520967769

Rosenstock, I. M. (1974). Health belief model and preventive health behavior. *Health Education & Behavior*, *2*(4), 354–386. https://doi.org/10.1177/109019817400200405

Rossi, M. M., Parisi, M. A., Cartmell, K. B., & McFall, D. (2023). Understanding COVID-19 vaccine hesitancy in the Hispanic adult population of South Carolina: a complex mixed-method design evaluation study. *BMC Public Health*, *23*(1), 2359. https://doi.org/10.1186/s12889-023-16771-9

Saldana, J. (2016). *Thinking qualitatively: Methods of mind*. SAGE Publications.

Shmueli, L. (2021). Predicting intention to receive COVID-19 vaccine among the general population using the health belief model and the theory of planned behavior model. *BMC Public Health*, *21*, 1–13. https://doi.org/10.1186/s12889-021-10816-7

Smallwood, N., Pascoe, A., Karimi, L., & Willis, K. (2021). Moral distress and perceived community views are associated with mental health symptoms in frontline health workers during the COVID-19 pandemic. *International Journal of Environmental Research and Public Health*, *18*(16), Article 8723.

Somanathan, S. (2024, May 29). *10 best transcription software in 2024 (free & paid)*. ClickUp. https://clickup.com/blog/transcription-software/

Sprengholz, P., Betsch, C., & Böhm, R. (2021). Reactance revisited: Consequences of mandatory and scarce vaccination in the case of COVID-19. *Applied Psychology: Health and Well-Being*, *13*(4), 986–995. https://doi.org/10.1111/aphw.12285

Stahl, N. A., & King, J. R. (2020). Expanding approaches for research: Understanding and using trustworthiness in qualitative research. *Journal of Developmental Education*, *44*(1), 26–28.

Stenfors, T., Kajamaa, A., & Bennett, D. (2020). How to… assess the quality of qualitative research. *The Clinical Teacher*, *17*(6), 596–599. https://doi.org/10.1111/tct.13242

Strijker, D., Bosworth, G., & Bouter, G. (2020). Research methods in rural studies: Qualitative, quantitative and mixed methods. *Journal of Rural Studies*, *78*, 262–270. https://doi.org/10.1016/j.jrurstud.2020.06.007

Tachine, A. R., Lopez, J. D., Begay, N. S., Brown, K., Lee, J. S., Horne, A. N., & Begaye-Tewa, R. L. (2024). Toward an Indigenous mixed method approach to research. In N. K. Denzin & M. D. Giardina (Eds.), *Advancing qualitative inquiry toward methodological inclusion* (pp. 91–106). Routledge.

Taherdoost, H. (2022). What are different research approaches? Comprehensive review of qualitative, quantitative, and mixed method research, their applications, types, and limitations. *Journal of Management Science & Engineering Research*, *5*(1), 53–63. https://doi.org/10.30564/jmser.v5i1.4538

Tajik, O., Golzar, J., & Noor, S. (2024). Purposive sampling. *International Journal of Education and Learning Studies*, *2*(2), 125–131.

Thampy, P., Sharma, S., Joshi, P., Raj, M. S., Rupani, A., Tyagi, S., & Joshi, A. (2024). COVID-19 vaccine hesitancy among healthcare workers: A phenomenological study of skepticism. *Cureus*, *16*(4), Article e58445. https://doi.org/10.7759/cureus.58445

Tomaszewski, L. E., Zarestky, J., & Gonzalez, E. (2020). Planning qualitative research: Design and decision making for new researchers. *International Journal of Qualitative Methods*, *19*, Article 1609406920967174. https://doi.org/10.1177/1609406920967174

Williams, S. N., Armitage, C. J., Tampe, T., & Dienes, K. (2021). Public attitudes towards COVID-19 contact tracing apps: A UK-based focus group study. *Health Expectations*, *24*(2), 377–385. https://doi.org/10.1111/hex.13179

Wolfe, B. L., & Dilworth, P. P. (2015). Transitioning normalcy: Organizational culture, African American administrators, and diversity leadership in higher education. *Review of Educational Research*, *85*(4), 667–697. https://doi.org/10.3102/0034654314565667

Woodhead, C., Onwumere, J., Rhead, R., Bora-White, M., Chui, Z., Clifford, N., & Hatch, S. L. (2022). Race, ethnicity and COVID-19 vaccination: A qualitative study of UK healthcare staff. *Ethnicity & Health*, *27*(7), 1555–1574. https://doi.org/10.1080/13557858.2021.1936464

Xu, X., Zhang, J., Fang, R., Liu, H., Zhou, W., She, Y., Liu, F., Hong, X., & Deng, X. (2023). Evaluation of the mental health status of community frontline medical workers after the normalized management of COVID-19 in Sichuan, China. *Frontiers in Psychiatry*, *14*, Article 1198822. https://doi.org/10.3389/fpsyt.2023.1198822

Yassi, A., Barker, S., Lockhart, K., Taylor, D., Harris, D., Hundal, H., Grant, J. M., Okpan, A. I., Pollock, S., Sprague, S., & Sing, C. K. (2022). Urban-rural divide in COVID-19 infection and vaccination rates in healthcare workers in British Columbia, Canada. *Canadian Journal of Rural Medicine*, *28*(2), Article 47. https://doi.org/10.4103/cjrm.cjrm_24_22

Yenew, C., Dessie, A. M., Gebeyehu, A. A., & Genet, A. (2023). Intention to receive COVID-19 vaccine and its health belief model (HBM)-based predictors: A systematic review and meta-analysis. *Human Vaccines & Immunotherapeutics*, *19*(1), 2207442. https://doi.org/10.1080/21645515.2023.2207442

Yin, R. K. (2018). *Case study research and applications: Design and methods* (6th ed.). SAGE Publications.

Zewude, R., & Sharma, M. (2021). Critical race theory in medicine. *Canadian Medical Association Journal*, *193*(20), E739–E741. https://doi.org/10.1503/cmaj.210178

Appendix A: Interview Protocol for Healthcare Workers

Thank you for agreeing to participate in this interview. The purpose of this research is to explore the reasons for vaccine hesitancy among African American healthcare workers in Los Angeles County, California, the mental health effects of their employment loss due to the State Public Health Officer Order of August 5, 2021 (Executive Order No. NR21-242), and the perspectives of healthcare administrators and managers involved in the development and implementation of the mandate, ensuring a comprehensive analysis of its public policy and administrative implications. There are no right or wrong answers. I am simply trying to understand different perspectives on this issue. I want to remind you that all of your responses will remain confidential. With your permission, I would like to audio record our conversation to ensure accuracy. Do I have your consent to begin recording and proceed with the interview?

1. What concerns, if any, did you have about the COVID-19 vaccines?
2. What information or sources influenced your views on the vaccines?
3. What factors do you believe most contributed to your decision not to get vaccinated?
4. How would you describe your level of trust in healthcare institutions before the vaccine mandate?
5. In what ways did your workplace address vaccine hesitancy among employees prior to the mandate?
6. How could vaccine messaging and policy have been improved to better address concerns among African American healthcare workers?

7. How would you describe your mental health and wellbeing before losing your job?
8. What impact has unemployment had on your mental health and daily life?
9. Have you experienced emotions, such as stress, anxiety, sadness, or other feelings due to job loss?
10. In what areas of your life has job loss had the biggest impact, such as financial stress, family relationships, and community activities?
11. What coping strategies have you used since becoming unemployed?
12. What types of support do you think would be most helpful for healthcare workers in your position?

Conclusion:

Thank you for your time and for sharing your experiences and perspectives with me. Your responses will help increase understanding of vaccine hesitancy among African American healthcare workers and the mental health consequences of losing one's livelihood due to vaccination status. Do you have any other thoughts or feedback you want to share before we conclude the interview? I appreciate you contributing to this important research.

Appendix B: Interview Protocol for Healthcare Administrators and Managers

Introduction

Thank you for taking the time to speak with me today. I am conducting research to explore the perspectives of healthcare administrators and managers involved in the development and implementation of COVID-19 vaccine mandates, particularly as they relate to African American healthcare workers. Your insights will be invaluable in helping me understand this important issue.

With your permission, I would like to audio record our conversation to ensure accuracy. All of your responses will remain confidential. Do I have your consent to begin recording and proceed with the interview?

Interview Questions:

1. What was your specific role and scope of involvement in the development of the COVID-19 vaccine mandate for healthcare workers in your organization/jurisdiction?
2. What were the key factors and considerations that went into the decision-making process around implementing the vaccine mandate?
3. How did you anticipate the mandate would impact the overall healthcare workforce, and what plans were in place to address potential job losses?
4. To what extent were the concerns and perspectives of African American healthcare workers explicitly incorporated into the policy development and implementation strategy?

5. What strategies or support programs did you have in place to try to address vaccine hesitancy among employees prior to the mandate taking effect?

6. What were some of the main challenges you faced in enforcing the vaccine mandate and managing the employment status of unvaccinated workers?

7. How would you describe the overall impact of the mandate on the healthcare workforce in your organization/jurisdiction, both in the short-term and longer-term?

8. What feedback or concerns, if any, did you receive from African American healthcare workers regarding the vaccine mandate and its implementation?

9. In retrospect, what would you have done differently in terms of the vaccine mandate policy and its enforcement processes?

10. What lessons have you learned from this experience that could inform more equitable and compassionate public health policies in the future?

11. What types of support or resources do you believe would have been beneficial for healthcare workers facing termination due to the vaccine mandate?

12. How has this experience shaped your perspectives on balancing public health priorities with individual employee rights and wellbeing?

Conclusion:

Thank you again for your time and for sharing your valuable insights. Your perspective as an administrator/manager involved in this process is essential for providing a more comprehensive understanding of this issue. Do you have any other thoughts or feedback you would like to share before we conclude the interview?

Appendix C: Focus Group Protocol

Thank you all for participating in this focus group discussion. The purpose of this research is to to explore the reasons for vaccine hesitancy among African American healthcare workers in Los Angeles County, California, the mental health effects of their employment loss due to the State Public Health Officer Order of August 5, 2021 (Executive Order No. NR21-242), and the perspectives of healthcare administrators and managers involved in the development and implementation of the mandate, ensuring a comprehensive analysis of its public policy and administrative implications. I want to remind you that all of your responses will remain confidential, and there are no right or wrong answers. I simply want to learn from your diverse perspectives on this important issue. With your permission, I would like to audio record our conversation to ensure accuracy. Does everyone consent to being recorded?

Focus Group Questions:

1. What were some of the key factors that influenced your decision not to get the COVID-19 vaccine at the time the mandate was announced?
2. How would you describe the level of trust you had in healthcare institutions and government authorities prior to the vaccine mandate?
3. In what ways did your employer try to address vaccine hesitancy among staff before the mandate was implemented? Do you feel these efforts were effective?
4. How could the messaging and policies around the vaccine mandate be improved to better address the concerns of African American healthcare workers like yourselves?

5. Can you describe the emotional and psychological impacts you experienced after losing your job due to the vaccine mandate? How has this affected your daily life and relationships?
6. What types of support or resources do you feel would have been most helpful for you and your colleagues in coping with job loss and mental health challenges?
7. If you could share one piece of advice with policymakers and healthcare leaders, what would it be when it comes to implementing future vaccine requirements for employees?
8. Is there anything else you would like to add about your experiences that we have not discussed? What else do you think is important for us to understand?

Closing Remarks:

Thank you all again for taking the time to share your valuable perspectives with me today. Your insights will be instrumental in helping to address the mental health needs of African American healthcare workers impacted by vaccine mandates and informing more equitable public health policies moving forward. I appreciate your openness and honesty in discussing this sensitive topic. Please feel free to reach out if you have any other thoughts or feedback you would like to provide. Have a great rest of your day.