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Navigating the low COVID-19 Vaccination Rate Nexus: Biblical Interpretations & Practices of Pentecostal Christians in DMV

Patricia Mbah Nchamukong
Walden University

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Walden University

College of Health Sciences and Public Policy

This is to certify that the doctoral dissertation by

Patricia A. Mbah Nchamukong

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Walden University
2025

Abstract

Navigating the low COVID-19 Vaccination Rate Nexus: Biblical Interpretations & Practices of Pentecostal Christians in DMV

by

Patricia A. Mbah Nchamukong

MS, Oxford Brookes University, Oxford, UK, 2014

BS, Ahmadu Bello University, Zaria Nigeria, 1997

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Public Health Epidemiology

Walden University

March 2025

Abstract

The development and release of a vaccine during an epidemic is aimed at mitigating the adverse effects of infection, transmission, and spread of the disease. However, this does not always guarantee the acceptance of the vaccine by the entire population, as was the case with the COVID-19 vaccine. The low COVID-19 vaccine rate within the Black Pentecostal Christian community in Washington, D.C., Maryland, and Virginia (DMV) is a public health concern. Some factors that might have influenced the decision of this population to accept or reject the vaccine have been linked to politics, anti-COVID-19 vaccine sentiments, and religion. The purpose of this study was to explore the influence of religious beliefs, practices, and leadership guidance on the acceptance or rejection of COVID-19 vaccination within the Black Pentecostal Christian community in the DMV. This basic qualitative study was guided by the health belief model and used semistructured, open-ended interview questions involving 14 participants from the DMV. The results of this study revealed that the final decision of the participants to accept or reject the COVID-19 vaccine centered on one of the following: personal belief, belief in God/ Bible/religious leader, COVID-19 vaccine compliance, or job compliance. This study revealed that a more collaborative approach involving religious leaders is vital when implementing COVID-19-targeted public health interventions. The findings of this study are significant in bridging the gap in knowledge with regard to COVID-19 vaccination and religious beliefs, fostering religious leaders' community engagement, and have the potential to enact positive social change both at personal and community levels.

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Dedication

This dissertation is dedicated to my mother, Mammy Monica Mbayi, my husband, Rev. Ernest Lovala Nchamukong, my adorable children, Shalom Destiny Lovala Nchamukong, Pretty Besona Mbayi Nchamukong, and Prince - Wealth Sema Nchamukong for supporting and standing by me all along this journey. Thank you all for being my support system and my source of inspiration after God.

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Chapter 1: Introduction to the Study

Introduction

The Sars-CoV-2 virus (COVID-19) started in Wuhan, China, in December 2019 and rapidly spread across China, the Far East, and then globally in March 2020 (Balmford et al., 2020; Lango, 2020; Wilder, 2021). COVID-19 is a respiratory tract infection with symptoms like cough, breathing difficulties, fever, and shortness of breath (Centers for Disease Control and Prevention [CDC], 2021). This disease was disproportionately distributed in the United States due to inequity and inequality (Peteet et al., 2022). The minority Black population, as compared to their White counterpart, were reported as being more infected, more hospitalized, and two to three times more likely to die from complications related to COVID-19 (CDC, 2020). The CDC (2020) underscored the urgency to address both the disproportionate gap in COVID-19-related health conditions and vaccine hesitancy within the minority population. Peteet et al. (2022) reported that in 2022, over 83% of Blacks believed in God, and they constituted about 45% of Washington D.C.'s population; yet the mortality rate of all COVID-19-related deaths stood at 75%. Vaccine hesitancy is, therefore, a menace to global health, particularly among Christian groups where prevalence is high.

Background

The low COVID -19 vaccine acceptance amongst Christians has been linked to politics and anti-COVID-19 vaccine sentiments (DiGregorio et al., 2022; Gray, 2021). It has also been linked to medical mistrust and social media misinformation (Bogart et al., 2021; Nelson et al., 2020; Tara, 2022). Further, it has been linked to religion and

aphorisms, Jewish expectations of the anti-Christ, which is the mark of the beast, hellfire bound, behaving immorally, and animalistic tendencies, etc. (Tara, 2022).

Problem Statement

Vulpe (2021) stated that religiosity and climate change denial have been used as a justification for vaccine hesitancy. The researcher further stated that this denial has not only been supported by some religious entities, but they have also encouraged it by providing deviating interpretations of religious dogmas. They often use the knowledge deficit model for information campaigns on vaccination and climate change, which obstructs the understanding of the role of religiosity by increasing scientific skepticism and dispensing misleading information about this social phenomenon (Vulpe, 2021). Though research findings have linked the low COVID-19 vaccine acceptance to the Christians' belief in God (God's higher power's ability to intervene), this research focused only on one aspect of the image of God (DiGregorio et al., 2022), that is, how individuals conceptualized God and how this influenced the acceptance of the vaccine. Moreover, the research by DiGregorio et al. (2022) was not localized to any specific state in the US but on secondary "data from a nationally representative survey of U.S. adults, collected using the Amerispeak® probability-based panel via the National Opinion Research Center (NORC) at the University of Chicago" (DiGregorio et al., 2022, p.475). Furthermore, the influence of other aspects of the image of God that are the core of Christian traditions (Christian doctrines/ biblical teachings) and practices, as well as the impact of the Christian leaders on their congregants through the interpretation of the Scriptures with regard to COVID-19 vaccine acceptance have not been explored. To the

best of my knowledge, no research has been conducted to explore the influence of Christian doctrines/practices in Washington, D.C., Maryland, and Virginia (DMV). DiGregorio et al. stated that their study was likely one of the first to address the issue of religiosity and COVID-19 vaccine uptake and recommended that future studies should explore additional images of God and their relationships to the COVID-19 vaccine uptake. This study attempts to address this gap.

Purpose of the Study

The purpose of this qualitative study was to explore the influence of religious beliefs, practices, and leadership guidance on the acceptance or rejection of COVID-19 vaccination within the Black Pentecostal Christian community in DMV. Unraveling the perceptions of how biblical interpretations and teachings contributed to the attitudes and beliefs of Black Pentecostal Church members about COVID-19 vaccination was vital. This study also explored the conflicts that might have arisen between Christian beliefs/practices and the acceptance or rejection of COVID-19 vaccination, Christian practices that congregants might have perceived as relevant to their decisions regarding COVID-19 vaccination, the nexus between faith principles and scientific information about COVID-19 vaccines and its influence on vaccination status was also important for this study. Moreso, the extent to which religious leaders influence congregants' attitudes and beliefs regarding COVID-19 vaccination, the nature and impact of public statements, sermons, or guidance provided by religious leaders on COVID-19 vaccines as well as the comfort level of congregants in discussing vaccination concerns with religious leaders and the effectiveness of these discussions, where congregants follow or diverge from

religious leaders' guidance on COVID-19 vaccination and the associated outcomes, and the perceived role of religious leaders in encouraging COVID-19 vaccination was also essential. By identifying and addressing these specific objectives, the study provided insights into the complex interplay of religious beliefs, practices, and leadership influence on COVID-19 vaccination decisions among Black Pentecostal Christians in the DMV area. That is, understanding the impact religious leaders played through the interpretation of Christian doctrines (e.g., divine healing (divine providence, deliverance), Eschatology doctrine (the mark of the beast -666), and New Creation Doctrine (immunity to sicknesses and diseases) on COVID-19 vaccine uptake within this Christian population. Hence, the overarching objective of this study was to contribute to a better understanding of how religious factors hindered or promoted COVID-19 vaccination within this community, with the potential for informing public health strategies and interventions.

Research Questions

Two qualitative research questions guided this study as follows:

1. What role do Biblical interpretations and Christian practices play in shaping the attitudes and beliefs towards COVID-19 vaccination status among Black Pentecostal Christians in DMV?
2. What role do religious leaders play in shaping the attitudes and beliefs towards COVID-19 vaccination status among Black Pentecostal Christians in DMV?

Theoretical and/or Conceptual Framework for the Study

This study used the Health Belief Model (HBM), as suggested by Kenzig and Mumford (2022) and Limbu et al. (2022) to guide the study. HBM has been effectively

used to determine behavioral reactions based on core beliefs. Christians' beliefs about the COVID-19 vaccine may influence their decision whether to take the vaccine or not. Using HBM facilitated the understanding of how the unique Christian beliefs of Black Pentecostal Churches impacted beliefs about COVID-19 vaccines and the behavior of accepting or rejecting the vaccine. HBM was used as a guide to develop the data collection tool about the attitudes of Black Pentecostal Christians' perspectives of the COVID-19 vaccine. As suggested by Kenzig and Mumford (2022), and Limbu et al., (2022), this framework was appropriate to research the problem of low COVID-19 vaccine rate reported in DMV as it could be used to effectively explore the influence of religious beliefs, practices, and leadership guidance within the Black Pentecostal Christian community in the DMV region. The HBM developed by Rosenstock (1966) is a well-established theory that examines factors influencing health-related behaviors. It involves key concepts such as perceived susceptibility, severity, benefits, and barriers to health actions, which have been adapted to understand the COVID-19 vaccine perceptions of the Pentecostal Christians in the DMV.

Nature of the Study

The specific research design for this study was qualitative in nature, using a basic qualitative approach with in-depth interviews. This design was helpful in assessing how the perceived risk of the virus, its severity, and perceived benefits or barriers to vaccination interact with religious beliefs and practices. The flexibility and adaptability of the basic qualitative approach made it a suitable design method as the responses of each interviewee were unique to each participant. This approach provided valuable

insights into the specific Christian doctrines/practices that influenced the low COVID-19 vaccination among the Black Pentecostal Christian community.

The key concept of this study was the low COVID-19 vaccination rate with a focus on biblical interpretations and practices within the Black Pentecostal Christian communities in the DMV. The purpose of this qualitative study was to explore the influence of religious beliefs, practices, and leadership guidance on the acceptance or rejection of COVID-19 vaccination within the Black Pentecostal Christian community in DMV. I developed a semistructured interview guide and conducted phone, face-to-face, and Zoom interviews. My data points comprised biblical interpretations, Christian practices, religious leader influence, attitudes, and beliefs toward vaccination decisions. Examples of these data points include the divine healing (divine providence, oil, laying of hands, and deliverance), Eschatology doctrine (the mark of the beast: 666), God's sovereignty, and New Creation Doctrine (immunity to sicknesses and diseases).

The basic qualitative approach employed in collecting the data permitted me to decode, describe, translate, and unravel the participants' COVID-19 vaccination perceptions vis-à-vis their biblical teachings, Christian practices, and the role their religious leaders played in their decision to accept or reject the COVID-19 vaccine based on the constructs that made sense from their experiences (Merriam & Tisdell, 2016). This inductive approach enabled me to understand the participants' perspectives from their shared experiences, effectively collect primary data through semi-structured interviews using Zoom, face-to-face, and telephone, conduct interviews with the flexibility of orienting the participants, and collect rich descriptive words that enhanced a smooth and

comprehensive analysis of the data collected. It also provided a high-quality design appropriate for administering the interview questions that addressed the research questions. Conducting the interview using open-ended questions allowed for a seamless flow of dialogue with the participants, facilitating the collection of accurate information communicated by the interviewee. I recruited 14 permanent residents of the DMV (four from Washington D.C., five from Maryland, and five from Virginia) of age 25 and above who were knowledgeable of COVID-19 vaccination, attending a Black Pentecostal Church, and who were interested and willing to communicate their COVID-19 vaccination experiences articulately. Additionally, these participants were recruited based on their ability to read, understand, and communicate in English. All participants in this study were also required to sign an informed consent form.

Definitions

Biblical interpretations: This refers to the understanding of the sacred status of the Bible as the word of God based on how the word of God has been interpreted, which could be the literal, moral, allegorical, or anagogical interpretation (El Greco, 2024). The literal interpretation is based on the premise that a biblical text is to be interpreted according to the literal or plain meaning; the moral interpretation is based on establishing exegetical principles from ethical lessons found in the Bible; and the allegorical interpretation describes the vices imaginatively associated with persons, things, and events. In contrast, anagogical interpretation is the mystical interpretation based on explaining biblical events as they relate to or prefigure the life to come (El Greco, 2024).

Christian practices: Christian practices are Christians' response to God's love, and by so doing, they become more like Christ (Mennonite Christian Church, 2024).

Divine healing: Divine healing, also known as faith healing, is the diagnosis, prevention, and treatment of a plethora of health issues by professed Christians through prayer, laying hands on patients, and providing holy water and medicinal herbs. The healing power is believed to have come from God through ecstatic states and trance contact with the Holy Spirit (Peprah et al., 2018).

Eschatology doctrine: This is the conception or doctrine of the last things or things of the end time, including immortality of the soul, rebirth, resurrection, migration of the soul, and the end of time (Landes, 2024).

God concepts: This refers to one's mental representations of God that stem from biblical doctrines and teachings (Parker et al., 2022).

God image: This is a representation of who God is based on the individual's personal experiences of God (Parker et al., 2022).

God's sovereignty: This simply means God is in control of everything. The three main views of God's sovereignty are divine determinism*,* relational theism, and the mediating views *(*Olson, 2019). Determinism means all events are traceable back to God, who controls everything*;* relational theism describes the relational theology that focuses on the interactivity of the God-human relationship, while the mediating view describes God, who knows the course of the future and the fulfillment of the future *(*Olson, 2019).

New creation doctrine: This is God's redemption plan after the fall of man. Creation has been suffering from the effects of the curse over mankind from God yet has

not been totally depraved from God as his original plan for his creation to glorify him is still in effect through his son Jesus who was sent to redeem mankind (Landes, 2024). New creation is God's redemption through Jesus' death and resurrection that is limited to spiritual salvation; however, it anticipates physical redemption (human bodies) and material redemption - the natural world (Landes, 2024).

Pentecostal Christians: Protestants believe in the Holy Spirit's power to heal the sick and deliver those suffering from demonic and chronic diseases (Azia et al., 2023).

Religiosity: Religiosity is an individual's adoption of an organized system of beliefs, rituals, and practices that are sacred and give reverence to a superior being (Parker et al., 2022).

Assumptions

As the researcher of this study, some assumptions relevant to this research included the following. I assumed that the information I collected from the participants was accurately reported to reflect the intent of each participant without biases or personal judgment. Also, the perspectives of those who reported accepting or rejecting the COVID-19 vaccine based on Christian teachings and practices and their religious leaders' influence (positive or negative) on their decision to accept or reject the vaccine were important for this study. Furthermore, though Christian teachings and practices, as well as the religious leader, may have influenced the decision of Black Pentecostal Christians in DMV to accept or reject the vaccine, the unique perspective of the participant was of the essence of this study. Finally, I assumed that the results of this study would either

build upon or challenge existing findings in the field and offer a nuanced understanding of the dynamics at play within the Black Pentecostal Christian community in DMV.

Scope and Delimitations

The scope of this study involved only permanent resident of the DMV of age 25 and above who were knowledgeable of COVID-19 vaccination, currently attending a Black Pentecostal Church and were interested and willing to communicate their COVID-19 vaccination experiences articulately. Also, only participants who could read, understand, and communicate in English were eligible. From literature, suggestions, qualitative researchers, and recommendation of peer-reviewed academic reports, the predicted sample size for this study was between 12-15 participants (four or five from each of the three regions in DMV) or when saturation was met. The assumption was that 12-15 participants from diverse backgrounds would sufficiently address the topic. According to Smart Scrapers (2024), there are 8041 Pentecostal Churches in the United States, and the top three states with the most Pentecostal Churches are Texas (770), California (606), and Florida (605). There were no data for the DMV; however, the Christian Reformed Church in North America has 343 Pentecostal Churches in the DMV: Washington DC (240), Maryland (77), and Virginia (26; The Christian Reformed Church in North America, 2024).

According to Hennink and Kaiser (2022), the use of 9-17 or when saturation is reached depends on the complexity of the topic under scrutiny. This study population was chosen because I reside in the Washington D.C. Metropolitan area, which is part of the DMV region. The population of DMV is quite diverse, with many Pentecostal Churches,

and diverse responses for this study were crucial. Saturation is said to have been reached when the required number of participants has been reached, and any addition of further participants does not provide more information on the topic (Rahimi & Khatooni, 2024). This study was limited to Black Pentecostal Churches in the DMV area and focused on how Christian teachings and practices affect COVID-19 vaccine uptake and the role those religious leaders played in influencing the decision of their congregants to accept or reject the vaccine. This research was conducted with rigor and could be replicated. Future researchers may adapt it to study the same topic in similar populations or regions.

Limitations

A challenge in this study was finding contacts of Pentecostal Christians/leaders on their Church websites, which made the participant recruitment process challenging. Some participants were uncomfortable disclosing their COVID-19 vaccination status due to fear associated with the outcome of non-compliance. To ensure confidentiality, the data collected were pseudonymized. To ensure privacy during the interviews, I asked the participant to be in a secluded location, and I was in a room where I would not be disturbed. As with any research, information and selection bias were potential challenges due to my familiarity with Christian teachings and practices and attending a Black Pentecostal Christian Church in the DMV. To avoid information bias, I remained objective and avoided leading questions during the interview process and accurately analyzed and reported the results of the interviewees, which they checked for accuracy. To minimize selection bias, the sample population was recruited from different Black Pentecostal Christian Churches in the DMV than the one I attended. I proposed in-person

interviews since non-verbal communication during the interview could convey more insights; however, this presented a barrier to recruitment and participation compared to online and phone interviews. Finally, there was a potential barrier to attaining the required sample size. Since predicting saturation was difficult prior to the study, I analyzed the information collected weekly to know when saturation was attained.

Significance

The significance of this study arises from the insights provided by the participants regarding the influence of religious beliefs, practices, and leadership guidance on the acceptance or rejection of COVID-19 vaccination within the Black Pentecostal Christian community in DMV. Negative perceptions of vaccines have led to antivaccine behaviors, so the findings of this study could inform the targeted population of COVID-19 risk factors that have contributed to the increase of COVID-19-related morbidity and mortality in their community. According to the research by Singh et al. (2022), negative perceptions about the acceptance of vaccines were identified as the main risk factor with the least mobilized strategy to debunk antivaccine sentiments and behaviors. This justifies the importance and urgency of this study; “Ideas have significance only as a prelude to action” (Hoffer, n.d., p. 210422). Though addressing religious beliefs, practices, and leadership guidance may not be the only solution to curbing COVID-19 morbidity and mortality through vaccine acceptance, it can increase knowledge in the field as the study design was well structured to target this specific population: minority Black Pentecostal Christians in DMV. Moreover, the findings of this study can be used to create interventions (via sensibilization and health promotion activities) targeted at

increasing COVID-19 vaccine awareness. The findings can also inform public health project implementers to develop more specific and targeted interventions that focus on debunking the misconceptions, mistrust, and information about the COVID-19 vaccine related to the influence of religious beliefs, practices, and leadership guidance. All these are social and behavioral determinants of health, and their findings are relevant in increasing COVID-19 uptake. Furthermore, the findings of this study could not only provide relevant insights of the theological competency of the Black Pentecostal Church leadership whose interpretation of the Scriptures have a great impact on the followings in the uptake of COVID-19 vaccines but also create positive impact globally as the findings could be applied in similar Christian Communities.

The findings of his study have the potential to enact positive social change both at personal and community levels. Findings can help policymakers, public health professionals, and researchers to make informed decisions and enact more targeted policies, research, and interventions that will help to curb low COVID-19 vaccine uptake among minority Black Pentecostal Christians in DMV. For instance, policies or budgets could be created to train Church leaders to understand the influence of their Scripture teaching on their congregants related to vaccine acceptance and health issues.

Summary

In this chapter, I described the topic of interest, which is as follows: “Navigating the low COVID-19 Vaccination Rate Nexus: Biblical Interpretations & Practices of Pentecostal Christians in DMV.” I have provided an overview of the background and stated the problem statement that highlighted the gap, thus justifying the purpose of this

study. Furthermore, I have stated the two research questions that this study would be addressing. RQ 1 addresses the issue of Biblical interpretations and Christian practices of Black Pentecostal Christians, and RQ2 focuses on the role of religious leaders in influencing the decision to accept or reject the COVID-19 vaccine. I have also explained that the theoretical foundation for this study is HBM, and the nature of the study is a basic qualitative study design with in-depth interviews. I have also provided the definitions of some key terms I used in this study, stated some assumptions, scope and delimitations, and some potential limitations that I encountered and hope to address them. Finally, I have explained the significance of this study and the potential social implications of the study.

In the next chapter, I reviewed the literature on the topic, discussed the framework, and the methodology that I implored for this study. I concluded the chapter with a succinct summary of my findings from the literature.

Chapter 2: Literature Review

Introduction

The purpose of this qualitative study was to explore the influence of religious beliefs, practices, and leadership guidance on the acceptance or rejection of COVID-19 vaccination within the Black Pentecostal Christian community in DMV. Evidence from the literature shows that the minority Black population in the US is dying from COVID-19 at disproportionate rates, leading to increased COVID-19 vaccine hesitancy among Blacks than Whites (Peteet et al., 2022). A report from the National surveillance data states that the minority Black population was more infected, more hospitalized, and more likely to die from complications related to COVID-19 than their White counterparts (CDC, 2020). The Office of National Statistics also reported that individuals of Black ethnicity had over 3.5 times greater risk of COVID-19 death compared to Whites, which reflected a similar trend over the disproportionate number of COVID-19 deaths amongst African Americans in the USA (Raisi-Estabragh et al., 2020). Peteet et al. (2022) further revealed that, over 83% of Black minority population believe in God and constitutes about 45% of D.C.'s population; yet, the mortality rate of all COVID-19 related deaths among this population is 75%. The CDC (2020) further emphasized the urgency to address the disproportionate gap that exists in marginalized groups that have led to COVID-19-related health conditions and vaccine hesitancy.

In this chapter, I provide an overview of the literature on my topic, discuss the framework and methodology I used, and provide a succinct summary of my findings from the literature.

Literature Search Strategy

The search mechanism that I used to identify relevant peer-reviewed articles for this study included searching terms such as *COVID-19, SARS2-CoV-19 Virus, COVID-19 + perceptions, beliefs, attitudes, trust, information*, as well as keywords and phrases like *COVID-19* AND *death rate, COVID-19* AND *hospitalization, COVID-19 hesitancy, Black minority* AND *COVID-19 vaccination, COVID-19 vaccination rate* AND *biblical interpretations, Christian practices, vaccine hesitancy, vaccine uptake, vaccine* AND *misinformation,* and *vaccine* AND *Black Pentecostal Christians*. I used citations, skimmed relevant abstracts, and used Boolean logic as a search strategy. All the selected appropriate articles were downloaded in PDF and saved using the Zotero reference management tool to make future access, citation, or referencing seamless.

For the article search, I used the following search databases or repositories: PubMed, Elton B. Stephens Company (EBSCO), Research Gate, Science Direct, Cumulative Index for Nursing and Allied Health Literature (CINAHL), Walden University Library, WHO, CDC, Johns Hopkins University, and Oxford University. I reviewed over 150 peer-reviewed articles related to this research topic and included 94 articles in this study.

Theoretical Foundation

The theory that was used for this study was the health belief model (HBM). Rosenstock (2000a) and Rosenstock (2000b) postulated that individual's perceptions (beliefs) of who they are and the perceptions of how they view themselves would influence their health behaviors and actions. This means that there is a likelihood that

people will act when experiencing a threat or risk. However, this would only happen when the benefit of that action outweighs perceived barriers (Rosenstock, 2000a; Rosenstock, 2000b). The HBM focuses on an individual's beliefs about health conditions; thus, it may be used to predict behaviors effectively. Moreover, the modified HBM (mHBM) has also proven to be an effective tool in understanding the factors that have the greatest impact on an individual's COVID-19 vaccination choice, like those associated with perceived susceptibility, perceived consequences, as well as confidence in the individual's ability to understand and make informed decisions effectively.

An understanding of health-related decisions of individuals and the factors that influence those decisions are key elements in understanding how a specific phenomenon affects health behaviors and health actions (Khumros et al., 2018). The theories and/or concepts that grounded this study included the HBM, as suggested by Kenzig and Mumford (2022) and Limbu et al. (2022). Knowledge of HBM was crucial in understanding the attitudes of Black Pentecostal Christians' perspectives on the COVID-19 vaccine acceptance. Hence, the model guided the collection of relevant information for this study (Khumros et al., 2018). This framework aligns with the problem of the low COVID-19 vaccine rate reported in DMV and the study's purpose, which aimed to explore the intricate relationship between religious beliefs, practices, and leadership guidance within the Black Pentecostal Christian community in the DMV region. The HBM, developed by Rosenstock in 1966, is a well-established theory that examines factors influencing health-related behaviors. It involves key concepts such as perceived

susceptibility, severity, benefits, and barriers to health actions adapted to understand the COVID-19 vaccine perceptions of Black Pentecostal Christians in the DMV.

This model was useful in assessing how religious beliefs and practices influenced the virus's perceived risk, severity, and perceived benefits or barriers to vaccination. This approach provided valuable insights into the Christian doctrines/practices influencing the low COVID-19 vaccination among this Christian community. The results of this study build upon existing findings in the field. It offers a nuanced understanding of the dynamics within the Black Pentecostal Christian community in the DMV. According to Kenzig and Mumford (2022) and Limbu et al. (2022), personal narratives from underserved populations have influenced the decision to reject the vaccine, for instance, the integrative model of HBM and the theory of planned behavior (TPB). The integrative model of HBM and TPB study has effectively predicted vaccine hesitancy (Romate et al., 2022).

HBM has been effectively used to determine behavioral reactions based on core beliefs. Since Christians' beliefs about the COVID-19 vaccine have been shown to influence their decision whether to take the vaccine or not, HBM was, therefore, an excellent theory for this study to understand how the unique Christian beliefs of Black Pentecostal Christians influenced beliefs about COVID-19 vaccines and the behavior of vaccine uptake.

Literature Review Related to Key Variables and/or Concepts

The impact of epidemics or pandemics cannot be overemphasized, as these negatively impact individuals, communities, as well as the economy, the healthcare

system, and public health (Filip et al., 2022). According to research studies by Alcendor (2021) and Ranjan and Ranjan (2020), the COVID-19 infection disproportionately affected different communities, and the unvaccinated populations were the most affected and contributed significantly to the continuous spread of the virus. Breakthrough in the development of vaccines is believed to be a great preventative measure that mitigates both the infection rate and the spread of the infection. However, during the COVID-19 pandemic, there was strong resistance to the emergency-approved COVID-19 vaccine developed and approved by the Federal Drug Authority (FDA; Simonov et al., 2022). This resistance to the vaccine is believed to have been promoted by some media and news outlets, social media, politics, and religious leaders that strongly opposed the findings of the COVID-19 vaccines (Simonov et al., 2022). This vaccine hesitancy was not only felt in the United States of America but also globally. Some Americans could still recall and relate to the experience they had during the Ebola outbreak in 2016 whereby the Centers of Disease Control (CDC) and World Health Organization (WHO) had assured the population that the disease was being contained, which was not true, as there was a tremendous outbreak leading to enormous deaths (CDC, 2024). Therefore, the CDC and WHO findings were inaccurate and inconsistent with those of other countries that had a low impact on the Ebola outbreak as they were fully prepared to contain the predicted spread of the disease (Gesser-Edelsburg & Shir-Raz, 2017). The US health system was not considered trustworthy, and opposition to the COVID-19 vaccine was imminent (Gesser-Edelsburg & Shir-Raz, 2017).

Fisk (2020) reported two significant barriers to vaccine uptake: structural (vaccination providers availability, access, and distance to vaccination sites) and attitudinal (beliefs and perceptions of infectious disease, side effects, distrust in the government, healthcare system, and pharmaceutical companies). The vaccination disparities, educational status, and income level are hindrances to positive perceptions of the implementation of vaccination programs (Fisk, 2020). Fisk further stated that increased vaccination rates for persons of color were directly related to their beliefs in their decision to take or reject the vaccine as compared to the White Americans. They also reported that the vaccination rates were lower for persons of color and concluded that vaccination hesitancy was likely correlated with distrust in the healthcare system and the government (Fisk, 2020).

Background of Vaccine Resistance

Vaccine against smallpox is believed to be the first-ever inoculation. Dr. Edward Jenner (English physician and scientist) realized that milkmaids in Derby were never infected by smallpox and concluded that since cowpox often infected milkmaids, there was a likelihood that this protected the milkmaids from severe smallpox (Eisen, 2020; Gallegos et al., 2023). To confirm this, Jenner intentionally infected a child with cowpox, which protected the child from smallpox. As soon as Jenner demonstrated that intentionally infecting a child with cowpox would protect them from smallpox, criticisms erupted based on sanitary issues, scientific and political objections, and even religious reasoning (Smith, 2011). Christians deemed the discovery as unclean as samples were collected from an animal, and others were skeptical as they believed that diseases

originated from decay, a vapor known as miasma (Kannadan, 2018). The opposition became fiercer as the government implemented mandatory vaccination policies for children, which some people believed violated human rights and personal liberty.

After the first mandatory vaccination act of 1853 was instituted for infants from birth to three months, the act of 1867 extended it to age 14 with penalties for refusing (Durbach, 2000). The contention led to the creation of the Antivaccination League, which was responsible for addressing responses the mandate requirement (Williamson, 1984). The opposition backed with demonstrations provoked further investigation of the vaccine and it was finally confirmed as effective in protecting children against smallpox in 1896 (Badar, 2021). However, there was a smallpox outbreak in the United States towards the end of the 19th century that led to the creation of anti-vaccine groups.

The Antivaccination Society of America was then created in 1879 following the English antivaccination organizers' visit to the US (Tolley, 2019). Other antivaccination groups included the New England Anti-Compulsory Vaccination League, The Antivaccination League of New York (Wolfe & Sharp, 2002). The opposition by antivaccination groups in America, Europe, and across the world has continued, and it is a familiar occurrence globally.

Due to crowdedness and unhygienic conditions during the first world war, on March 11, 1918, the first cases of H1N1 influenza were diagnosed and recorded (Patterson & Pyle, 1991). The H1N1 influenza pandemic has been recorded to be among the most severe outbreaks, as it infected 35% of the world's population with about 50 to 100 million deaths (Beach et al., 2022). In the US, about 675,000 people died, with

children under five years and adults between 20 to 40 years being the age groups that were most hit (CDC, 2019). High mortality rates were recorded among healthy young men because as fighters, they were exposed and there was no vaccine against influenza nor antibiotics to treat secondary infections then (Greenberger, 2018). To curb the spread of the infection, infected persons were either isolated or quarantined. Disinfectants were also used, and gatherings were limited (Greenberger, 2018). It is believed that every 40 years, there is a significant flu pandemic (Kim et al., 2022). The cause has been associated with a significant antigenic drift leading to an alien virus unrecognized by the human body; thus, no defense mechanism found in the human system. It is believed that this was the underlying cause of the 1918 influenza pandemic (Kim et al., 2022).

Controversies erupted in England in the late 1970's of the safety of tetanus-diphtheria-pertussis vaccines after a report from a hospital linked it to neurological damage. Though this was later debunked, antivaccination groups were quick to denounce the safety of the vaccine (Kulenkampff et al., 1974). Lawsuits were levied against vaccine manufacturers and though the pharmaceutical companies thrived, vaccine costs increased, and many companies stopped the formulation of some childhood vaccines (Kulenkampff et al., 1974). An antivaccination researcher, Andrew Wakefield, also falsely claimed that autism was associated to the measles-mumps-rubella vaccine, and this is still posing fear in the hearts of many today as they believe his claim was correct (Flaherty, 2011; Rao & Andrade, 2011). Research by Chamberlain (2020) stated that pharmaceutical companies removed Thimerosal (a preservative) from vaccines in 1999,

not because it was scientifically proven but because it was alleged to cause autism from non-scientific spokespeople.

COVID-19 and Vaccine Resistance

Alsan et al. (2021); Howe et al. (2019); and Shao and Hao (2020) stated that though many Americans were more intentional in seeking ways to protect their health from exposure to the disease, they could easily be compromised by contradictory health reports about vaccine efficacy. Nelson et al. (2020) stated that social media amplifies misinformation and underscored the necessity to implement strategies aimed at debunking social media misinformation of COVID-19 vaccines to the public, which was relevant in increasing COVID-19 vaccine uptake. Bogart et al. (2021) provided great insights into COVID-19-related medical mistrust regarding the COVID-19 vaccine and COVID-19 treatment hesitancy among Black Americans. Findings revealed that 97% of participants acknowledged at least one COVID-19 mistrust belief, and more than 50% acknowledged at least one COVID-19 vaccine or treatment hesitancy belief. The findings by Bogart et al. provided information on how misinformation impacted vaccine uptake in the DMV Christian community. According to Johns Hopkins (2021), four types of false information comprised of mischaracterization of the disease or protective measures that are needed; false treatments or medical interventions; scapegoating of groups of people; and conspiracy theories. These false types of information were predominant during health emergencies (Johns Hopkins, 2021).

Research by Dielschneider (2021) provided some reasons for vaccine hesitancy especially among Christians and religious groups where hesitancy seemed to be

prevalent. Findings from this study revealed that understanding the reasons for vaccine hesitancy, especially in a Christian context, and discussing responses that involved scientific evidence, and philosophical arguments would partially address the problem of COVID-19 hesitancy among this population. Hein de Vries et al. (2020, p3205) purported that "One of the factors influencing vaccine hesitancy included the sources and types of information that serve as cues for people to think and act with respect to the COVID-19 vaccination." Hein de Vries et al. expounded on COVID-19, vaccine hesitancy, knowledge, attitudes, self-efficacy, and information behavior, and findings revealed that there were important differences between hesitant and non-hesitant individuals on various predisposing, motivational awareness, and informational factors regarding COVID-19 vaccine hesitancy. Research by Tessalyn (2022) revealed that there was a relationship between religious affiliation and COVID-19 vaccine hesitancy and most of the religious groups did not endorse the COVID-19 vaccines and their reasons included the speed in which the vaccine was developed, inadequate information about the vaccine, side effects, and no trust in the vaccine. Conservative Christians have also expressed concern that fetal tissues were used to develop the Johnson & Johnson vaccine (Tessalyn, 2022). According to Tessalyn, though conservative Protestants believed in the scientific method used in producing the vaccines, they believed that scientists may not have acted in the best interest of the public, thus leading to distrust of the health system. However, the findings revealed that faith-based approaches effectively increased vaccination rates in this population. This could be achieved by implementing public health efforts that involve community leaders like pastors and priests since these

conservation religious leaders are generally pro-vaccine. Tessalyn recommended that unlike public health efforts focusing only on a classical knowledge gap model, there is a need for collaboration with religious leaders to address the issues preventing interest in vaccination. This study is in sync with that of Vulpe (2021), who identified some religious themes as a justification for vaccine hesitancy. This type of scientific skepticism has been supported and encouraged by some religious leaders whose interpretations of religious dogma are discursive (Vulpe, 2021). Vulpe suggested that using the knowledge deficit model for information campaigns on vaccination impeded the understanding of the role of socio-cultural resources in popularizing science skepticism and distorted knowledge of this social phenomenon. The Vaccine Weekly (2022), a journal in Nigeria, also stated that aphorisms (Jewish expectations of the anti-Christ like the mark of the beast, hellfire bound, behaving immorally, and animalistic tendencies) have sustained vaccine hesitancy in Makurdi. Though existing literature has failed to establish a causal link between the Christian understanding of Jewish expectations of the anti-Christ in Makurdi, Benue State, a recent study by Shahana (2023) revealed that vaccine acceptance and Christian beliefs were associated with vaccine hesitancy. This trend was higher among Christian conservatives due to their skepticism and distrust of vaccines and public health initiatives. Shahana further stated that while some Christians relied on their religion for comfort and support during the pandemic, others experienced faith crises and questioned their beliefs. The nuance between these two positions calls for more research on the topic to understand how Christian practices influenced the decision of Pentecostal Christians to accept or reject the COVID-19 vaccine (Shahana, 2023). Though Shahana

(2023) purported that religious leaders significantly influenced their followers' perceptions and behaviors about their COVID-19 vaccine choices as evidenced by higher country-level religiosity that led to lower vaccination rates, the author did not state how biblical teachings and practices have influenced these Christians. The author focused on the social determinants like adapting to COVID-19 measures, providing support for emotional stability, and compliance with social distancing guidelines and safety measures to curb the spread of the virus. Earlier research findings by Garcia and Yap (2021) suggested that religiosity played a role in vaccination hesitancy as reflected by religious teachings prioritizing prayers to treat diseases over medicine, using holy water, and fear of the vaccine due to misconceptions. Garcia and Yap further stated that religious beliefs influenced medical and scientifically sound evidence, resulting in varied responses toward getting vaccinated. These authors, therefore, recommended further research on how these religious beliefs have influenced Christians in their decision to accept or reject the COVID-19 vaccine.

Findings from a recent comprehensive study on the topic "Understanding the role of religious beliefs in adherence to antiretroviral therapy among Pentecostal Christians living with HIV in sub-Saharan Africa" by Azia et al. (2023) revealed how religious beliefs of Pentecostal Christians have influenced HIV/AIDS health outcomes. These beliefs act as barriers or facilitators (motivators) to health outcomes and psychosocial factors due to Pentecostalism also impacting health outcomes. The authors stated that Pentecostal Christians living with HIV/AIDS beliefs that hindered the uptake of antiretroviral therapy (ART) included the belief that prayers can heal the sick, the belief

in healing by faith, the belief that the healing power of God cannot be belittled by taking ART, and the belief that the prophetic healing words from the religious leaders is sufficient to heal HIV/AIDS (Azia et al., 2023). Paradoxically, some Pentecostal Christians adhered to ART based on the belief that God gave scientists the wisdom or supernatural power to produce ART to heal mankind (Azia et al., 2023). Thus, Pentecostal Christians in sub-Saharan Africa approach ART differently based on their individual Christian beliefs and convictions. Azia et al. also reported that more research is required to understand the nature of religious beliefs and how they impact ART adherence (health outcome) among people with Pentecostal beliefs living with HIV in sub-Saharan Africa. I believe this recommendation is valid for research to understand how religious beliefs and practices impact other disease outcomes, including COVID-19. Research by DiGregorio et al. (2022) stated that they are Christians who say, "God will protect us." Thus, they believe in God/Higher Power's ability to intervene, and COVID-19 vaccine uptake is nonexistent. This article recommended further research to understand why Christians are hesitant to take the COVID-19 vaccine. This further justifies the essence of this study.

The Gap in Literature

Understanding the role of Biblical interpretations and Christian practices and the impact of religious leaders' interpretations of biblical teachings on the congregants' choices of COVID-19 acceptance is vital within the Black Pentecostal Christian community in DMV. Unraveling the Christians' perceptions on how specific biblical interpretations and teachings might have contributed to the congregants' attitudes and

beliefs about COVID-19 vaccination, the associated outcomes, and the perceived role of religious leaders in encouraging COVID-19 vaccination within the Black Pentecostal Christian community in DMV was therefore crucial for this study. Understanding and addressing the afore mentioned phenomena has attempted to provide knowledge for informed decisions, strategies, and valuable insights into the complex interplay of religious beliefs, practices, and leadership influence on COVID-19 vaccination decisions among Black Pentecostal Christians in DMV. That is, understanding the impact religious leaders play through the interpretation of Christian doctrines, e.g., divine healing (divine providence, deliverance), Eschatology doctrine (the mark of the beast: 666), and New Creation Doctrine (immunity to sicknesses and diseases) on COVID-19 vaccine uptake within this Christian population. Hence, the overarching objective of this study was to seek to contribute to a better understanding of how religious factors can either hinder or promote vaccination within this community, with the potential for informing public health strategies and interventions.

Although researchers have attempted to explore how religion has affected the decision to accept or reject COVID-19 vaccine, the topic has not fully been explored. Some researchers have linked the low COVID-19 vaccine acceptance amongst Christians to politics or anti-COVID-19 vaccine sentiments (Gray, 2021). DiGregorio et al. (2022) have also reported that belief in God (God's higher power's ability to intervene) has delayed or refused the COVID-19 vaccine. This research focused only on one aspect of the image of God, how individuals conceptualize God and how this could influence the acceptance of the vaccine. Moreover, the research by DiGregorio et al. (2022) was not

localized to any specific state in the US but on secondary data from a nationally representative survey of U.S. adults, collected using the Amerispeak® probability-based panel via the National Opinion Research Center (NORC) at the University of Chicago (DiGregorio et al., 2022). Furthermore, the influence of other aspects of the image of God that are the core of Christian traditions (Christian doctrines/ biblical teachings) and practices, as well as the influence of the Christian leaders on their congregants through the interpretation of the Scriptures regarding COVID-19 vaccine acceptance have not been explored. To my knowledge, no research has been conducted to explore the influence of Christian doctrines/practices in the DMV. DiGregorio et al. (2022) clearly stated that their study was one of the first to explore religious perceptions and COVID-19 vaccine uptake. The researcher, therefore, recommended that future studies should explore additional images of God and their relationships to them. The aim of this study is therefore an attempt to address the gap.

The Research Questions

Two qualitative research questions guided this study:

RQ 1: What role do Biblical Interpretations and Christian Practices play in shaping the attitudes and beliefs towards COVID-19 vaccination status among Black Pentecostal Christians in DMV?

RQ 2: What role do religious leaders play in shaping the attitudes and beliefs towards COVID-19 vaccination status among Black Pentecostal Christians in DMV?

RQ 1 focused on the issue of Biblical Interpretations and Christian Practices of Black Pentecostal Christians while RQ 2 focused on the Role of Religious Leaders. I

used a semi-structured interview guide for interviewing both the congregants and the religious leader.

Summary and Conclusions

I have stated the purpose of this qualitative study, which was to explore the influence of religious beliefs, practices, and leadership guidance on the acceptance or rejection of COVID-19 vaccination within the Black Pentecostal Christian community in DMV. I have indicated the search mechanism that I utilized to identify relevant peer-reviewed articles for the study and how the selected appropriate articles were downloaded in PDF and saved using the Zotero reference management tool to make future access, citation, or referencing seamless. The conceptual framework was an inductive hermeneutic basic conceptual framework as the study aimed at searching for trends and patterns from the data collected to explore, understand, and explain the nexus of low COVID-19 vaccine rate vis-à-vis the role Biblical interpretations, Christian practices, and Christian leaders played within the black Pentecostal Christian community in DMV.

The HBM was used for this study because it effectively determined behavioral reactions based on core beliefs. I have presented the state of the topic from literature with a synopsis of various research findings. The key concepts of basic qualitative study have been addressed, and the narrative of the background of vaccine resistance has been carefully expounded upon. I also elaborated on how vaccine breakthroughs first started and the resistance and controversies associated with its discovery. It is evident from the literature that vaccine hesitancy has existed since its conception, and the resistance continues to date due to misinformation, distrust, politics, and religion. The factors

affecting COVID-19 vaccine resistance have also been delved into, with social media amplifying the misinformation, necessitating the implementation of strategies aimed at debunking social media misinformation about COVID-19 vaccines to the public. This is relevant in increasing COVID-19 vaccine uptake. Findings revealed that 97% of participants acknowledged at least one COVID-19 mistrust belief (Bogart et al., 2021). I have clearly stated the gap in the literature on how religiosity influenced the decision to accept or reject COVID-19 vaccines. Existing literature focused only on one aspect of the image of God, how individuals conceptualize God, and how this could influence the acceptance of the vaccine (DiGregorio, 2022).

The research was not localized to any specific state in the US but on secondary data. The influence of other aspects of the image of God that are the core of Christian traditions (Christian doctrines/biblical teachings) and practices, as well as the impact of the Christian leaders on their congregants through the interpretation of the Scriptures with regards to COVID-19 vaccine acceptance have not been explored. This study attempted to address this gap by providing insight on the topic that would hopefully increase vaccine acceptance. The research method used for this study, as detailed in the next chapter, was a semistructured interview guide developed for interviewing congregants and religious leaders to collect data through Zoom, phone calls, or face-to-face.

Chapter 3: Research Method

Introduction

The purpose of this qualitative study was to explore the influence of religious beliefs, practices, and leadership guidance on the acceptance or rejection of COVID-19 vaccination within the Black Pentecostal Christian community in DMV. In this chapter, I provided an overview of the research method. I began by explaining the research design and rationale of the study vis-a-viz the research questions, my role as the researcher, the methodology employed, the study setting, and the data collection process. I concluded this chapter by providing my data analysis plans with an emphasis on trustworthiness as per research guiding principles.

Research Design and Rationale

As stated in Chapter 1, the issue that prompted this study was information on COVID-19 vaccine hesitancy and the low uptake of the vaccine in DMV. The Black population in the US is dying from COVID-19 at disproportionate rates caused by an increase in COVID-19 vaccine hesitancy among Blacks compared to Whites (Peteet et al., 2022). Research by Summerville et al. (2024) confirmed that incidence, morbidity, and mortality are higher among Blacks compared to their White counterparts due to health inequity and inequality. To address this problem, this study aimed to understand whether, aside from the above-listed factors, biblical teachings, and practice, as well as the role of religious leaders, affect the COVID-19 vaccine acceptability by Black Pentecostal Christians living in DMV. The two qualitative research questions that guided this study comprised the following:

RQ 1: What role do Biblical interpretations and Christian practices play in shaping the attitudes and beliefs towards COVID-19 vaccination status among Black Pentecostal Christians in DMV?

RQ 2: What role do religious leaders play in shaping the attitudes and beliefs towards COVID-19 vaccination status among Black Pentecostal Christians in DMV?

The qualitative research design effectively explored the influence of religious beliefs, practices, and leadership guidance on accepting or rejecting COVID-19 vaccination within the Black Pentecostal Christian community in DMV. The qualitative research method effectively provided insights about new phenomena, experiences, or processes, and information necessary to understand human behavior (Boot & Bosma, 2021). This research method aligned with the purpose of this study as it provided a better understanding of how biblical teachings and practices, as well as religious leaders, may have influenced this population on their decision to accept or reject the COVID-19 vaccine.

The basic qualitative approach was selected for this study since it could be effectively used to explore the participants' COVID-19 vaccination perceptions vis-à-vis their biblical teachings, Christian practices, and the role their religious leaders played in their decision to accept or reject the COVID-19 vaccine (Merriam & Tisdell, 2016). This was based on the constructs that made sense from their experiences within the Black Pentecostal Christian community in DMV (Merriam & Tisdell, 2016). This would increase knowledge on the topic that would help enact policies and implement projects geared towards increasing the acceptability of the COVID-19 vaccine. This would also

lead to social change in the community by increasing the economic status, social, health, educational, and financial stability and decreasing COVID-19-related hospitalization, morbidity, and mortality rates.

Role of the Researcher

As a qualitative researcher, I was the instrument of data collection, and I also played a prominent role in protecting the participants. My role in the research was, therefore, very sensitive, as my verbal and nonverbal communication with the participants could greatly influence their responses to the interview questions. As recommended by Creswell and Creswell (2017), I identified, understood, and controlled biases, background, and personal values that could have affected the participants' responses, thus questioning the credibility and trustworthiness of the study (Creswell & Creswell, 2017). Personal and professional relationships identified that may have led to conflicts were minimized by selecting participants from diverse geographical locations within DMV. I played the role of data collection by observing and interviewing the participants and documenting the interviews. To mitigate the ethical issues that stemmed from my own Church environment, conflict of interest, or power differentials, I avoided recruiting participants from my local Church.

All the recruited participants reviewed and signed an informed consent form that explained the purpose of the study and my expectations from them. I emphasized that their participation was voluntary (they could opt-out at any stage of the process) and that their confidentiality and the level of risk associated with participating in the study were well protected. I ensured that all the participants fully understood the study and their

responsibilities before, during, and after the interview. As a data collection instrument, I developed an interview guide that helped me administer the semi-structured interview questions. It effectively oriented and supervised the interviewee to focus on the topic or questions asked. The questions were open-ended to better understand the participants' experiences, beliefs, attitudes, and perspectives. The interview guide helped me ensure that the questions and the follow-up questions aligned with the purpose of the research.

Personal Background

I am a female Black African, 52 years old, and I reside in the Washington D.C. Metropolitan area in Greenbelt, Maryland, in Prince George County, USA. I am a public health professional and a faith-based agent of change, and I am apolitically inclined. However, I interact daily at professional and religious level with people with different political and religious inclinations and ideologies. I worked as a Monitoring & Evaluation Officer with the CDC-PEPFAR HIV-Free Cameroon Project for 4 years, and the just-ended President Malaria Initiative (PMI) Measure Malaria Surveillance, Monitoring and Evaluation Reference Group (SMERG) for four years. As a public health professional (Epidemiologist) and a theologian, I have kept most of my views on theology and public health to myself. My objectivity to most political, health, and religious discussions permitted me to objectively function as a researcher on this topic as I consciously avoided influencing the participants or imposing my views on them. I used journaling during data collection, and the journal served as a record of ideas and experiences that I gathered during the interviews for further reflection and exploration. This served as a check against biases during the data reviewing process, and I ensured that details were well

recorded and preserved. Journaling also mitigated or reduced the chances of recall errors. Moreover, I also did my due diligence in reporting all results, even those unrelated to my topic. I designed my interview guide and questions with caution and listened to each interviewee attentively to accurately take field notes that I later used to identify themes for coding in the analysis stage to ensure an accurate conclusion of the findings.

Methodology

I used purposeful sampling to select a representative sample from my DMV target population. Purposive sampling enhanced the selection of individuals who met specific criteria relevant to this topic (Szklo & Nieto, 2019). Purposive sampling affects a study's internal validity by increasing the sample's representativeness and, hence, the external validity. Moreover, it was easier to implement especially as the sampling population was small and not evenly geographically dispersed (CDC, 2018). Purposive sampling method was an effective tool for selecting individuals based on specific stated criteria, thus relevant in increasing the study's internal validity (Szklo & Nieto, 2019). Though purposive sampling may introduce selection bias that may reduce the external validity of the study, thereby limiting the generalizability of the findings, it was relevant in this study since the research questions required a specific group of individuals to be interviewed (CDC, 2018; Szklo & Nieto, 2019). The selected purposive sampling method was, therefore, an effective method to identify and select relevant participants who have experience, are knowledgeable, were interested in participating in the research topic, and could effectively communicate their experiences about this phenomenon of interest on how biblical interpretations and Christian practices as well as the role religious leaders

played in shaping the attitudes and beliefs towards COVID-19 vaccination acceptance among Black Pentecostal Christians in DMV.

Participant Selection Logic

With the proliferation of Black Pentecostal Christians in DMV and the implementation of COVID-19 vaccine sites since 2020, It was feasible for me to recruit permanent residents of the DMV of age 25 and above who were knowledgeable of COVID-19 vaccination, currently attending a Black Pentecostal Church, interested, and willing to communicate their COVID-19 vaccination experiences articulately. Additionally, these participants were required to be able to read, understand, and communicate in English. The participants were duly informed of their right to opt out during the study based on an informed consent protocol. The interview guideline stipulated the duration (60 minutes) and highlighted the available slots, indicating days and times for participants to choose or suggest when they may be available for the interview. I used Zoom and phone calls to interview with each interviewee. I also conducted an in-person interview with one interviewee who requested that option. I conducted 14 interviews with participants living in the DMV between September 1-17, 2024. The sample size predicted for this study was 12-15 or when saturation was obtained. Prior knowledge or an exact prediction of when data saturation would be reached was not feasible; hence, I reviewed the transcription immediately after each interview to observe or determine when saturation occurred. I immediately stopped participant recruitment when saturation was reached.

I informed the participants that I might revert to them during the research study period should they need clarification of their interview. The in-person interview was conducted in the interviewee's private study to ensure the security and privacy of the interview responses. No other person was around during the interview, and the conversation could not be overheard next door. For the Zoom and telephone calls, the interviews were conducted when the interviewee and I were alone and in private locations. Also, most of the interviews were conducted early in the morning or at night when the kids were already asleep. To mitigate any data loss, data used for coding were confidentially stored on an encrypted drive on my personal secure computer in my private room.

Instrumentation

For this qualitative study, I developed an interview guide (See Appendix A) with guidance from my Chair and Committee Member that consisted of open-ended questions (Appendix B). The questions focused on the interviewee's beliefs and interpretations of the Bible regarding COVID-19 vaccination and how their beliefs and religious leaders influenced their decision to accept or reject the vaccine. In total, there were 10 interview questions. I took notes (see field notes template: Appendix B Table 1) during the verbal and non-verbal (when possible) communication interview and recorded the information using my laptop and iPhone 15 Pro developed in 2023 by Apple. I concluded the interview by debriefing participants of the purpose of the study and thanking them for their time in attending the interview after which I stopped the recording.

The recording was transcribed on a digital software called Descript, developed in 2017 by Andrew Mason - former Groupon CEO. Descript is software used by many

companies to provide audio word processing services since it can effectively transcribe audio messages. The Descript software takes less than 4 minutes to transcribe a 60-minute audio recording. It automatically inserts the names of all those who participate in the interview by identifying the different voices. This tool has been used by the audio-visual department and the Database Administrator of my local Church to record and transcribe sermons before publication and dissemination to members. I used it to record and transcribe my interview for an assignment in the Qualitative Reasoning course during my Coursework. I used my laptop and Microsoft Excel to code.

Procedures for Pilot Study

To test the appropriateness of the procedure for recruitment strategies, participation protocols, and data collection techniques to be applied to the main study, I recruited about two friends who attended a Black Pentecostal Church in the DMV and were interested and willing to communicate their COVID-19 vaccination experiences articulately. This pilot study helped me to assess the participants' understanding of the interview questions, duration, and rigor of the interview, reframed emotional questions that could lead to defensive responses, and ensured that leading questions that could point to bias were avoided.

Procedures for Recruitment, Participation, and Data Collection

To recruit participants for this study, I posted a flyer (Appendix C) and a brief 47-second video **(**Appendix D) on the American Public Health Association (APHA) and American Society of Tropical Medicine and Hygiene (ASTMH) platforms, as well as Walden Dissertation Facebook page for volunteers to participate in the study. I also

posted the flyer and short video to WhatsApp groups to which I belong and urged members to share with their friends and relatives on other platforms. I also recruited participants through snowball sampling. This is a sampling method whereby new interviewees are gotten through networking referrals; an interviewee gives the researcher the name of one or more potential interviewee(s), and the interviewee (s), in turn, also gives the name of one or more potential interviewees (s) (Kirchherr & Charles, 2018).

I shared an introduction and purpose of the study as well as the approved informed consent form with those interested in participating in the study through email. Following the reciept of the signed informed consent form from the participants, I verified and confirmed the information by telephone and email during which I scheduled the interview appointment with the prospective participants. I respected the participants' preferences for the time and date for the interview. An anonymous 5-digits identification code was generated using my computer and assigned to each participant as their unique ID. I conducted the interview following my interview guide approved by my Chair and Committee Member and Walden's Institutional Review Board (IRB). My IRB approval number for this study is 08-28-24-1117585. To assist the participants to effectively share their lived experiences with in-depth insights, I framed the questions using "how", "can", "what", and "why." I wrote field notes, and used the Descript tool to record, transcribe, and edit my interviews (Descript, 2017). Non-verbal communication was captured by observation during the face-to-face interview and by listening keenly to the interviewee's voice tone, exclamation, or hesitancy in responding to the interview questions. After transcribing each interview, I sent a copy to the interviewee by email to review its content

for accuracy to effectively reflect the interviewee's perspective. No corrections or changes were identified by the interviewees. I sent an Amazon gift card of $20 to each of the participants as well as a certificate of participation as promised (Appendix E).

Data Analysis Plan

For the analysis, I used qualitative thematic analysis which was an effective analytic method for reviewing large representation of information (non-numerical data) to identify trends and patterns via coding (Sundler et al., 2019). The coding process entailed reading the transcript repeatedly to identify patterns in meaning like common words or phrases used to express the participants' perspectives (Elliot, 2018). As suggested by Wæraas (2022), the more the I read the transcript, I realized that some codes conveyed similar meaning and could therefore be grouped into categories. As recommended by Roberts et al. (2019), I used a qualitative codebook to highlight any themes and categories that emerged from the captured data including any quotes from the participants that related to the identified themes. Ravitch and Carl (2021) defined a category as a combination of codes that have a common meaning, attributes, or intent. I reflected on the categories with rigor to identify major emerging themes and I grouped them based on similarity in meaning to form themes (Wæraas, 2022). Previous studies by Rubin and Rubin (2012, P.194) stated that "themes are summary statements, causal explanations, or conclusions and are developed from one or more categories that reflect the phenomenon." Thematic analysis was used to analyze the data collected because it enhanced reflection on the perspectives of the beliefs of Black Pentecostal Christians in

DMV about COVID-19 vaccine acceptance or rejection. Results of this study are discussed in Chapter 4.

Issues of Trustworthiness

Shenton (2004, pp.63-67) underscored the importance of ensuring excellence of qualitative research which must take into consideration it's "worthiness, relevance, timeliness, significance, morality, and practicality of the research topic, and the ethical stance of the research itself." Key elements that were considered in this study to ensure trustworthiness comprised of credibility, dependability, confirmability, and transferability. Trustworthiness have been defined as the degree of accuracy that the researcher possesses with regards to the findings of the study (Kyngäs et al., 2020). This study was conducted with rigor; the problem statement was lucid, research problems and questions were well-articulated, and well formulated to ensure trustworthiness. According to Yadav (2022), trustworthiness could be ensured by having a worthy topic that was relevant, timely, significant, and interesting. The topic of this study met those criteria. Further, I ensured the internal validity of my research by addressing only what the research questions intended to address.

Credibility

As defined by Haven & Van Grootel (2019), credibility is the level of accuracy and truthfulness of the findings of the research. It deals with the issue of internal validity which entails measuring or addressing just what it is intended to; that is, it seeks to address the question "How congruent are the findings with reality?" (Shenton, 2004. pp.63-67). To ensure credibility, I adopted the appropriate research methods, provided in-

depth description, triangulation, multivocality, and member reflections resonance as suggested by (Yadav, 2022). These enhanced replicability and transparency (Closa, 2021). Furthermore, only individuals that met the set criteria that have the competency of responding to the interview questions were recruited.

Dependability

Dependability addressed the consistency of the findings with existing literature (Kyngäs et al., 2020). To ensure dependability in this study, I described the steps that I used in conducting this study to allow future researcher to replicate the study. That is, the data collection process was rigorous, and I adhered to the established protocols as well as paid attention to details. The interview questions were reviewed by my Chair and Committee Member to ensure alignment with the overall purpose of the study; hence, mitigated individual and selective bias that could impact the validity and reliability of the study.

Confirmability

According to König & Jucks (2019) and Kyngäs et al. (2020), confirmability refers to the findings obtained from the participants' responses of the interview questions. It is not the researcher's idea, perspective, values, beliefs, or viewpoints. To ensure confirmability, I transcribed, reviewed, and shared each participant's responses and with them to authenticate the accuracy and authenticity of the transcription.

Transferability

Transferability of a research study is crucial as it defines the level at which these findings can be applied to future research on similar populations or geographical location

(Kyngäs et al., 2020). Though the findings of this study may not meet the criteria of generalizability due to the small sample size and the uniqueness of the population studied, the results may however be transferable within the US (Kyngäs et al., 2020).

Ethical Procedures

Approval of this study through an informed consent form with Walden IRB approval # 08-28-24-1117585 was obtained prior to engaging in the data collection process. This was used to inform the participants on the purpose, procedures, risks, and benefits of the study before engaging in the research (National Institutes of Health [NIH], 2020). As stated above, to be eligible for recruitment for this study, the individual had to be a permanent resident of the DMV, of age 25 and above, knowledgeable of COVID-19 vaccination, currently attending a Black Pentecostal Church, interested in participating in the study, and was willing to articulately communicate their COVID-19 vaccination experiences. Participants from my local Church were ineligible as well as public figures or my relatives due to conflict of interest. Each of the participants was assigned a unique 5-digit ID as a pseudonym for the participants' personal identification and each participant's response was matched to the appropriate corresponding ID. I ensured that the proper documentation and preservation of my field notes were securely locked up in a cabinet in my private room. Also, recordings, electronic data have been saved in my computer hard drive and backed-up on iCloud and the passwords encrypted. These materials would be destroyed after five years in accordance with Walden University's requirements (Walden University, n.d.).

Summary

In this chapter, I have provided an overview of the research method, stated the research design and the rationale, demonstrated how this aligned with the research questions/ purpose, and I described my role as the researcher. I also outlined the data collection process and how participants were pseudonymized to maintain confidentiality. I concluded this chapter by providing my data analysis process with emphasis on trustworthiness as per research guiding principles.

Chapter 4: Results

Introduction

The purpose of this qualitative study was to explore the influence of religious beliefs, practices, and leadership guidance on the acceptance or rejection of COVID-19 vaccination within the Black Pentecostal Christian community in DMV. The study was guided by two research questions:

RQ1: What role do Biblical interpretations and Christian practices play in shaping the attitudes and beliefs towards COVID-19 vaccination status among Black Pentecostal Christians in DMV?

RQ2: What role do religious leaders play in shaping the attitudes and beliefs towards COVID-19 vaccination status among Black Pentecostal Christians in the DMV.

This chapter includes a description of the pilot study, study's setting, demographics of the participants, and the data collection method. The chapter also provides a discussion of the trustworthiness of the research and key results of the data collected.

Pilot Study

Prior to the main study, I identified the need for a pilot study to get acquainted with the interview process, recruiting tools, interview guide, Zoom, audio recording instrument, interview questions, timing, voice tone, and the participant's ease of answering the questions. The pilot was a prototype of the interview to be conducted for the main study, but the participants of the pilot study were a family member and a friend who met all recruitment criteria. Both pilot interviews were over the stipulated time of 1

hour. In conducting the pilot interviews, I realized that I asked many questions that were not included in my interview guide, and I had not familiarized myself with the interview guide for clarity, coherency, and flow of the interview questions. After the pilot, I reviewed the interview guide to acquaint myself with the document based on my field notes and feedback, and I familiarized myself with the interview questions to avoid asking irrelevant questions that did not align with the research questions nor were approved by IRB. This solved the problem of time as the interviews during the main study were within an hour as anticipated. I also realized that since one of the pilot participant's interviews was face-to-face, it was difficult to record as there were technical glitches. I, therefore, used my iPhone 14 as a backup recorder to the Zoom recording for the entire main study interview process. No further issues were identified. The pilot study was a necessity as it informed me of the adjustments required based on the pilot study feedback.

Setting

To ensure the privacy and confidentiality of the Zoom and telephone interviews for the participants, I conducted the interviews in my private study area alone in the room, and I advised my household not to come in during the interview. I was also careful that my voice was not too loud for the discussion not to be overheard by anyone outside the room. I gave the same advice to the participants. One participant used her car since the house was not private at the time of the interview, two participants adjusted their interview schedules late into the night when their children were asleep, and another participant preferred the interview at 6:00 am when the children were asleep. The

interview information was stored in iCloud and password protected so that it could not be accessed by anyone other than myself.

Demographics

The sample size for this study was 14 and comprised of permanent DMV residents aged 25 years old and above. Fourteen persons finally participated based on the saturation point when no new information could be sourced from the semistructured interviews (Braun & Clarke, 2021). Of the 14 participants, five resided in Maryland, five in Virginia, and four in Washington D.C. As recommended by Campbell et al. (2020), I used the purposive nonprobability sampling method whereby participants were selected based on the specific eligibility criteria. I also used snowball sampling. Snowballing is a non-random sampling technique used in qualitative research. Researchers often use this approach for interviews by identifying and interviewing eligible individuals who have been friends or colleagues or have been identified by friends or colleagues (Geddes et al., 2018). During the interview process, a friend who was not eligible for the study identified and shared the flyer with a friend who was eligible to participate, who invited her friend after she completed her interview session. This happened with four of the participants. During the recruitment process, all participants met the following criteria:

- Permanent resident of DMV
- Self-identified as Black Pentecostal Christian
- Currently attending a Black Pentecostal Church
- Knowledgeable about COVID-19 vaccination,

- Interested and willing to articulately communicate their COVID-19 vaccination experiences.
- Could read, understand, and communicate in English.

Participants were recruited through a flyer and a short video shared on the Walden dissertation students' Facebook page, LinkedIn, WhatsApp groups, APHA, and the American ASTMH professional platforms. I could not recruit individuals through churches' online websites as initially proposed as it was difficult to know who to contact that met the eligibility criteria. The demographics of the 14 participants who participated in the study can be seen in Appendix F.

Data Collection

Prior to the interview, the purpose of the study, as well as a briefing on the interview process, was shared with the participants, and time was given to ask questions for further clarification. The participants were also reminded that their confidentiality and identity were well protected and that participating in the study was voluntary, and they could opt out or ask for the recording to be stopped at any time. The interviews were conducted based on the preferred time and location of each participant. Nine chose to participate via Zoom, four by telephone call, and one face-to-face. All interviews were conducted between September 2 and September 17, 2024. The average duration of each interview was about 40 minutes. The longest interview took an hour, while the shortest was 30 minutes long.

I collected data using semistructured interviews assisted by an interview guide that consisted of all the interview questions. All 14 participants were asked the same 10

semistructured open-ended questions. However, follow-up questions and prompts were different depending on the participant's responses to the interview questions. These follow-up questions and prompts helped to reorientate the participant to the interview questions or to provide more depth to their responses. All interviews were audio-recorded by Zoom (as applicable) and iPhone 14 and were later transcribed and sent back to the respective participant via email to review and validate for accuracy. Any correction received could have been corrected to reflect the participant's idea. However, no edits of inaccurate information on the transcripts were received from the feedback from the participants. All materials collected were digitalized, stored in iCloud with an encrypted password, and were kept for 5 years as per Walden University policy (Walden, n.d.).

Data Analysis

The data analysis phase started after all my field notes were collated and reviewed, all recordings transcribed and reviewed, and the appropriate transcript was sent to each participant to review and validate for accuracy. The coding process entailed reading the transcript repeatedly to identify patterns in meaning, such as common words or phrases used to express the participants' perspectives (Elliot, 2018). This was rigorous as it required several cycles of analysis of the coding process. After I analyzed all the data collected, 32 primary codes emerged as listed below.

- Personal Belief
- Biblical Belief
- Bible Teachings
- COVID-vaccine production

- Bible verses
- Bible Interpretation
- Different interpretations
- Mark of the Beast
- Mark of the Beast
- 666
- opinion
- Healing
- Only God can heal
- Ultimate healer
- Supreme healer
- Take medication.
- Go to the hospital.
- Go see my doctor.
- Guidance
- Imposing
- Controversies
- Fear
- Rapture
- Deaths
- Role of religious leaders
- Religious Leaders' influence

- Extent Influence
- Decision
- Public health recommendations
- CDC guidance
- Public Health recommendations
- Government recommendations

A complete list of the codes, categories, and themes can be found in Appendix G. Next, I inductively moved from the coded units to larger representations as I reviewed each participant's transcript (Sundler et al., 2019). It was fascinating to see that some codes conveyed similar meanings and could, therefore, be grouped into categories (Sundler et al., 2019; Wæraas, 2022). Each category was a combination of codes that had a common meaning, attribute, or intent (Sundler et al., 2019; Wæraas, 2022). I used my qualitative codebook and highlighted themes and categories that emerged from the data captured during the interview (Roberts et al., 2019).

Seven major themes emerged from analyzing the data from the semi-structured interview questions:

Theme 1: Participants Interpretations of Biblical Teachings Regarding Vaccinations

Theme 2: Participants Perceptions of the Mark of the Beast

Theme 3: "Only God can heal" perception.

Theme 4: How Religious Leaders Interpret the Bible and Bible's Teachings

Theme 5: The Impact of Religious Leaders' Role on the Congregants' COVID-19 Vaccination Choices

Theme 6: Religious Leaders' Perception of the CDC Covid-19 Recommendations

Theme 7: Key Factor That Influenced the Participants most to Make Informed Decision about COVID-19 Vaccination.

In the analysis, some discrepant cases were identified. Dunn (2023) defined a discrepant case as a data point that is unusual. Discrepant cases were those that were at odds with most of the cases (Dunn, 2023). These were cases that did not fit most of the data, but they helped to unravel the complexity and boundaries of the phenomenon under scrutiny (Dixon-Woods et al., 2019). For instance, for this study, all the participants were influenced by their religious leaders in their decision about accepting the COVID-19 vaccine, except one participant who stated, "I believe in everything that is Christianity, but no Pastor can ask me not to take my medication or vaccine. I will never change my belief." Appendix G illustrates an overview of the emerging themes from the two research questions, factoring in the discrepant cases.

Evidence of Trustworthiness

As purported by Shenton (2004), the issue of trustworthiness is crucial in qualitative research as it ensures the worthiness, relevance, timeliness, significance, and morality of the study. It addresses the degree of accuracy and reliability of the findings of the study (Kyngäs et al., 2020). It also ensures the ethical issues of the research. Four key components that were relevant to ensure trustworthiness for this study comprise credibility, dependability, confirmability, and transferability.

Credibility

Credibility is the level of accuracy and truthfulness of the findings of the research (Haven & Van Grootel, 2019). To ensure credibility, I selected only participants who met the set inclusion criteria and who had the competency to accurately respond to the semi-structured open-ended interview questions. Adhering to these standards ensured accuracy and reliability (Yadav, 2022). This further enhanced replicability and transparency (Closa, 2021).

Dependability

Dependability comprises of the consistency of the findings with existing literature (Kyngäs et al., 2020). In this study, I ensured dependability by providing a detailed description of the steps that I used to conduct the study that would allow future researchers to replicate the study. I paid attention to details during the data collection process that were rigorous, and I adhered to the established protocols. I ensured the interview questions were reviewed by my Chair and Committee Member to ensure alignment with the overall purpose of the study. This mitigated individual and selective bias that had the potential to impact the validity and reliability of the study.

Confirmability

As defined by König and Jucks (2019) and Kyngäs et al. (2020), confirmability pertains to the findings obtained from the participants' responses to the semi-structured open-ended interview questions. I ensured confirmability as I transcribed and reviewed each participant's responses and shared them with each of them to verify and authenticate

the accuracy of the transcription. This ensured that it was not my idea, perspective, values, beliefs, or viewpoints.

Transferability

As defined by Kyngäs et al., (2020), transferability is crucial in research study as it defines the level at which these findings can be applied to future research on similar populations or geographical location. Though the findings of this study may not meet the criteria of generalizability due to small sample size of this study (14 participants) and the uniqueness of the population studied (Black Pentecostal Christians in the DMV), the results may be transferable to a population with similar cultural and societal context within the US (Kyngäs et al., 2020).

Results

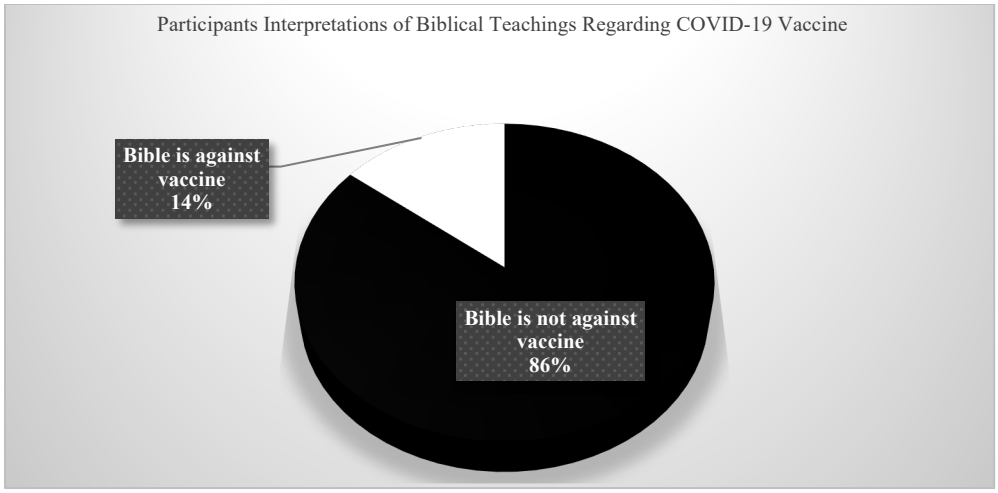
The data collected during the interviews addressed the two research questions. This section highlights the themes that answer these research questions and direct quotations from the research participant *(RP)* that support the themes. Research question 1 (RQ1) explored how biblical interpretations and Christian practices have influenced the decision of the Black Pentecostal Christians in DMV to accept or reject the COVID-19 vaccine while research question 2 (RQ2) explored the role that religious leaders have played in influencing the decision of the Black Pentecostal Christians in DMV to accept or reject the to the COVID-19 vaccine. Seven themes emerged**:**

Theme 1: Participants' Interpretations of Biblical Teachings Regarding Vaccinations

This theme portrays how the participants' Pentecostal Christian religious background and personal interpretation of biblical teachings and practices impacted their decision to accept or reject the COVID-19 vaccine. All the participants except *RP7* and *RP10* acknowledged that the Bible had bearing on their decision to accept or reject the COVID-19 vaccine illustrated in Fig 1 below.

Figure 1

Participants' Interpretations of Biblical Teachings Regarding Vaccinations



Participant 2 stated support for COVID-19 vaccine and that his religious inclination linked to his background and upbringing.

> *RP 2:* I am a Christian and brought up in a Christian home. I have been exposed to vaccination right from the time I was born. My religion has not at any time made me not to believe in any vaccine. My religion has not at any time made me not to believe in any vaccine. I was looking forward to COVID-19 vaccine. The

vaccine will protect me. I believe in everything that is Christianity, but no Pastor can ask me not to take my medication or vaccine. I will never change my belief.

Participant 3 quoted and elaborated on Psalm 24:1.

RP 3: The earth is the LORD's, and the fulness thereof; the world, and they that dwell therein (Psalm:24:1, KJV). God created heaven and earth. He made things on earth for the benefit of man including vaccines. Vaccine is not something we should shy away from. It is proven to save lives. I think people should be open minded towards receiving COVID-19 vaccine. I do not hold anything against getting vaccinated. I believe in the COVID-19 vaccine, and I took my vaccines. Man can only get better out of our imperfections through what God has left for us on earth. I believe that COVID-19 vaccine is good to take care of the growing epidemic. Vaccines have a proven benefit to mankind.

Participant 10 did not believe in COVID-19 vaccine and quoted 1John 4:18 KJV, "There is no fear in love; but perfect love casteth out fear: because fear hath torment. He that feareth is not made perfect in love."

RP10: I believe the Lord can protect his own. The one who fear is not made perfect in God and perfect love drives out fear because fear has to do with punishment. "There is no fear in love; but perfect love casteth out fear: because fear hath torment. He that feareth is not made perfect in love" (1John 4:18 KJV). We will not allow fear of any sickness or disease because we are children of God, we should abide in the love of God, reflect, reside in the love of God, knowing that God loves us so much. And if this disease is all around us, my trust is in

> God's love that he would protect and preserve me even on to the end. I believe that God is protecting me and preserving me. Am I outsold. We will not allow fear of any sickness or disease; it's just that the fear of just hearing it that there is an epidemic going on, just that fear alone, I'm sure, kills. People are dying and they might also die not so much because of the coronavirus itself, but because of fear. My faith, my perspective is that we should not allow fear to take over our lives. I just remain in God's love. I don't allow the COVID to infect me. I protect myself by wearing masks, protect myself by eating healthy. I trust in Jesus, and I will not allow that to derail my faith or my trust in God.

Theme 2: Participants' Perceptions of The Mark of the Beast

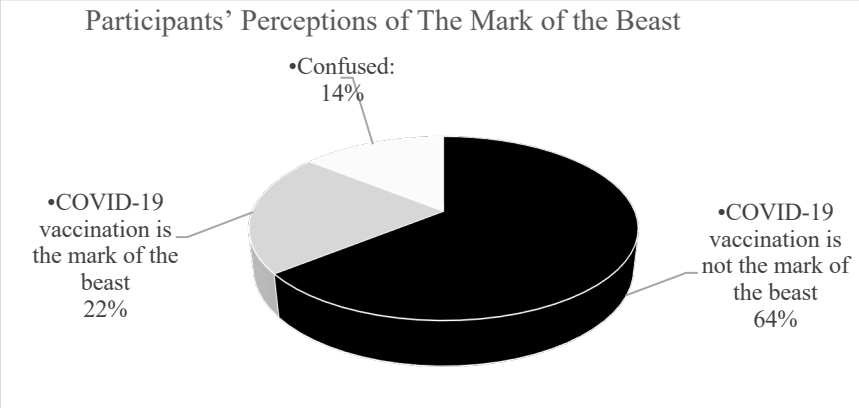
Nine participants stated that the COVID-19 vaccine was not the mark of the beast, and ~~3~~ three participants believed that the COVID-19 vaccine mimicked the mark of the beast; thus, the vaccine was the mark of the beast. Two participants stated that they were confused, but because the vaccine was imposed, they concluded that the COVID-19 vaccine was the mark of the beast. One participant~~)~~ was adamant that the vaccine could not be trusted because Bill Gates, a man with dubious previous records was associated with the production of the vaccine.

Half of the participants stated that they were disturbed by the fact that the vaccine was being imposed on the population. Some of the participants, or people they knew, were threatened to take the vaccine, or lose their jobs. This imposition of the vaccine provoked rage, anger, and fueled resistance even by participants who did not see any direct link between the vaccine and the mark of the beast. These participants believed that

the fact that it was being imposed on people created fear of its authenticity and safety. Two participants mentioned that they had not encountered any argument linking COVID-19 vaccine to the mark of the beast as shown in Fig. 2 below.

Figure 2

Participants' Perceptions of The Mark of the Beast.



One participant did not think the COVID-19 vaccine was the mark of the beast and explained why.

> *RP 1:* The Bible talks about the mark of the beast and how people would be tracked in the last days. People were afraid! Lots of heresies and many videos about how the vaccine was bad, microchip has been inserted in it to monitor people. Some people had the beliefs that the vaccine was meant to reduce the black population. I know what vaccine is and what vaccine does in the body. Saying that if you receive the vaccine, you receive the mark of the beast is not right. That's not true. However, saying no COVID-19 vaccine, no work mimics what will happen when the antichrist would come, and people will not be able to buy or sell without the mark. Christians cannot still be here and they're giving

Mark of the Beast when the rapture has not taken place. The rapture has not taken place. There was so much fear. COVID-19 is indicating the end of the world.

Participant 3 believed linking COVID-19 to the mark of the beast is baseless and has no connection.

RP 3: Some people believe that COVID 19 vaccine is a way to introduce some kind of computer chips through messenger RNA COVID-19 vaccines have been linked to the mark of the beast by some people. COVID-19 vaccine is just like any other vaccines- measles, chicken pox vaccines, etc. I do think the argument about COVID-19 being seen as the mark of the beast is baseless – no connection. The mark of the beast has nothing to do with COVID-19 vaccine. I don't think there is any bearing with COVID 19 vaccination. The Bible states that the number 666 will be given to man but, the vaccine has no such number. Vaccine is just biological chemicals given to people to take care of their health. Some people do not understand what messenger RNA is and how messenger RNA is used in the biomedical field to treat diseases.

Participant 7 discussed how he came to conclusion about the vaccine being associated to the mark of the beast from the narrative below.

RP 7: The conditions that if you don't take the vaccine, they will take you off from your job caused some sort of skepticism. They did that to many people. I had that thought because I know what the Bible says about the mark of the beast; that it was going to be forced on people. It's not like something that you have a choice to say, no, I don't want it. Just the way the COVID vaccine was forced to

> on people, it's like it was correlated to the mark of the beast. Many people, especially in my community believed that it was the mark of the beast for the fact that it was being imposed and forced on people. They told people in advance that in case anything happens to you after taking the vaccine, you don't hold anybody liable. This is to show that there was something spiritual about it. It was not a normal vaccine because it was not like the flu vaccine. Even in workplaces, if you like you take the flu vaccine, if you don't take it, it's you're concerned. You just have to write that; I don't want to take vaccine and that's it. But this COVID vaccine, from all indications, it had something to do spiritually evident by the way it was imposed on the people. At a point in time, I did not think that it was the mark of the beast, though it was something similar. However, not only did they forcefully imposed the vaccine on people, but the conditions also that are attached to the vaccine, if you don't take it, you will not work, made me to conclude that the two were related.

Theme 3: "Only God can heal" Perception.

This theme revealed how participants who were Black Pentecostal Christians in the DMV interpreted divine healing as it related to the acceptance or rejection of the COVID-19 vaccine. Though all 14 participants interpreted the statement "only God is the healer" differently, 13 participants had very similar conclusions. That is, God can use human agents and human resources to perform healing. See Fig.3 below.

Figure 3

"Only God can heal" perception.

Participant1 believes God is the ultimate healer yet, they will still go to see the doctor or take medications when they are sick.

> *RP 1*: If I am infected with COVID 19, I will not die because God will heal me. God will heal me because he's a healer. I pray for healing and at the same time, I take medications, I still treat myself; I still go to the hospital; I still pray to God to use doctors to heal me. I don't believe that God can heal other diseases but with COVID 19, he cannot. God protects us from getting COVID 19, we'll pray for healing like any other illness. I know God is the ultimate healer. Yes, but as a Christian, I take medications as well. I'm not anti-medicine. I believe that God is the ultimate healer. God heals diseases that medicine cannot do.

Participant 6 believed that the statement “only God can heal” is correct and confirmed that it is a belief that existed even before COVID-19. However, RP6 concluded by declaring that only God can heal but he gives wisdom to humans to heal the sick.

> *RF 6*: “Only God can heal” is a belief that has been there ever since before COVID-19. They are many people who have always had that belief. So, during COVID it was not the first time that I heard that kind of pattern. I don’t think it’s wrong. In my understanding, yes, God is the one that heals. He’s the primary healer. He’s a primary provider, but there are channels that he passes through. He can pass through people; he can pass through organizations. It’s the same thing when it comes to healing. Sometimes God will heal you directly. Sometimes he’s passes through things like medicine. He’s the one that gives all wisdom, all the wisdom on earth belongs to God. And he will pass through things like that to support your faith If your faith is not up to the level that you are able to receive your healing. So, if you cannot depend on him and believe in him and be healed, or it’s taking a bit of time to build up your faith, he has provided all that means. He’s the ultimate healer. But he uses different channels. He uses different things that can also help for your healing. And when I look at like, God is the ultimate healer. I do believe that. Yes!

Participant 12 was against the statement *only God can heal yet* had the same conclusion with RP 1 and RP 6 above who applauded the statement.

Different interpretations, yet same conclusion.

> *RP 12:* I am absolutely against that. I'm not entirely in agreement with that just because I don't think people understand the idea behind God alone can heal. The interpretations are very, very wrong most of the time. And it has caused a lot of lives to be lost because of that. I think the good interpretation behind that is, no matter what you do for your health, ultimately, the only solution, the only way that that's going to work is if God puts his hand on it and he gives his blessing or, allows that to happen. So, if you're sick and you have to go take tablets, you have to go take medicine, you have to go do a surgery or something. You do everything that is humanly possible for you to be healed. But ultimately, you would still put your health in prayers and still trust God and still have faith that God is ultimately going to be the one that heals you because you can do all of that and still not survive. God is the one that inspired the scientists and all those that are doing the research. So, that's how I would say, we must interpret that right. God is the ultimate healer, but you can't just fold your hands, just pray and rely on God only. He will, sometimes really wants you to act, go to the hospital, get a treatment, and just let him do the rest.

Participant 7 was the only participant whose conclusion was different from all the others. This participant resolutely agreed with the statement, *only God can heal.*

The following narrative confirms this stance which seemed to be consistent with all the other responses of the participant.

> *RP 7:* Of course; that's it! Only God can heal! First, I believe in that because, as I said earlier, in my community, we prayed and we believed that God was going to

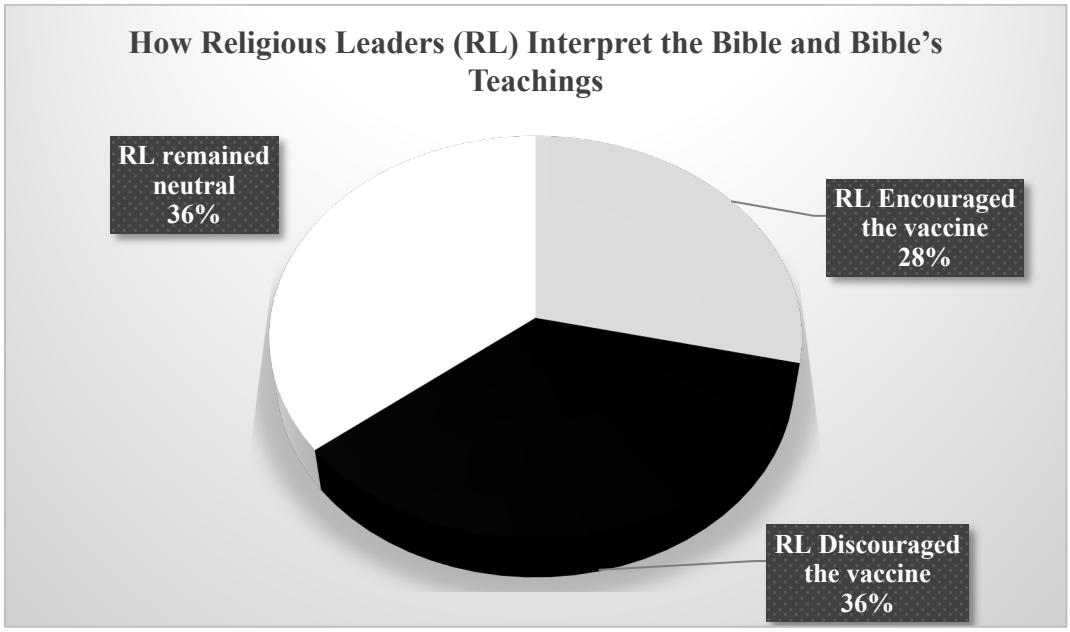
heal us just as his word says that if you believe in me, ask whatever you will, I will do unto you. So, the moment you believe and ask, Matthew 7 :7 says that because you asked, it shall be given unto you.

Theme 4: How Religious Leaders Interpret the Bible and Bible's Teachings

This theme portrays how religious leaders of the Black Pentecostal Christians in the DMV interpreted Bible's teaching to their congregants with regards to COVID 19 vaccination and how this influenced their choice to accept the COVID-19 vaccine. Three types of responses emerged from the 14 participants. Four participants felt the religious leaders' supported congregants taking the COVID-19 vaccine, five felt their religious leaders were opposed to their congregants taking the COVID-19 vaccine, and five felt their religious leaders had a neutral perspective vis-à-vis the uptake of the vaccine. See Fig.4 below.

Figure 4

How religious leaders interpret the Bible and Bible's teachings



The religious leader of Participant 4 encouraged and supported the congregants to take the vaccine by quoting Bible verses.

> *RP4:* "They say unto him, Caesar's. Then saith he unto them, Render therefore unto Caesar the things which are Caesar's; and unto God the things that are God's." (Matthew 22:20-22, KJV). "Everyone must submit himself to the governing authorities, for there is no authority except that which God has established." (Romans 13:1, NIV). It's something that's going on and people are actively dying and what they're saying has nothing to do with how COVID-19 is affecting the way the Christians live their lives.

Participant 7 stated that the religious leader did not take the COVID-19 vaccine, nor did they encourage their congregants to do so as narrated below.

> *RP 7*: We know in the ancient days; they were doctors from the priestly class and their job was to help God heal the sick. God has not changed, and God has given many wonderful ways to heal the sick and to prevent them from getting sick. However, the way the vaccine was being imposed on the people was not okay. The fact that taking this vaccine was a must and the fact that you were warned not to complain to anybody if you have any side effects was skeptical. That's the point that my leader stood on to say, well, they are advising all the Christians not to take it because there was something fishy about the vaccine, not that vaccination is bad. Vaccination is good, but this COVID 19 vaccine had something fishy attached to it. So, the religious leaders in my Church told the Christians that they didn't encourage any Christian to take the vaccine and to the best of my knowledge, no Christian in the Church that I am, none of them took the vaccine and none of them was hospitalized and none of them died.

Participant 10 was convinced that COVID-19 vaccine was/is the mark of the beast with spiritual implications as taught by the religious leader. The religious leader believed it was a means to destroy the Church as evident in the narrative below.

> *RP 10*: My pastor is one of my reliable sources. Whether I like it or not, I'm influenced by him. His perspective, his mindset, his belief on Jesus. He believed 100 percent that it's the mark of the beast because the enemy has again come to decapitate the body of Christ. The Church or the pastors are looking at it from the spiritual perspective. It is spiritual and so it's not something you can see. Things in the spirit are only perceived by faith. So, their perspective towards COVID,

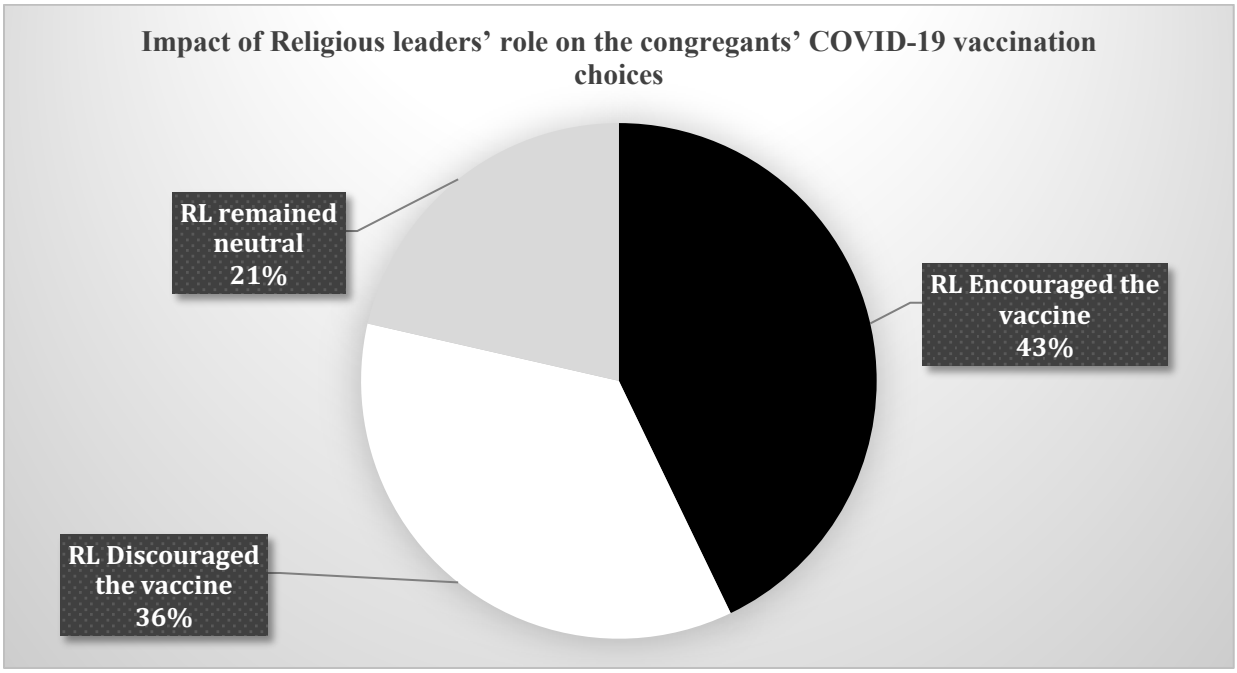
their mindset towards COVID is that it's a spiritual entity, it is a spiritual battle but not everyone looks at it as a spiritual battle.

Theme 5: The Impact of Religious Leaders' Role on the Congregants' COVID-19 Vaccination Choices

This theme delineates the role and influence religious leaders played on the decision of the congregants whether to take the COVID-19 vaccine or not to take it. Six participants stated that their religious leaders encouraged them to take the COVID-19 vaccine; five voiced that their religious leaders discouraged them from taking the vaccine, and three revealed that their leaders were neutral. The different narratives of the participants below paint a picture of how the religious leaders helped shaped the attitudes of the congregants in making their choice whether to take the COVID-19 vaccine. See Fig. 5 below.

Figure 5

Impact of religious leaders' role on the congregants' COVID-19 vaccination choices



Participant 1 voiced that the religious leaders discouraged the congregants from taking the vaccine via preaching, messages, and teachings.

> *RP 1*: The religious leaders talked about COVID-19 vaccination when preaching during the pandemic and warned Christians about the side effects of taking the vaccine. It maybe you are taking the mark of the beast, and you may not be able to be raptured. Religious leaders in my church have negatively influenced Christians in their attitude towards the COVID 19 vaccine. They discouraged members by linking the vaccine to the Mark of the Beast. Members are told that anyone who takes the mark will be condemned. Christians were scared and some of them refrained from taking the vaccine. Some of my religious leaders encouraged the Christians to take it especially those who doubled as our

> healthcare personnel since they also had to take the vaccine. So, in a nutshell, the Christian leaders have negatively influenced their members across the board. They discouraged Christians from taking the COVID19 vaccine to a greater extent. Some spiritual leaders even threatened anybody that takes it. People were scared for their lives. It was a confusing moment. It was a scary moment. People were anxious. People had anxiety about everything. No one knew about what was going on. So, many people listened to their Christian leaders and did not take the vaccine.

Participant eight highlighted the role of the religious leaders in educating their congregants about the COVID-19 vaccine as narrated below.

> They invited medical professionals to educate and enlightened the Church. They were not compelling; didn't pressure anybody, but just ensuring that everybody was well informed to be able to make an informed decision that best suited them; but there was no pressure. They did drives where they provided brochures, masks, and hand sanitizers. Their main emphasis was to provide medical education because there were too many misconceptions out there. They did a lot; they enlightened us a great deal, not only me, but everybody else. COVID was a very scary thing, so, they had various teachings in the medical and biblical aspect. As Christians, we look up to our religious leaders sometimes to make decisions to know that we're doing the right thing. They had a big role to fill during COVID because their role was to educate and to use biblical verses to enlighten the congregation. We were encouraged though some people were not for it and

nothing you said to them would make them take the vaccine; but they were also guided.

Participant 7 in the narrative below explained how their religious leaders discouraged the Church from taking the vaccine and why.

> The religious leaders explained to the Christians that the fact that the vaccine was mandatory and there were conditions attached to the vaccine made it suspicious. They were telling us that we should believe in Christ. They emphasized on the point that the Bible says our bodies are the temple of Christ. That we cannot defile our bodies. Because that vaccine and the conditions that were attached to it, it's like it was something that had to with maybe destroying humanity. So, they were always sending out encouraging messages to make sure we stand steadfast in Christ and do not defy our body with the vaccine as they were produced from the baby fetus. Vaccination is good but this COVID-19 vaccine is fishy. So, they were telling Christians that they didn't encourage any Christian to take the vaccine. To the best of my knowledge, no Christian in the community that I am, none of them took the vaccine and none of them was hospitalized and none of them died. The people in my community, even the ones that were sick, believed the leader. First, if you believe that God will heal you, he will heal you. Some people took the vaccine and they still died. others believed in Christ, and they were well because they trusted that God is the healer. He's the solemn healer and he did heal them. Well, my religious leaders stood firm in discouraging the Christians that this vaccine is not right. That they don't encourage anybody to

> take the vaccine, and nobody took the vaccine. They even went ahead writing letters and telling members' jobsites that they don't believe in the vaccine. Not that they don't believe in other vaccines, but this COVID vaccine. They didn't believe in it and they're encouraging their Christians that they should be allowed at their job places because they are against the COVID vaccine.

The participants also stated their perceptions of the level of influence of the religious leader (Table 1 &Fig. 6). Fig. 7 illustrates the responses of the participants to the question on the type of influence (positive, negative, or neutral) that the religious leaders exerted on them that shaped their perspectives of acceptance or rejection of the COVID-19 vaccine.

Table 1

The Level of Influence of the Religious Leader (Percentage)

Participant	Negative Influence	Positive Influence	Neutral Influence	
RP 1	70	30	0	Negative
RP 2	85	15	0	Negative
RP 3	0	100	0	Positive
RP 4	0	100	0	Positive
RP 5	0	80	20	Positive
RP 6	0	70	30	Positive
RP 7	100	0	0	Negative
RP 8	0	70	30	Positive
RP 9	80	0	20	Negative
RP 10	100	0	0	Negative
RP 11	0	100	0	Positive
RP 12	50	50	0	Neutral
RP 13	0	70	30	Positive
RP 14	0	100	0	Positive

Fig. 6 & 7 below shows the influence of the religious leaders on each participant's COVID-19 vaccination choices as well as the type of influence (positive, negative, or neutral) on the congregants.

Figure 6

Influence of Religious Leaders on Each Participant's COVID-19 Vaccination Choices

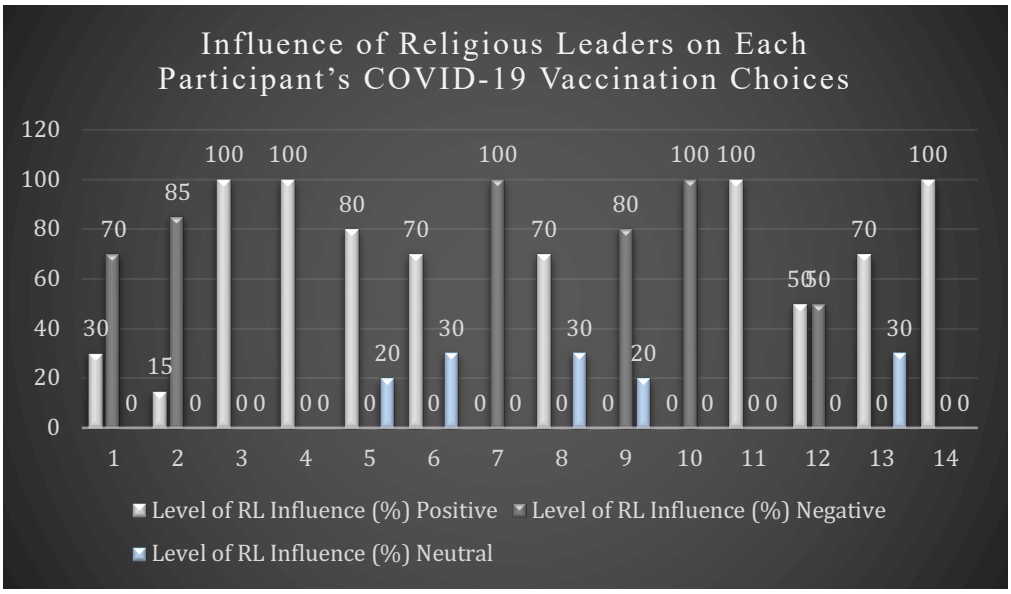
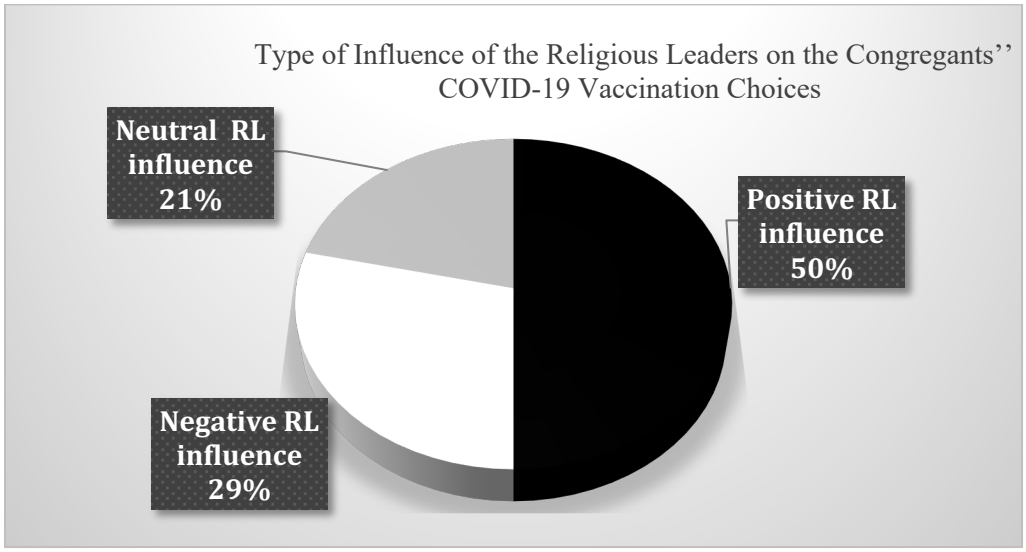


Figure 7

Type of Influence of the Religious Leaders on the Congregants'' COVID-19 Vaccination Choices

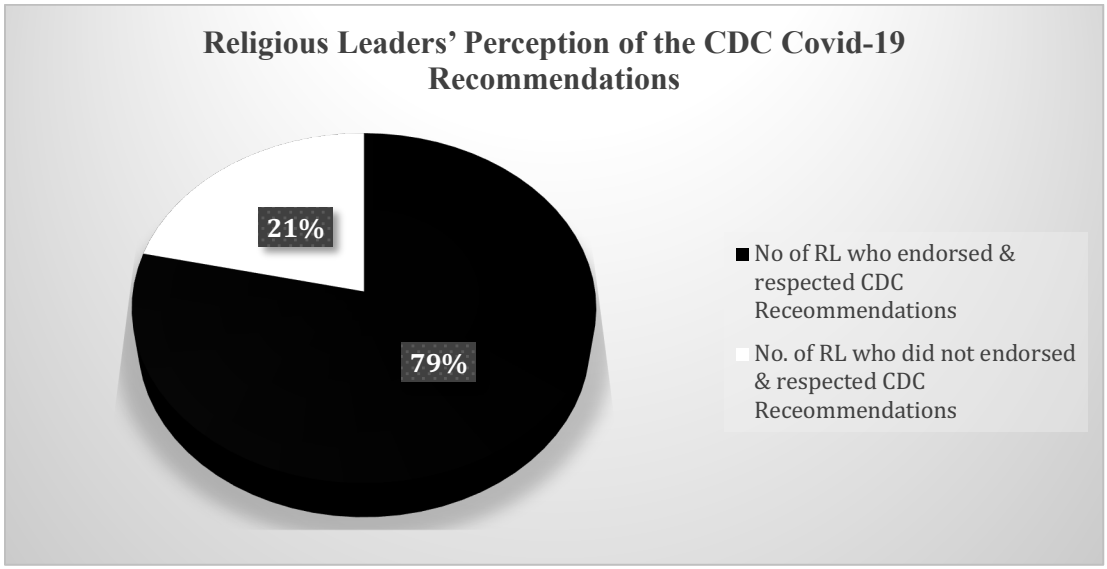


Theme 6: Religious Leaders' Perception of the CDC Covid-19 Recommendations

This theme shows whether the religious leaders were for or against the COVID-19 guidelines recommended by CDC. Eleven of the participants reported that their religious leaders fully respected the guidelines; three participants indicated that their religious leaders did not endorse nor respect the CDC guidelines as shown in Fig. 8 below.

Figure 8

Religious Leaders' Perception of the CDC Covid-19



The participants emphasized the need to gather as a Church during challenging moments to seek God's protection. According to the former theme, attending Church meetings through Zoom, and gathering of families in their homes to seek the face of God and pray were means of fellowship as a Church and the assembly of brethren were never forsaken. The narratives below substantiate the afore mentioned theme.

Participant 3 affirmed that their religious leaders followed the CDC recommendations.

> *RP 3*: The Church followed the CDC recommendations. The Church encouraged members to take advantage of the government vaccination program. The Church respected social distancing and there were stations with hand sanitizers, limited number of people allowed to attend Church service, and the number of Sunday

services increased from two to three or four services. These recommendations had a very positive impact.

Similarly, one participant said that the Church endorsed the CDC guidelines.

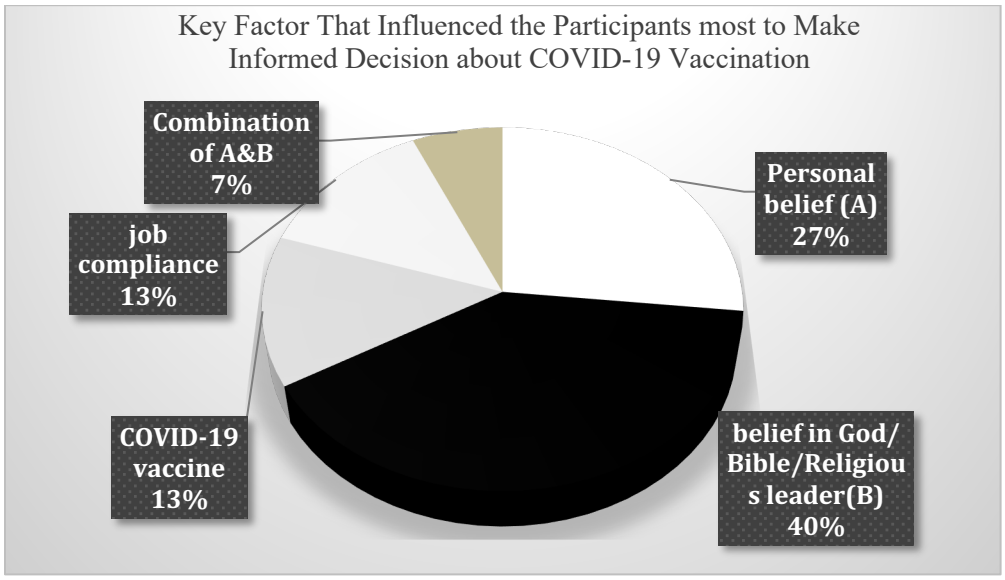
> *RP2:* The [CDC] recommendations aligned with the religious leaders' guidance and were fully respected. The leader believed that government was going to come and round and so fully complied. The Church had to comply even against their wish due to fear of sanction from the government. The Bible says the authority/government should be respected. Social distancing was observed in Church after the lockdown. Members were sitting six feet from each other. Hand sanitizers we placed at strategic positions in the Church premises.

Theme 7: Key factor that influenced the participants most to make informed decision about COVID-19 vaccination.

The final decision of the participants to accept or reject the COVID-19 centered on one of the following factors: Personal belief, belief in God/ Bible/Religious leader, COVID-19 vaccine compliance, and job compliance. Four participants affirmed that their decision whether to accept COVID-19 vaccine or not was based on personal belief, six on belief in God (which is the same as belief in the Bible or religious leader), two on job compliance, and two on COVID-19 vaccine component. One was the combination of personal believe and believing in God. See participants' narratives and Fig. 9 below.

Figure 9

Key factor that influenced the participants most to make informed decision about COVID-19 vaccination.



Participant 6 disclosed that the determining factor in making an informed decision on whether to take COVID-19 vaccine or not was based on personal belief.

> *RP 6:* It was based on my own belief and my own understanding of what was going on at the time. I don't believe in them but those were the things going on. Those were the controversies that were going on at that time. I believed that if I didn't believe in the rapture, the mark of the beast, I was going to take it because at the end of the day, this is what is available right at that time while praying, while and believing God. There's nothing wrong in having a vaccine that can support your faith. Because if you stay, you don't take it and then you eventually die, that's neglecting your health. You do not take care of the body that God gave you. So that's how I was able to navigate the boat to decide if I should take it or not.

Participant 10 admitted that the determining factor in making an informed decision on whether to take COVID-19 vaccine or not was based on belief in God, Bible, or religious leader.

> *RP 10*: I trust in the Lord and 2Corinthians chapter 6:17-19 says that our body is the temple of the Holy Ghost. Because I know that God dwells in me, I trust in him. I believe in him. I'm not going to allow any impurity or allow any pollution or allow any impurities, foreign objects to get into my body consciously. I will preserve my body as unto the Lord. The Bible says that which we commit to the Lord can protect and to preserve it. So, that affected my decision. When COVID 19 came, I said I'm not taking it. I believe and I trust my God that He will preserve me.

Participant 13 decided to take the COVID-19 vaccine because of knowledge that taking it would prevent others from being infected as narrated below.

> *RP 13:* Like I said, my decision to get vaccinated with the Pfizer vaccine was because not only my belief can protect me, but the medicine. The vaccine can protect me and protect those who are around me. That's why I chose to get the COVID vaccine. I choose to take the vaccine because of the spread of this disease, and of how people around us die. Also taking the vaccine can protect me and can also protect people around me. The Bible says that we shall know the truth and it shall make us free. The Bible says the word of God is spirit and truth. So, this word of God even if it's written on black and white, it's spirit. If you are a

> believer and you believe that this God can heal you, you don't need to take any vaccine.

Participant 11 confessed that the only determining factor that influenced the decision to take the COVID-19 vaccine was his job compliancy.

> *RP 11:* My Christian belief didn't affect me getting vaccinated in the sense that the only reason I got vaccinated was because my job required it. If my job didn't require it, I wouldn't have gotten vaccinated, honestly. It was just because my job had it as a requirement. My personal belief really didn't play any role on me getting it.

Summary

This chapter focused on the results of the study and provided a discussion of the trustworthiness of the research and key findings of the results analyzed from the data collected. I concluded this chapter with seven themes obtained from analyzing the data collected which comprised of:

> Theme 1: Participants Interpretations of Biblical Teachings Regarding Vaccinations
>
> Theme 2: Participants Perceptions of the Mark of the Beast
>
> Theme 3: "Only God can heal" perception.
>
> Theme 4: How Religious Leaders Interpret the Bible and Bible's Teachings
>
> Theme 5: The Impact of Religious Leaders' Role on the Congregants' COVID-19 Vaccination Choices
>
> Theme 6: Religious Leaders' Perception of the CDC Covid-19 Recommendations

Theme 7: Key Factor That Influenced the Participants most to Make Informed Decision about COVID-19 Vaccination.

Chapter 5 concludes this study with an interpretation of the findings. The chapter also provides a discussion of the limitations of the study, recommendations for future research, implications and significance, and the conclusion.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The Black population in the US is dying from COVID-19 at disproportionate rates caused by an increase in COVID-19 vaccine hesitancy among Blacks compared to Whites (Peteet et al., 2022; Summerville et al., 2024). Attitudinal barriers like beliefs, perceptions of infectious disease, and side effects have affected the uptake of the COVID-19 vaccine (Fisk, 2020). Fisk (2020) further reported that the beliefs of persons of color directly influenced their decision to take or reject the vaccine as compared to White Americans. This basic qualitative study aimed at exploring the influence of religious beliefs, practices, and religious leadership guidance on the acceptance or rejection of COVID-19 vaccination within the Black Pentecostal Christian community in DMV.

In the previous chapter, I provided the seven key findings of this study that I obtained from analyzing the data collected, which included the following:

- Theme 1: Participants' Interpretations of Biblical Teachings Regarding Vaccinations
- Theme 2: Participants Perceptions of the Mark of the Beast
- Theme 3: "Only God can heal" perception
- Theme 4: How Religious Leaders Interpret the Bible and Bible's Teachings.
- Theme 5: The Impact of Religious Leaders' Role on the Congregants' COVID-19 Vaccination Choices.

- Theme 6: Religious Leaders' Perception of the CDC Covid-19 Recommendations.
- Theme 7: Key Factor That Influenced the Participants most to Make Informed Decision about COVID-19 Vaccination.

This chapter discusses how the findings confirm, disconfirm, or extend knowledge in the discipline. It also highlights the limitations, and issues of trustworthiness that arose during the execution of the study, recommendations for further research, potential impact for positive social change, and a conclusion of the study.

Interpretation of the Findings

Two research questions guided this study:

RQ1. What role do Biblical interpretations and Christian practices play in shaping the attitudes and beliefs towards COVID-19 vaccination status among Black Pentecostal Christians in DMV?

RQ2. What role do religious leaders play in shaping the attitudes and beliefs towards COVID-19 vaccination status among Black Pentecostal Christians in the DMV.

The following seven themes emerged that had the potential to answer the two research questions.

- Theme 1: Participants Interpretations of Biblical Teachings Regarding Vaccinations.
- Theme 2: Participants Perceptions of the Mark of the Beast.
- Theme 3: "Only God can heal" perception.
- Theme 4: How Religious Leaders Interpret the Bible and Bible's Teachings.

- Theme 5: The Impact of Religious Leaders' Role on the Congregants' COVID-19 Vaccination Choices.
- Theme 6: Religious Leaders' Perception of the CDC Covid-19 Recommendations.
- Theme 7: Key Factor That Influenced the Participants most to Make Informed Decision about COVID-19 Vaccination.

Theme 1: Participants' Interpretations of Biblical Teachings Regarding Vaccinations.

The first theme that emerged from the data analysis is the participants' interpretations of biblical teachings regarding COVID-19 vaccination. Of the 14 participants, 12 (86%) believed that the Bible was not against COVID-19 vaccination, while two participants argued that the Bible was against the COVID-19 vaccine. These findings confirmed that the participants' Pentecostal Christian religious background and interpretation of biblical teachings and practices impacted their decision to accept or reject the COVID-19 vaccine. The participants did not see any biblical barrier to receiving COVID-19. Many of these participants quoted the Bible: "The earth is the Lord's, and the fullest thereof; the world, and they that dwell therein (King James Version (KJV, 1769/2017, Psalm 24:1). According to them, God created heaven and Earth, and he made things on earth for the benefit of man, including vaccines that have proven to save lives over the years. Therefore, they did not have any biblical concerns about taking the COVID-19 vaccine as they also believed that God is their protector and ultimate healer, as previously suggested by DiGregorio et al. (2022). DiGregorio et al.

(2022) stated that the belief in an intervening God (protector) was negatively associated with accepting or planning to accept the COVID-19 vaccine. This also confirms the study by Talbot (2021). According to Talbot (2021), the Bible is not silent about medicine (which inductively includes vaccines), medical practices, and procedures. Talbot stated that the book of Exodus alluded to the two Hebrew midwives who played a pivotal role in the birth of Moses.

However, two participants justified their biblical stand against the COVID-19 vaccine. They emphasized that if somebody truly believes and does not harbor fear of COVID-19, that person is protected by God. This confirms previous studies by DiGregorio et al. (2022), whose research findings suggested that God has higher powers or ability to intervene and protect Christians. It also has similar results with research by Kenzig (2022) and Limbu et al. (2022) that stated that Christians believed in the protection and healing of God.

The two participants believed Christians should pray and present yourselves to Christ according to the Bible's words since God is the ultimate healer. They also cited Philippians 4:6, which admonishes Christians not to be anxious about anything but, in every situation, by praying and petitioning with thanksgiving, presenting their request to God. They also cited instances where people were still seriously sick and are still having problems today, even after taking the vaccine. According to these two, believing and trusting in God in everything, including protection from diseases and healing, as the Bible recommends, is very important. The findings of this study confirm the research findings by DiGregorio et al. (2022) that cited Corcoran et al. (2021), whose findings

stated that 54% of their sample believed that God would protect them from being infected with COVID-19 as they uphold their biblical principles.

Theme 2: Participants' Perceptions of the Mark of the Beast Vaccination

The second theme that emerged from the data analysis was the participants' perceptions of the mark of the beast. Nine of the 14 participants argued that the COVID-19 vaccine was not the mark of the beast, while three participants believed that the vaccine was the mark of the beast; two participants voiced that they were confused. The participants who argued that COVID-19 was not the mark of the beast stated that, though the COVID-19 vaccine mimicked the mark of the beast about how people would be tracked in the last days, forced to take the mark, and restricted to carryout normal activities, that would only happen when the antichrist and rapture must have taken place. They believed that the fact that Christians have not been raptured is proof that COVID-19 is not the mark of the beast. These findings confirm the research findings of Dein (2021), who stated that pre-millennialism asserts that the end time will occur only when all true believers have been raptured to heaven; those left on Earth will suffer the tribulation. According to Dein (2021), COVID-19 is not linked to the mark of the beast.

Those who believed COVID-19 was the mark of the beast argued that the introduction of chips through messenger RNA COVID-19 confirms that it is the mark of the beast. Further, they believed that the COVID-19 vaccine was developed from tissue from a fetus, thus impure and diabolic, and anyone who takes it is condemned to go to hell. This confirms previous research by Tara (2022), whose findings reported that the COVID-19 vaccine was perceived as a precursor of the mark of the beast and would lead

to eternal damnation. Linking the COVID-19 vaccine to the mark of the beast can be scary and has a negative impact on COVID-19 uptake (Zimmerman, 2023). This study finding also confirms that of Letšosa (2021), who surmised the possibility of the COVID-19 vaccine from the devil aimed at infusing 666 that could corrupt human DNA, thereby advancing Satan's agenda. The report purported that some social media interpretations reported that the COVID-19 vaccine would cause a change in DNA and make Christians backslide and lose their faith in their Lord (Letšosa, 2021). Further, this finding confirms the study by Letšosa that reported that the fact that people were compelled to take the COVID-19 vaccine was proof of a hidden agenda. The result of this study, therefore, confirms that of Letšosa, who reported that people had some fears about the speed with which the vaccines were produced, which created unfounded speculations about the vaccines.

Theme 3: "Only God can heal" perception.

The third theme from the data analysis is "Only God can heal" perception. Reacting to the statement "only God is the healer," all 14 participants interpreted the statement differently, yet 13 had the same conclusion. These participants believed that God could use human agents and human resources to perform healing. They believed that though God is the ultimate healer, he still uses doctors and medications, including vaccines, to heal and protect humans.

This confirms the study by Talbot (2021), who reported that health and healing are attributed directly to God, as found in Exodus 15:26, Deuteronomy. 32:39; Luke 4:16-21 (KJV,769/2017) or is mediated to mankind through his priestly, prophetic, or

ecclesiastical representatives as found in 1 Kings 17:17-24; 2 Kings 5:1-14; Mark 6:7-13; Acts 3:1-10; 9:32-35; James 5:14-15 (KJV,769/2017). One participant, however, disagreed with the rest of the participants. This participant believed the statement "only God can heal" literally and quoted Matthew 7:7, which says, "Ask, and it shall be given you; seek, and ye shall find; knock, and it shall be opened unto you" (KJV;1769/2017, Matthew 7:7). So, if a person asks God for protection or healing, he gives it ; thus, there is no need for a vaccine (COVID-19 vaccine). This implies that the interpretation of Biblical teachings on "Only God can heal" may directly influence the perception of some Black Pentecostal Christians in the DMV and their decision to take or reject the COVID-19 vaccine. This confirms the research findings by Zimmerman et al. (2023), who reported that some participants believed in God's protection from the disease and were not required to take the COVID-19 vaccine. However, the findings of this research disconfirm the study by Talbot (2021). According to Talbot (2021), the Bible rarely mentions medicine and physicians; thus, Christians sometimes believe relying on them is useless, as seen in (KJV,769/2017, Luke 8:43-48). Sometimes relying on medicine is also considered as wrong as seen in 2 Chronicles 16:12 (KJV,769/2017; Talbot, 2021). Despite the negativity that surrounds the COVID-19 vaccine, teachings on divine healing by religious leaders, and the fact that the Bible does not directly talk about vaccines, this participant's COVID-19 vaccination decision choice was not affected by any of the aforementioned factors.

Theme 4: How Religious Leaders Interpret the Bible and Bible's Teachings

The fourth theme that emerged from the data analysis is "How Religious Leaders Interpret the Bible and Bible's Teachings." Biblical perception impacts attitudes toward the COVID-19 vaccine (Singh et al., 2022). The responses from the 14 participants revealed that their religious leaders either encouraged, discouraged, or remained neutral in their teachings to the Church on the COVID-19 vaccine. Of the 14 participants, four voiced that they were encouraged, five were discouraged, and five stated that their religious leaders allowed them to make their own decisions with regard to the COVID-19 vaccine. This result implies that only 28% were encouraged by their religious leaders through the interpretation of the Bible's teachings. This result shows that most of the leaders did not endorse or encourage their congregants to take the vaccine. Most of the participants (four positives, five negatives) emphasized that their religious leaders were their reliable sources, and their perspectives, mindsets, or beliefs impacted them. This confirms previous research that states that religious leaders have an influence on their congregants (DiGregorio et al., 2022). According to DiGregorio et al. (2022), the belief in God's higher power to intervene on earth was not significantly associated with the odds of COVID-19 vaccine uptake or vaccination intent. It is rather significantly and negatively associated with the odds of COVID-19 vaccine uptake and the odds of having received or planning to receive a COVID-19 vaccine (DiGregorio et al., 2022).

Theme 5: The Impact of Religious Leaders' Role on the Congregants' COVID-19 Vaccination Choices

The fifth theme from the data analysis is the "Impact of Religious Leaders' Role on the Congregants' COVID-19 Vaccination Choices". It delineates the role religious leaders play in the decision of the congregants to accept the COVID-19 vaccine. Of the 14 participants, six participants (43%) stated that their religious leaders encouraged them to take the COVID-19 vaccine; five (36%) voiced that their religious leaders discouraged them from taking the vaccine; and three (21%) revealed that their leaders were neutral. Thus, 11 of 14 participants were influenced by their religious leaders. This result confirms previous findings by DiGregorio et al. (2022) that state that religious leaders influenced their members in making COVID-19 vaccination choices. However, the statistics of the findings of this study disconfirms that of Dellatto (2021) who reported that only 39% of the sample population were encouraged by their leaders, unlike 43% for this study; 5% discouraged their people, unlike 36% for this study, and 54% of the leaders were neutral about their COVID-19 vaccination choices unlike 21% for this study. This finding also disconfirms research findings by Duong et al., (2021) that stated that only 18% of the religious leaders recommended the COVID-19 vaccine to their members. This study, however, confirms previous research findings by Soni et al. (2023) that faith-based religious leaders were role models for their followers and could become advocates and voices of their communities. Participants in this study noted that some religious leaders encouraged church members to accept the vaccine by inviting medical professionals to educate and enlighten them about COVID-19. They also organized

drives and provided brochures, masks, and hand sanitizers. This confirmed the findings by Soni et al. (2023) that suggested that community engagement and mobilization that involved religious leaders as advocates in their communities promoted confidence in the COVID-19 vaccination.

However, 36% of the participants in this study revealed that their religious leaders warned them about the side effects of taking the vaccine and the danger of accepting the mark of the beast through COVID-19 vaccination and condemned them from being raptured. This confirms the research findings of Chimuanya and Igwebuike (2021), who stated that Pentecostal pastors portrayed COVID-19 as a force of the devil and a sign of the end-time (mark of the beast) and, thus, have influenced their communities negatively against accepting the vaccine due to their vaccine hesitancy perceptions.

Additionally, the result of this study revealed the influence of religious leaders on each participant's COVID-19 vaccination choices (percentage) as shown in *Fig,4:5b* above. This finding showed that, though the religious leaders played a role in the congregants' COVID-19 choices, each congregant was influenced differently. Religious leaders influenced each congregant either positively, negatively, or never weighed on any side (neutral). As shown in Table 1 above, the level of influence of the religious leader on each congregant was as follows:

RP 1: (70% negative, 30% positive)

RP 2: (85 % negative, 15 % positive)

RP 3: (100% positive)

RP 4: (100% positive)

RP 5: (80% positive, 20% neutral)

RP 6: (70% positive, 30% neutral)

RP 7: (100% negative)

RP 8: (70% positive, 30% neutral)

RP 9: (80% negative, 20% neutral)

RP 10: (100% negative)

RP 11: (100% positive)

RP 12: neutral (50% positive, 50% negative)

RP 13: (70% positive, 30% neutral),

R*P 14:* (100% positive).

Thus, collectively, the positive influence was 50%, negative 29%, and neutral 21%. This finding confirms the research findings by Chakhunashvili et al., (2024) that suggested that religious leaders influenced their remembers' COVID-19 vaccination choices and underscored the necessity to incorporate them in vaccination promotion activities as a strategy to address COVID-19 hesitancy.

Theme 6: Religious Leaders' Perception of the CDC COVID-19 Recommendations.

The sixth theme that emerged from the data analysis is the religious leaders' Perception of the CDC COVID-19 Recommendations. The result shows that 11 of the participants revealed that their religious leaders fully respected the guidelines and only three participants indicated that their religious leaders did not endorse nor respected the CDC guidelines. The former acknowledged that the CDC COVID-19 recommendations aligned with the religious leader's guidance. The religious leaders endorsed and enforced

the CDC guidelines and many of the participants believed that these recommendations had a very positive impact. This finding disconfirms earlier findings by Corcoran et al. (2021) that said Christian nationalists did not respond favorably to the scientific recommendations geared towards the reduction of the spread of COVID-19. They believed that they are God's chosen people, who are protected and privileged by God if they uphold both their identity as a Christian and biblical principles.

However, more than half of the participants condemned the shutdown of Churches and stay-at-home recommendation as it negatively impacted the Church attendance to date. It also affected the spiritual lives of the members of the Church. Some participants however appreciated and recommended the CDC guidelines and stated that it was for the good of the population as of then. This result confirms previous research by Majumdar (2022) that analyzed 198 countries and territories and reported how religious bodies were affected by COVID-19 restrictions during the COVID-19 pandemic. Majumdar stated that 169 country's governments used physical force (arrests and raids) to compel religious groups to comply with COVID-19 public health recommendations. The author further stated that more than a third of the religious groups in the Americas in 2020 condemned this action (Majumdar, 2022).

Theme 7: Key Factor That Influenced the Participants most to Make Informed Decision about COVID-19 Vaccination.

The seventh and final theme that emerged from the data analysis was the determining factor of COVID-19 vaccination decision. The result from this theme revealed that the final decision of the participants to accept or reject the COVID-19

centered on one of the following factors: Personal belief, belief in God/ Bible/religious leader, COVID-19 vaccine compliance, or job compliance. Four participants affirmed that their decision whether to accept COVID-19 vaccine or not was based on personal belief, six on belief in God/ Bible/religious leader, two on COVID-19 vaccine compliance, and two on job compliance. One participant stated that the decision was a combination of personal believe and believing in God. Thus, the result of this study revealed that the final decision to accept or reject the vaccine was based on the following:

a.) Belief in God/ Bible/Religious leader(B); 40%

b.) Personal belief (A): 27%

c.) COVID-19 vaccination compliance: 13%

d.) Job compliance: 13%

e.) Combination of A&B: 7%

The belief in God/Bible/ key factor confirms the research findings by Chimuanya & Igwebuike (2021) who stated that the sample population reverenced their Pastors, considered them as demigods, and looked up to them for counsel in any situation. The belief in the religious leaders was a key determining factor. This confirms findings by Viskupič & Wiltse (2022) who suggested that messaging from a religious leader had a positive impact on interest in getting vaccinated. The personal belief key factor has similar results with research findings by Kenzig (2022) and Limbu et al., (2022) who suggested that God protects those that believe on him from sicknesses and harm. Mao et al., (2024) also confirmed that religious people often rather turned to their beliefs than on scientific measures. The COVID-19 vaccination/job compliance key factors confirm

research findings by Gur-Arie et al., (2021) that stated that the mandatory COVID-19 vaccination had a negative impact on careers of those who were not in compliant including Pentecostal Christians and many experienced losses of jobs or reduction in salary. Gur-Arie et al., (2021), suggested that COVID-19 Vaccine mandate was an intrusive form of vaccine policy, but it was effective in increasing COVID-19 vaccination thus, has generated interest in mandating COVID-19 vaccines when it is made available to the public.

Limitations of the Study

According to Creswell & Creswell (2017), acknowledging and addressing limitations in research is crucial as they may act as inherent constraints that may affect the validity, reliability, generalizability, and the scope of the study. It also helps in maintaining transparency that enhances reproducibility of the study (Creswell & Poth, 2016). The small sample size limited geographical location, and the fact that it was limited to only the Black Pentecostal Christians who met the recruitment criteria also posed limitations in the generalizability of the findings of the research.

The small sample size posed a limitation is the generalizability of the findings of my study; however, sample sizes are small in qualitative research, and I reached saturation. Predicting saturation was difficult prior to the study, however, my sample size was 14. It was challenging analyzing the information collected weekly to know when saturation was attained when the required number of participants have been reached and any addition of further participants did not provide more information on the topic (Sebele-Mpofu & Serpa, 2020). Though generalizability of the findings of this research

may not be possible, the research can be replicated with similar populations and settings Long, 2021).

Geographic location was another limitation for the study. The 14 participants for this study were dispersed in three locations. It was challenging when I could not reach them easily on emails and had to keep sending reminder messages for the interview. However, when we eventually connected by zoom or telephone, this issue was resolved. Nonetheless, face-to-face interview could have been great to convey more insights and help me to ask prompting questions to the interviewees. However, there was no guarantee that the participants could have opted for face-to-face interview as only one participant in Maryland where I live opted for face-to-face. Perhaps it was and added advantage in that I got participants from different Churches from diverse locations.

One major limitation that I faced was recruiting and selection biases due to my familiarity with members of my local Church. Conducting data collection from my Church was intentionally avoided to ensure rigor and reliability of the study. It also assured diversity in the responses of participants from different churches. I also encouraged snowballing by asking the participants that had an interview to share the flyer and short video to their friends and relatives.

This was a sensitive topic, and participants were skeptical about disclosing their COVID-19 vaccination status and the identity of their church and religious leaders. This was a limitation; however, to ensure confidentiality, the data collected and reported was pseudonymized.

Recommendations

The following recommendations for future research are grounded in the strengths and limitations of this study. One of the key recommendations for further study is for researchers to assess the level of engagement of the religious leaders in COVID-19 vaccination campaigns. There is an urgent need for policies that would encourage collaboration between religious leaders, public health implementers, and policy makers to debunk the myth about the COVID- 19 vaccine. Secondly, further research that is more robust (mixed methods study) with larger sample size and diverse religious populations is vital to gain more insight of the religious dynamics and complexity that may have contributed to the low COVID-19 vaccination rate among Christians (Shahana, 2023). This will enhance generalizability as such findings could be applied to a broader population taking into consideration gender balance during the participants' recruiting process. Thirdly, future research that assesses and establishes whether a relationship exists between the level of theological training of the religious authority and the type of influence (positive or negative) these leaders exert on their congregation is highly recommended.

Implications

This study has an overarching impact across the public health spectrum. It provides insights to the existing knowledge of the current issue of low COVID-19 vaccination amongst Black Pentecostal Christians in the DMV and by extension, the Christian population in general (Shahana, 2023). An understanding of how religious leaders interpret the Bible with regards to health and their level of community

engagement in health promotion interventions is important. This could serve as a prelude to the identification of the unique dynamics that have influenced the behavior of Black Pentecostal Christians in the DMV to make COVID-19 vaccination choices (Shahana,2023; Tessalyn, 2022).

Engaging religious leaders in COVID-19 public health interventions would equip them to become first respondents in their community and with the influence they have on their followings, negative perceptions of the COVID-19 vaccine that has promoted antivaccine behaviors would be debunked (Singh et al., 2022), The religious leaders would become agent of change in their community as they would inform their community the risk factors of COVID-19 risk factors that have contributed to the increased of COVID-19 related morbidity and mortality in their community. Information (ideas) is said to be a prelude to action (Hoffer, n.d.).

Findings of this study can inform public health project implementers and policy makers to be more specific in interventions that will focus on debunking the misconceptions, mistrust, and misinformation about COVID-19 vaccine inefficacy and side effects. Addressing these social and behavioral determinants of health are relevant steps in increasing COVID -19 hesitancy within the Christian community (Wright & Merritt, 2020).

Findings of this study suggest that how the Bible is being interpreted by the Black Pentecostal religious leaders in the DMV matters as their interpretation greatly influence the congregants' decision to take or reject the COVID-19 vaccine. Though assessing the theological competency of the Black Pentecostal Church authorities was beyond the

scope of this study, the findings of this study prove that the way the Bible is being interpreted by the religious leaders have a great impact on the followings in the uptake of COVID-19 vaccines which may also have a global impact in similar Christian Communities. Perhaps this may be an area of interest for policy makers to advocate assessing the theological competency of these leaders and the need for training and capacity building. From the findings of this study, it is evident that educating the Black Pentecostal religious leaders in the DMV on COVID-19 vaccine means educating the Black Pentecostal Christians in the DMV. Therefore, by inference, the religious leader's theological competence in interpreting the Bible may have great influence on the congregants' decision about COVID-19 vaccine uptake.

Findings of this study also portrayed how almost all the religious leaders in the participants' Churches accepted and endorsed the CDC COVID-19 guidelines. This could be a relevant information that could be explored to develop strategies by public health and government entities that are providing vaccinations to encourage partnerships with faith-based organizations to provide education about preventing viruses and getting vaccinated.

It is evident that the findings of this study have the potential to enact positive social change both at personal and community level. As earlier mentioned, findings will help policy makers and public health professionals and researchers to make informed decisions and enact more targeted policies, research, and interventions that will help to curb low C0VID-19 vaccine uptake among Black Pentecostal Christians DMV. Addressing the factors that caused the COVID-19 health related disparities, inequity, and

inequality within the black Pentecostal community in the DMV will help to build a stronger herd community and prepare the community to respond better in case of future outbreaks.

Conclusion

The purpose of this basic qualitative study was to explore the influence of religious beliefs, practices, and leadership guidance on the acceptance or rejection of COVID-19 vaccination within the Black Pentecostal Christian community in DMV. A total of14 participants voluntarily accepted to be interviewed to explore their experiences on how Bible teachings and Christian practices as well as the role of their religious leaders influenced their decision to either accept or reject the COVID-19 vaccine. From the thematic analysis of the narratives of these 14 participants, seven major themes emerged that comprised of the following:

- Theme 1: Participants' Interpretations of Biblical Teachings Regarding Vaccinations.
- Theme 2: Participants' Perceptions of the Mark of the Beast.
- Theme 3: "Only God can heal" perception.
- Theme 4: How Religious Leaders Interpret the Bible and Bible's Teachings.
- Theme 5: The Impact of Religious Leaders' Role on the Congregants' COVID-19 Vaccination Choices.
- Theme 6: Religious Leaders' Perception of the CDC Covid-19 Recommendations.

- Theme 7: Key Factor That Influenced the Participants most to Make Informed Decision about COVID-19 Vaccination.

These findings unraveled the perceptions of how biblical interpretations and teachings contributed to the attitudes and beliefs of Black Pentecostal Christians in the DMV with regards to COVID-19 vaccination and the conflicts that arose between their Christian beliefs/practices and the acceptance or rejection of COVID-19 vaccination. The findings also provided insights on the Christian practices that they perceived as relevant to their decisions regarding COVID-19 vaccination choices, the interplay between faith principles and scientific information about COVID-19 vaccines and its influence on their vaccination status, and the extent to which religious leaders influence congregants' attitudes and beliefs regarding COVID-19 vaccination. Moreso, the findings also provided insights on the nature and impact of the public statements, sermons, or guidance provided by religious leaders on COVID-19 vaccines, the comfort level and effectiveness of congregants' discussion on vaccination concerns with their religious leaders. The findings of this study are as follows.

- Most of the participants except two did not see any biblical barrier to receiving the COVID-19.
- Though some participants argued that COVID-19 vaccine was not the mark of the beast, two thirds believed it was not the mark of the beast.
- All the participants serve one believed that though God is the ultimate healer, he could use human agents and human resources like doctor, medications including vaccines to perform healing (2021)

- All the 14 participants revealed that their religious leaders either encouraged, discouraged, or remained neutral in their teachings to the Church on COVID-19 vaccine.
- Though some participants reported that there were encouraged by their religious leaders to take the COVID-19 vaccines, others revealed that their religious leaders warned them about the side effects of taking the vaccine and the danger of accepting the mark of the beast, thus hellfire bound (Soni et al, 2023; Chakhunashvili et al., 2024).
- Almost all the religious leaders endorsed and applied the CDC COVID-19 recommendations as they aligned with their Christian faith. More than half however condemned the shutdown of Churches and stay-at-home recommendation as it negatively affected the Church attendance till date (Majumdar, 2022).
- The final decision to accept or reject the vaccine was based on the following: Belief in God/ Bible/Religious leader, Personal belief, COVID-19 vaccination compliance, and Job compliance.

In conclusion, 84% of the participants believed that the Bible is not against COVID-19 vaccine; only 43% of religious leaders in the DMV encouraged COVID-19 vaccination, yet 93% are being influenced by their religious leaders. This calls for an urgent need to establish a systemic collaborative engagement effort between public health implementers and policy makers, and the leaders of faith-based organizations to jointly address interventions to promote COVID-19 vaccination in the DMV.

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Appendix A: Interview Guide/Field Template

Topic: Dissertation Navigating the low COVID-19 Vaccination Rate Nexus: Biblical Interpretations & Practices of Black Pentecostal Christians in DMV
Welcome to this interview session and thank you for your willingness to participate in the study.

As earlier mentioned in our prior conversation, my study seeks to understand how biblical teachings and practices as well as religious leader may have influenced their congregants in the decision to accept or reject the COVID-19 Vaccine.
The purpose of this research is to understand the role of Biblical Interpretations and Christian Practices and the impact of religious leaders' interpretations of biblical teachings on the congregants' choices of COVID-19 uptake within the Black Pentecostal Christian community in the Washington D.C. Metro area.

interpretations of biblical teachings on the congregants' choices of COVID-19 uptake within the Black Pentecostal Christian community in the Washington D.C. Metro area. Thus, the study is aimed at documenting on how Biblical Interpretations and Christian Practices have impact on religious leaders' interpretations of biblical teachings on the congregants' choices of COVID-19 uptake within the Black Pentecostal Christian community in the Washington D.C. Metro area.

The time duration for this interview will take an hour and I will be asking you questions about your personal beliefs and interpretations of the Bible regarding COVID-19 vaccination, how religious leaders in your Church interpret Bible's teachings with regards to COVID-19 vaccination, and how do their interpretations impact your attitude toward acceptances of the vaccine, share any specific Bible verses or religious teachings that you believe are relevant to the discussion of vaccination, and how do you interpret them in the context of your faith? Also, have you encountered any religious or biblical arguments against vaccination, such as beliefs that vaccination is the "mark of the beast" or that "only God can heal"? How have these beliefs affected your vaccination choices? Lastly, how can you reconcile your faith and religious teachings with the scientific or public health recommendations related to COVID-19 vaccination? Are there any specific practices or approaches that you find to be compatible with your faith and beliefs?

In the consent form I sent to you via email, you consented by signing the form and gave me permission to record this interview. Are you still okay for me to audio record our conversation?

Yes: Thank you for confirming. Please, if at any point you are uncomfortable with the recording, let me know and I will gladly turn it off.

No: Thank you very much. I will only take notes then.

Please do you have any question before we begin the interview?

If you have no question, we can begin. However, feel free to stop me at any point if any question arises.

The questions that I will be asking you will focus on 2 areas:

- **Biblical Interpretations and Christian Practices/COVID-19 vaccination**
- **Role of Religious Leaders/ COVID-19 vaccination**

Table A2

Field Template (Notes) for RQ1

1. Please tell me about your personal beliefs and interpretations of the Bible regarding COVID-19 vaccination, and how do these beliefs influence your decision to get vaccinated or not?	Personal beliefs	Interpretations of the Bible regarding COVID-19 vaccination	How do these beliefs influence your decision to get vaccinated or not?	
2. Could you kindly explain how religious leaders in your Church interpret Bible's teachings with regards to COVID-19 vaccination, and how do their interpretations impact your attitude toward acceptances of the vaccine.	How religious leaders in your Church interpret Bible's teachings with regards to COVID-19 vaccination	How do their interpretations impact your attitude toward acceptances of the vaccine.		
3. Please, could you share any specific Bible verses or religious teachings that you believe are relevant to the discussion of vaccination, and how do you interpret them in the context of your faith?	Could you share any specific Bible verses or religious teachings that you believe are relevant to the discussion of vaccination	How do you interpret them in the context of your faith?		
4. As a Pentecostal Christian, have you encountered any religious or biblical arguments against vaccination, such as beliefs that vaccination is the "mark of the beast" or that "only God can heal"? How have these beliefs affected your vaccination choices?	Have you encountered any religious or biblical arguments against vaccination?	Example: Beliefs that vaccination is the "mark of the beast" or that "only God can heal"?	Example: only God can heal	How have these beliefs affected your vaccination choices?
5. In your view, how can you reconcile your faith and religious teachings with the scientific or public health recommendations related to COVID-19 vaccination? Are there any specific practices or approaches that you find to be compatible with your faith and beliefs?	How can you reconcile your faith and religious teachings with the scientific or public health recommendations related to COVID-19 vaccination?	Are there any specific practices or approaches that you find to be compatible with your faith and beliefs?		

Table A3

Field Template (Notes) for RQ2

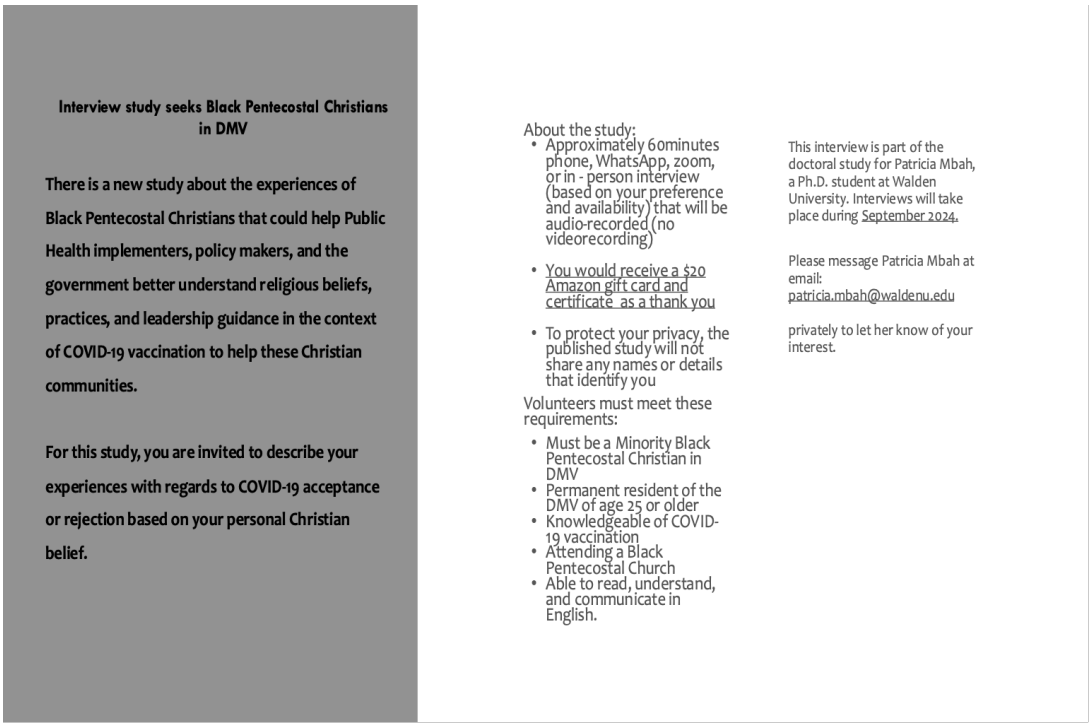
1. Can you please describe the role of religious leaders in your Pentecostal church community in shaping attitudes and beliefs about COVID-19 vaccination? How have they influenced perspective on the acceptance or rejection of the COVID-19 vaccine?	The role of religious leaders in your Pentecostal church community in shaping attitudes and beliefs about COVID-19 vaccination	How have they influenced perspective on the acceptance or rejection of the COVID-19 vaccine?	
2. In your opinion, to what extent do religious leaders in your Pentecostal church community endorse or discourage COVID-19 vaccination, and how do their positions impact you or the congregation's willingness to get vaccinated?	To what extent do religious leaders in your Pentecostal church community endorse COVID-19 vaccination	To what extent do religious leaders in your Pentecostal church community discourage COVID-19 vaccination	How do their positions impact your willingness to get vaccinated?
3. Have you observed any specific messages or guidance from your religious leaders regarding COVID-19 vaccination, and how have these messages affected your decisions regarding vaccination?	Specific messages from your religious leaders regarding COVID-19 vaccination	Specific guidance from your religious leaders regarding COVID-19 vaccination	How have these messages affected your decisions regarding vaccination?
4. What is your opinion on the guidance from religious leaders? Does this align with public health recommendations related to COVID-19 vaccination? Are there any conflicts or areas of agreement between the two?	Your opinion on the guidance from religious leaders?	Does this align with public health recommendations related to COVID-19 vaccination?	Are there any conflicts between guidance from religious leaders and the public health recommendations related to COVID-19 vaccination?
5. In your view, how can you reconcile your faith and religious teachings with the scientific or public health recommendations related to COVID-19 vaccination? Are there any specific practices or approaches that you find to be compatible with your faith and beliefs?	How can you reconcile your faith and religious teachings with the scientific or public health recommendations related to COVID-19 vaccination?	Are there any specific practices or approaches that you find to be compatible with your faith and beliefs?	

Appendix B: Approved Interview Questions

Proposed open-ended qualitative survey questions for Research Question 1 (Biblical Interpretations and Christian Practices):

1. Please tell me about your personal beliefs and interpretations of the Bible regarding COVID-19 vaccination, and how do these beliefs influence your decision to get vaccinated or not?
2. Could you kindly explain how religious leaders in your Church interpret Bible's teachings with regards to COVID-19 vaccination, and how do their interpretations impact your attitude toward acceptances of the vaccine.
3. Please, could you share any specific Bible verses or religious teachings that you believe are relevant to the discussion of vaccination, and how do you interpret them in the context of your faith?
4. As a Pentecostal Christian, have you encountered any religious or biblical arguments against vaccination, such as beliefs that vaccination is the "mark of the beast" or that "only God can heal"? How have these beliefs affected your vaccination choices?
5. In your view, how can you reconcile your faith and religious teachings with the scientific or public health recommendations related to COVID-19 vaccination? Are there any specific practices or approaches that you find to be compatible with your faith and beliefs?

Appendix C: Social Media Post



Interview study seeks Black Pentecostal Christians in DMV

There is a new study about the experiences of Black Pentecostal Christians that could help Public Health implementers, policy makers, and the government better understand religious beliefs, practices, and leadership guidance in the context of COVID-19 vaccination to help these Christian communities.

For this study, you are invited to describe your experiences with regards to COVID-19 acceptance or rejection based on your personal Christian belief.

About the study:

- Approximately 60minutes phone, WhatsApp, zoom, or in - person interview (based on your preference and availability) that will be audio-recorded (no videorecording)
- You would receive a $20 Amazon gift card and certificate as a thank you
- To protect your privacy, the published study will not share any names or details that identify you

Volunteers must meet these requirements:

- Must be a Minority Black Pentecostal Christian in DMV
- Permanent resident of the DMV of age 25 or older
- Knowledgeable of COVID-19 vaccination
- Attending a Black Pentecostal Church
- Able to read, understand, and communicate in English.

This interview is part of the doctoral study for Patricia Mbah, a Ph.D. student at Walden University. Interviews will take place during September 2024.

Please message Patricia Mbah at email: patricia.mbah@waldenu.edu

privately to let her know of your interest.

Appendix D: Video Link

https://www.linkedin.com/posts/patricia-mbah-nchamukong-175656a8_dear-all-there-is-a-new-study-in-the-dmv-activity-7222524660716838912-G129?utm_source=share&utm_medium=member_ios

Appendix E: Participant Appreciation Certificate

CERTIFICATE OF APPRECIATION

Awarded to

NAME OF PARTICIPANT

for participating as Interviewee for a study on the Low COVID-19 Vaccination rate within the Pentecostal Christians in the DMV for the month of September 2024

Patricia Mbah Nchamukong

Walden University

November 30, 2024

Appendix F: Participants' Demographic Characteristics

Table F4

Participants' Demographic Characteristics

Interviewee	Gender	Region (DMV)
1	Female	Virginia
2	Male	Maryland
3	Male	Virginia
4	Male	Virginia
5	Female	Maryland
6	Female	Virginia
7	Female	Maryland
8	Female	Virginia
9	Female	Maryland
10	Female	Washington D.C
11	Male	Maryland
12	Female	Washington D.C
13	Male	Washington D.C
14	Female	Washington D.C

Appendix G: Codes, Categories, and Emerged Themes from Interview Transcripts

Table G5

Codes, Categories, and Emerged Themes from Interview Transcripts

Codes	Categories	Themes
Personal Belief Biblical Belief Bible Teachings COVID-vaccine production Bible verses Bible Interpretation Different interpretations Mark of the Beast Mark of the Beast 666 opinion Healing Only God can heal Ultimate healer Supreme healer Take medication. Go to the hospital. Go see my doctor. Guidance Imposing Controversies Fear Rapture Deaths Role of religious leaders Religious Leaders' influence Extent Influence Decision Public health recommendations CDC guidance Public Health recommendations Government recommendations	Belief in the Bible Believe in God Believe in my religious Healer. Teachings Bible teachings Preaching the word of God Interpretation Misinterpretation Interpret the Bible differently. Mark of the beast 666 Rapture Antichrist Healing Only God can heal Ultimate healer Pray for the sick COVID-19 Vaccine COVID-19 Controversies COVID-19 impact Religious leaders' roles Religious leaders influence Recommendations	Theme 1: Participants Interpretations of Biblical Teachings Regarding Vaccinations -This theme points to the fact that the interpretation of the Bible impacts the decision of the Pentecostal Christian to accept or reject COVID-19 vaccine. All 12 research participants vocalized their perceptions of biblical teachings based on their interpretation of the Bible. 2 participants were against the COVID-19 vaccine. Theme 2: Participants Perceptions of the Mark of the Beast perception. – This theme portrayed how Pentecostal Christians linked COVID-19 vaccine to the mark of the beast based on their understanding of the Bible. 8 participants voiced that COVID-19 was the mark of the beast, 4 mentioned that there was no relationship between the two, while 2 stated that they were confused. Theme 3: "Only God can heal" – This theme conveys the idea of God being the supreme healer. Based on the participant's foundational biblical interpretation or belief, 3 participants mentioned that God is the only healer while 11 participants voiced that though God is the supreme healer, he gives knowledge to humans to develop medicines to cure the sick. Theme 4: How Religious Leaders Interpret the Bible and Bible's Teachings: This theme portrays how religious leaders interpret with regards to COVID 19 vaccination. It shows how religious leaders interpreted bible verses differently. The congregant's decision to take the vaccine was impacted by the interpretation they received from their religious leaders. Of the 14 participants, only 1 voiced that he was not influenced by the interpretation of his religious leaders.

Table G5

Codes, Categories, and Emerged Themes from Interview Transcripts

Codes	Categories	Themes
		Theme 5: The Impact of Religious Leaders' Role on the Congregants' COVID-19 Vaccination Choices – This theme highlights the role religious leaders played during COVID-19 pandemic and COVID-19 vaccination that helped to shape the congregants' decision to accept or reject the COVID-19 vaccine. Theme 6: Religious Leaders' Perception of the CDC Covid-19 Recommendations: This theme shows whether the religious leaders accepted and respected the covid-19 guidelines recommended by CDC. Theme 7: Key Factor that Influenced the Participants most to Make Informed Decision about COVID-19 Vaccination. This theme highlights the factor that influenced a participant to accept or reject the COVID-19 vaccine.