Walden University

College of Psychology and Community Services

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W. Sumner Davis

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Walden University
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Abstract

Lived Experiences of Anti-COVID Vaccine Health Beliefs for Americans Who Forgo

COVID-19 Vaccine

by

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MSHEP, Walden University, 2021

MSc, Walden University, 2021

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Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Health Psychology

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November 2023

Abstract

Since the initial cases in early 2020, COVID-19 has grown from an outbreak to an epidemic to a pandemic. In that same time, it has grown from a public health crisis to a political debate touching on personal liberty, individual freedom, and government overreach. Little research has been conducted into the lived experiences of individuals who despite warnings of media and healthcare practitioners chose to forgo vaccination against COVID-19. This study aims to fill that gap to better understand the how and why of this phenomenon using a qualitative approach framed in a modified health belief model and based in hermeneutical phenomenology. Using this methodological lens, a sample of 16 subjects permanently residing in Washington County Maine were recruited by flyer for in person interviews. Criteria for inclusion was aged 30 to 70 years, non-institutionalized, English speaking, displayed no self-reported cognitive impairment, and who opted out of COVID-19 vaccination. All responses were transcribed verbatim via digital recording, unspoken communications were collected with field notes, and all responses were coded in vivo and coded before entering into Excel to be analyzed thematically. Findings were revealed in several themes including how public health messaging, news and social media, and politics impacted their perceptions and behaviors surrounding vaccination for COVID-19. The implications for positive social change include a better understanding of vaccination hesitation, social media messaging, and public health campaigns.

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Dedication

There are many people I would thank. First off, my wonderful wife Cathy, who has helped me through college and 11 graduate programs (and counting) including three doctorates. She has supported me financially, emotionally, and academically. I do not know what I would do without you.

To my mentors, Sri Banerjee, Peter Anderson, Zin Htway, and David Anderson for your continued guidance and support. To my wonderful chair Dr. Ethel Perry, the only graduate professor to assign me a "C" in a course because I did not read the final assignment and thought I knew what was needed. I knew from that moment you would hold me to a higher level and why I insisted to have you as my chair. To my committee member Dr. Matthew Howren, your feedback and insight are appreciated, and to Dr. Debra Wilson, my URR who befriended me in my first residency in my first PhD program, convinced me to publish my first peer-reviewed article, and has kept me in the straight and narrow in this process.

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Again, to my amazing wife Catherine, who has been my shield, my anchor, and my wheel to keep my course. I could not have done this without you.

"Education is the most powerful weapon which you can use to change the world."

-Nelson Mandela

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Chapter 1: Introduction to the Study

Introduction

Since first appearing in Wuhan, China in December 2019, the Sars-CoV-2 virus spread quickly across China and the far east, before reaching almost every nation on Earth (Balmford et al., 2020; Lango, 2020). The virus and its many variants are responsible for the COVID-19 infectious disease pandemic that has become a global outbreak. Sars-CoV-2 is a corona virus and the disease it caused prompted the World Health Organization (WHO) to declare a public health emergency of international concern in January 2020, characterizing the disease as a pandemic on March 11th of that year. Since the beginning of the pandemic, COVID-19 has been associated with 759 million cases and nearly seven million deaths, most of whom were among the elderly (Harris, 2023). Both in Europe and The United States, the Centers for Disease Control and Prevention (CDC) and the WHO identified vaccine hesitancy as a leading threat to two pandemic controls, as the rejection of the COVID-19 vaccines negatively impacted the probability of developing herd immunity while extending the pandemic. Vaccine hesitancy among health care workers including physicians, nurses, and other staff placed healthcare workers, and patients at greater risk of contracting and transmitting this disease (Bandyopadhyay et al., 2020). Yet today, large populations in more rural areas are under vaccinated or unvaccinated (Hess et al., 2022). While a number of reasons have been proffered to explain this issue, from poor health understanding to social media disinformation, the fact remains that only a subset of the population has chosen to not be

vaccinated for COVID-19, and greater understanding of the reasons for this decision is critical to help fill the current knowledge gap around structured pandemic response.

Beyond the primary concern of unvaccinated healthcare workers becoming infected or transmitting the infection, their actions may have a powerful influence on patients' decisions to become vaccinated. Yigit et al. (2021) suggested that physicians who were vaccinated were more likely to recommend vaccination to their patients and understanding the primary arguments for vaccine refusal is crucial to promoting acceptance of the vaccine for both this pandemic and any future vaccine preventable communicable outbreaks. Berg (2020) and Lee et al. (2021) found that the intention to become vaccinated against COVID-19 was higher among physicians than nurses, and both of these groups were higher than the general population. Many among the general population adopted the wait-and-see attitude to ascertain the safety and efficiency of the vaccines. Among Americans, one study found that 38% of adults polled had declined vaccination as of the end of 2020 (Motta, 2021) up from the 31% of Americans who stated they did not intend to become vaccinated against COVID-19 in 2020 (Lee et al., 2021). Researchers found the likelihood of vaccine refusal was highest among African Americans, political conservatives, and women (Lee et al., 2021). Groups more concerned about COVID-19 infection include the elderly, those of more liberal political ideology, healthcare workers, and those with college or above education (Malik et al., 2020). Fisher et al. (2020) suggested that as many as 75% of Americans would become vaccinated when a vaccine became available. The reasons for vaccine refusal included safety concerns, a belief in herd immunity, the effectiveness of the vaccine, and dismissal

of the seriousness of COVID-19 (Dorman et al., 2021). Reasons for reluctance to vaccination varied across populations, African Americans were less trustful of healthcare and public health (Quin et al., 2019) while women were most concerned with efficacy and side effects (Reiter et al., 2020). What is now known is that substantial portions of the American public have not and do not plan to obtain a COVID-19 vaccination, often citing safety and efficacy concerns.

Concerns about safety related to the compressed timeline in which the vaccines were developed have led some to feel that the vaccine testing skipped certain stages of testing. While the belief in the untested hypothesis is largely among are not cognizant of the vaccine development process, and the misbelief that mRNA technology is entirely new and unproven. The reality is that messenger RNA, or mRNA, is the genetic material that tells your body how to make proteins, has been widely used in veterinary practice for over three decades, and many scientists long considered mRNA a necessary leap in human medicine (Fabian et al., 2010; Weng et al., 2020).

Government, public health organizations, and healthcare systems should work together to provide accurate information concerning vaccines, immunity, and prevention. Increased availability of safety and efficacy data however is unlikely to significantly impact the acceptance of vaccines among some groups. Some feel that herd immunity can be achieved only through previous infections which will, they believe lead to a natural immunity. However, repeated infection among unvaccinated and initially vaccinated individuals has demonstrated this to be a false belief.

Among populations that consider natural immunity as superior protection rather than limiting the effect of the virus through vaccination and secondary boosters often believe that the seriousness of the symptoms of COVID-19 are widely exaggerated and the numbers of infected persons are significantly inflated for financial gain or social control. Given the rapid emergence of variants, a clear understanding of the consequences of either natural or vaccine driven immunity must be communicated to patients and the general population, and recent research has established that achieving any high capacity of herd immunity through previous infection is likely to take significantly longer and will incur significantly higher health care costs for individuals hospitalized for COVID symptoms. Research shows that vaccine acceptance among healthcare workers who have helped care for hospitalized COVID patients is often imparted to other patients who may be uncertain of vaccination and may help to convince hesitant health care workers to become vaccinated.

<center>**Background**</center>

The reasons given for forgoing COVID-19 vaccinations range from a fear of needles, dismissal of the seriousness, or distrust of health, science, or government (Chwodery et al., 2022; Hornsey, 2022).

Distrust

A key component of vaccine refusal is a distrust in government and public health in general. Misinformation spread on social media create doubt about the spread of the disease, the lethality, vaccine safety, and natural immunity often initiated by members of the general public who are neither trained or educated in science or medicine (Burki,

2020). It is widely accepted that gaining acceptance of vaccines is a key factor in curtailing the health impact of any vaccine preventable communicable disease. It has been well established (Sabahelzain et al., 2021; Sufi et al., 2022) media misinformation generates significant doubt in the public's perception of disease spread, lethality, prevention, and vaccine safety and often results in a general distrust of health authorities, policymakers, public health professionals and pharmaceutical companies. Health care workers including nurses and physicians as well as tertiary technicians are not immune to the conspiracy theories, early that the pharmaceutical companies were responsible for the creation of the SARS-2 virus that causes COVID-19 infections. While the evidence is mounting that the pandemic virus may have inadvertently been released from a research laboratory in Wuhan China (Knight, 2019; Ruiz-Medina et al., 2022), social media exposure especially among conservative media listeners were correlated with higher levels of misinformation about the pandemic and lower rate of vaccination (Stecula et al., 2020). Messaging from physicians and other healthcare workers may be effective in decreasing vaccine hesitancy among patients who are uncertain about efficacy and safety however little affect was seen in individuals who had taken an anti-vaccination stance based in part of social media (Hoffman et al., 2019). The desire by healthcare workers, public health professionals, and government entities to deliver pro-vaccination and prevention information, regardless of factuality, has proven inadequate. And while many policymakers argue with that language and terminology used on both sides of the argument is critical, polls continue to show an increased distrust in government and in particular lockdown policies which have had a detrimental impact on businesses,

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education, and health (Becchetti et al., 2020; Zambelli et al., 2022). Certainly, to have a

president who continually misunderstood the issue and failed to take the COVID-19

outbreak seriously played a role in the socioeconomic and health fallout.

The federal government avoided developing tracing procedures even as other

wealthy nations were implementing them among other control procedures. The White

House repeatedly took to media to explain that the coronavirus was under control when it

was clearly not. During the critical early months that the United States could have been

stockpiling protective gear for frontline healthcare workers and making testing available,

messages from the White House stated that it would all be gone by April and that only a

handful of people were ill (Rutledge, 2019). What seemed evident to many if not most

Americans was that "business as usual" was the predominant theme (Algara et al., 2022),

while concerns about limitations imposed by government quickly spread.

Many Americans, particularly in rural states like Maine (pop. 1,385,340) and in particular

Washington County (31,095), identify to the most important aspects of being American

as personal liberty and autonomy (Carlson, 1995; Mahale et al., 2020; Marten, 2019;

Reardon, 1998). Healthcare providers often remark on the intense current of personal

freedom espoused in rural populations and how that informs their attitudes towards

vaccines, healthcare, mental health, and public health (Aljassim & Ostini, 2020;

Harrington et al., 2020; Kohn et al., 2004; Pereira-Sanchez et al., 2020). The population

of Washington County Maine is an aging group; most work full-time jobs in the fishing

and timber industry and rely heavily on social media for both news and information. A

sampling of this population was effective to gauge the beliefs and experiences of people

who refused vaccination for COVID-19. This study may help public health professionals,

program directors, lawmakers, planners, and media producers combat misinformation on

the safety and efficacy of vaccines more effectively, for future communicable disease

outbreaks.

Problem Statement

According to the reports from the WHO and the CDC, the western world has seen

the largest sustained drop in childhood vaccinations for over 3 decades (Bianco et al.,

2022; Diekema, 2012; He et al., 2022). Moreover, this drop has been significantly

increased with anti-covid sentiments (DeSilva et al., 2022). As a result, 25 million

children in the United States failed to obtain routine immunizations in 2021 (DeSilva et

al., 2022), which is up from 22 million in 2020 and 19 million in 2019 (Jarchow-

MacDonald et al., 2021), signifying the increased number of children and young adults at

risk from often deadly but preventable diseases. While the decline in childhood

vaccination rate has been attributed to a number of factors including a belief in natural

immunity, the rise in some areas of naturopathic and holistic medicine, or children living

in rural areas where access to health care may be difficult, the increased misinformation

on the necessity and effectiveness of vaccines has shown to be a potent adversary to

public health and health care. The resistance to COVID-19 vaccination, the difficulties

with the original testing process and supply chain disruptions that plagued the first 18

months of pandemic response, and the stringent lockdowns that have proved devastating

to many service industries have helped fuel this resistance. It may be argued that, at least

during lock-down, that a drop in childhood vaccination as well as general health care was

to be expected, the easing of restrictions the availability of vaccinations for COVID-19, the last quarter of 2022 and 2023 have thus far experiencing a continued decline in childhood vaccinations (Berba, 2023; O'Boyle, 2023). Despite the development of tested, safe, and effective COVID-19 vaccines, current vaccination rates have been insufficient to prevent the spread of the disease and the emergence of strains.

One factor that is often mentioned for vaccine deniers are political views and the beliefs that certain politicians have an inside track to critical information. Current research (Allington et al., 2023; Ye, 2023; Zhao et al., 2023) supports that political beliefs in the West are heavily influenced by political identity, education level, and trust of public health and government authorities. Experts in public health, health care delivery, and preventative medicine have often viewed the political system as a means to an end by mandating childhood vaccinations, public health programs such as curbing tobacco use, ending lead paint and asbestos usage, and promoting air bags and seatbelts. However, politicians can also use their platforms to disseminate misinformation, and while distrust of politics is at an all-time high (Smith, 2023), not only politicians, but science seems to be under increased attack. This is more evident in areas of conservative concentrations, and while to more left-leaning voters science trumps politics, this is not always the norm. Conservative politicians point to overreach by public health agencies and other organizations, and attacks on public health professionals are frequently in the news (van Stekelenburg et al., 2023), the separation and mistrust have led to incalculable lost opportunities.

Researchers (Alkhair et al., 2023; Ho et al., 2023) claim that fundamental philosophical differences drive paranoia and suspicion, making progress in public health and the medical field difficult. Often the lack of understanding of the motivations of those in public health and medical research, and the distrust of government and science has created a gulf between public health, the health care system, and the average American (Jamison et al., 2019). The insertion of science into politics by politicians is by and large self-serving, and generally not in the public's best interest; nevertheless, public health remains an evidence-based profession dedicated to reducing morbidity and mortality of diseases and conditions which are largely preventable.

While public health remains an evidence-based profession, the political process, including public policy decisions, in particular regulations on public health and health care are directed and funded by elected officials, who may not share the best interest of the population. Often politicians pander to those groups that they see as most able to affect their election or reelection chances, and frequently there are fundamental philosophical differences concerning the role of government in the lives of the citizenry, including rules and regulations directing public health. During the COVID pandemic, many individuals who saw themselves as more conservative and small government centered did not view isolation, masking mandates or the eventual vaccination as critical to public health and the population but simply as examples of government overreach and proof that government should be limited (Greer et al., 2020; Wood & Schulman, 2021). Some groups argue that the role of government is not the daily regulation of society, but

the occasional support of the population. Those favoring a more limited government view

regulation as antithetical to personal liberty and responsibility.

One group that gained prominence in the few past decades is the Tea Party, which

focused on the 10th amendment, the rights of individual states as outlined in The

Federalist Papers (Boykoff & Laschever, 2011; Williamson et al., 2011). Many in the Tea

Party argue that the federal government exists only for protection against foreign powers,

that the United States should extract itself from interactions with other nations, and that

essentially, a government that governs least governs best (Spiker, 2016). The closing of

businesses that were arbitrarily selected as non-essential, closing of schools, and

forbidding social events was seen as the overexpression of police powers. To many,

federal responsibilities are limited to protecting the borders, and sovereign states should

be free to adopt or deny public initiatives including education and public health. While

many hold positions that are more centrist, nevertheless, the handling of the pandemic by

the CDC and the federal government has been seen as opportunistic, and focused on the

dismantling of social structures that resist political control (Dell'Ariccia et al., 2020). As

scientists, we are often surprised when government acts against the interests of science,

and the activities of public health organizations are often puzzling to many in the field.

Nevertheless, because organizations including the CDC and the FDA are subject to

political appointed leadership, the imperatives of preventing premature death, disability,

and the improvement of the health of Americans is not always convincing (Rasmussen et

al., 2020). Many Americans see public health advocates as attempt at social engineering

for some populations, as advocates for interventions that are not necessarily beneficial to

the total population, for example abortion, or for restricting the personal liberties of

people to enjoy life, whether that includes smoking tobacco, drinking alcohol, or driving

without their seat belt. However, the issues which drive political decision making are far

more complicated and include multiple factors.

In order to become elected or reelected, politicians must advocate for those

positions of their constituency even if those positions are unscientific, unhealthy, and

destructive. Examples include oil pipelines, offshore wind power generation, and support

of pharmaceutical companies (Chun et al., 2020; Sekerka & Benishek, 2018). Because

this is widely understood among most voters in the United States, elected officials make

their political decisions based on economic, ideological, and personal factors rather than

on scientific or population driven influences. Because politicians and those employed by

various governmental bureaus that oversee health must balance competing influences,

many have a strong incentive to incorporate the perspectives of their largest financial

supporters, often these are major corporations including the pharmaceutical industry.

Most elected officials are not physicians or public health experts and have received no or

little training in science or health care. As a result, they may misunderstand or dismiss

scientific evidence in favor of a straightforward vote supported by their constituents. Few

have the educational tools to effectively measure the health impact of their decisions,

even though some of these decisions are far reaching and detrimental to the health of the

average citizen (Hopf et al., 2019; Ravetz, 1987). Those in public health, medicine, and

even the psychological sciences do not present arguments in the same terms as those who

are seeking to influence politics and regulation. While many reactions against public

health issues including response to epidemic, pandemic, or outbreaks are complicated, conservative elected officials frequently distill these down to simplistic matters of personal liberty and government accountability. To be fair, most Americans neither understand nor appreciate the benefits of public health interventions in everyday life. Public health interventions often take several years to implement, for example airbags in motor vehicles; however, many view such prevention programs as intrusion into the lives of individuals and their right to make their own decisions (Watson & Austin, 2021). Public health officials generally avoid political entanglements, as a clear and obvious conflict of interest exist; however, so long as politicians have the authority to appoint leadership in organizations like the FDA, the CDC, and others, there will at least be a limit to what scientists working in these organizations will be allowed to do. Political intrusion into areas of public health include limitations on the purchasing of firearms, reproductive health issues including sex education, HIV prevention programs, and issues related to access to abortion, even the collecting of data that is used for the distribution of services to the needy can be countermanded by political parties and individual politicians. So long as corporate interests hold sway over the political process, politicians will continue to block public policies that run counter to business interests. Examples of this can be seen in the previous decades' attempts by tobacco companies to block research into tobacco-related lung disease, repeal soft drink tax, and challenge carbon emission regulations. Yet despite these ongoing challenges, public health and clinical medicine have significantly reduced many once deadly childhood diseases, supported laws to protect children and others from secondhand tobacco smoke in airplanes, automobiles,

bars, and restaurants, removed lead from paint and gasoline, and supported food safety

standards and the standardized labeling of food content despite significant push back

from corporate entities (Fortin, 2020). This lengthy process of research, evidence, and

presentation of the facts may well be largely unknown by the populations who benefit

from these interventions. It has been said that public health works best when no one hears

about it. What is needed then is sustained and constructive communication and

engagement between public health and the population.

Elected officials ultimately bear the responsibility for sustaining and improving

the health of the population and in order to do so must support and partner with public

health and medical experts. At the same time, those in public health cannot choose to

ignore or refuse to take part in the political system simply because political support is

necessary for public health interventions. The work of local, state, or federal public health

officials to introduce programs, make changes in existing programs, and access public

money will likely always be dependent on political cooperation.

Purpose

The purpose of this study is to explore the lived experiences of anti-COVID

vaccine health beliefs for Americans who forgo the COVID-19 vaccination. Research

suggests that in areas with a higher percentage of conservative or republican voters

suffered significantly lower vaccination rates and elevated deaths from COVID-19

infection (Gao & Radford, 2021). In order to better understand the driving forces of both

acceptance and refusal of life saving treatment, it is critical to overcome political division

and rebuild trust in public health and science. Public health depends on a sustained,

constructive engagement between public health and political systems. This study outlines

the importance of such engagement and suggests ground rules that can help bridge the

current divide.

Research Question

What are the lived experiences of adult residents of Washington County, ME who

forgo the COVID-19 vaccination?

Conceptual Framework

This study was guided by the descriptive psychology of modern phenomenology

described by Edmund Husserl (Giorgi, 2009). The principle theory underlying this

framework is derived from Husserl, who sought to make philosophy more scientific by

examining the undercurrents of perception (Broome, 2011). The modified health belief

model (mHBM) first developed by social scientists working in the public health field in

an attempt to understand counterproductive health beliefs (Champion & Skinner, 2008),

and modified to fit the hermeneutical approach (Fuster Guillen, 2019) to try to understand

why health beliefs continue even after they have been demonstrated to be false.

Nature of the Study

This study used a qualitative design research structure based on the

phenomenological framework, a usual form of qualitative research which involves

collecting data through field interviews and observations. This approach is flexible and

adaptable given this subject matter and population, and the responses to the semi

structured interview questions depended on the individual interviewees. The key concept

being investigated was the lived experiences of adults living in Washington County

Maine and how those experiences led to the choice to forego COVID-19 vaccination. I used this approach to appreciate the essence of the experiences of the population, identify the essential structure of the lived experiences as described by the subjects (Creswell, 2008) and capture the concrete aspects of the subjects' experiences. Three aspects guided this study: first, the aim of the investigation was to answer the research question, second, accepting the philosophical approach to obtaining knowledge of the subjects lived experiences, and third, the investigative strategy that was applied to answer the research question. The interview guide that was administered listed a series of open-ended questions, which may uncover not only the essence of the experiences of the subjects but allowed for a wide flexibility in information gathering. My aim as the researcher was to identify they lived experiences as described by the subjects through a systematic attempt to understand their experiences as they appear in their consciousness and perspective. It was essential for me to focus on only identifying the substance of the lived experiences that were the core focus of this phenomenological qualitative investigation. According to many researchers (Bartoli et al., Bass et al., 2022; Becchetti et al., 2021; 2022l Linden et al., 2022), researchers adopting their perspective of exploring the essential themes of lived experience can gain a deeper understanding of the experience. This suggested qualitative approach offers a framework, theoretical lens, and data collection process designed to be flexible yet aligned with the theoretical and philosophical assumptions that support qualitative research. By entering in an open-ended and free flowing dialogue with participants and the resulting thematic data, a multilayered description of the subject experience was produced.

I recruited participants for this study among the adult population using a flyer on social media. Requirements are that the subjects be adults between the ages of 30 and 70 years of age, are year round residents of Washington County, who speak English, are not institutionalized, and who have chosen to forgo vaccinated for COVID-19 since vaccine availability. Each subject was required to sign an informed consent form.

Definitions

Alternative treatment: Refers to the use of alternative, unapproved treatments of COVID-19 including FDA approved drugs to treat bacteriological infections, parasitical infections, or anti-viral drugs; the use of herbalist or alternative medicines that include teas, essential oils, tinctures, herbal therapies such as oleander/oleandrin, and silver products such as colloidal silver as defined by the National Institutes of Health (NIH, 2022; Panikar et al., 2021).

Education level: Refers to the educational background of an individual and that person's ability to discern accurate health related information (Cale et al. 2020).

Forgo COVID-19 vaccine: Referring to a deliberate desire to forgo any of the available FDA approved vaccines that were made available for all aged 16 and over on April 19, 2021 (Roberts et al., 2022), including Pfizer-BioNTech and Moderna COVID-19 mRNA vaccines, Novavax COVID-19 protein subunit vaccine, or Johnson & Johnson's Janssen (J&J/Janssen) COVID-19 viral vector vaccine.

Health knowledge: According to Zheng et al. (2022), this refers the understanding of health care, health risk, healthy living, and healthcare.

Hermeneutical phenomenology: Hermeneutic phenomenology can be used to help researchers understand lived experiences, as individuals are as unique as their lived experiences (Van der Zalm & Bergum, 2000).

Lived experiences: Refers to a representation of the experiences and choices of a given person, and the knowledge that they gain from these experiences and choices (Reid et al., 2005).

Modified health belief model: Modifying the HBM brings to the focus demographic variables, perceived beliefs, the effects of politics and education, and personal perceptions to action (Jose et al., 2021).

Political ideology: A person can be conservative, liberal, centrist, or have no interest (Irmak et al., 2020).

Assumptions

Assumptions relevant to this research are several. I assumed that participants in this study recounted their experiences honestly and without fear of judgement. The perspective of the persons who refused vaccination for COVID-19 is critical to understanding the lived experiences. Although some may be influenced by political belief and distrust, the unique insights of participants are crucial.

Scope and Delimitations

The focus of this study was English speaking adults between the ages of 30 and 70 years living independently, and who are full time residents of Washington County in eastern Maine, and who have chosen to forgo vaccination for COVID-19. Washington

County is located in the far eastern section of Maine, bordering on the Bay of Fundy and the Canadian Province of New Brunswick. Based on academic research, feedback from qualitative researchers, and opinion from potential subjects, 20 individuals is thought to provide a diverse group of individuals for this study. The reason for this group is largely based on my experience as an investigator for the CDC, and the fact that I live in Washington County, Maine and frequently interact with members of the community. Populations excluded from this study were adults under the age of 30 years, adults over the age of 70 years, adults living in assisted living or long-term care facilities, and adults who obtained one or more of the COVID-19 vaccines when available. In qualitative research, the use of nine to 17 interviews or until saturation depends on the complexity of the subject under investigation (Hennink & Kaiser, 2022). Saturation is the metric used to identify an adequate number of participants; saturation is said to have been met when adding participants does not offer further insight or introduce novel information. As for ability, this study was focused on a very specific area and very specific population. Nevertheless, these findings may be applied to other areas or age groups. The subject pool was geographically limited or focused; the real evaluation of the findings can be reviewed by further researchers or crafted for other groups or other populations.

Limitations

The primary limitation was expected to be the recruitment of subjects; however, this has proved to be non-problematic. Bias, however, may jeopardize the validity of any study as well as this proposed study including design and findings. Potential bias could result from my familiarization with the population, or the willingness of participants too

answer openly, honestly, and completely. Respondents may have expectations of the proposed research questions, and factors such as economic status, political ideology, and age may alter perceptions of the research focus. Another area of bias maybe in the relatively homogeneous group selected from the local population who are largely Caucasian, Hispanic or both. I brought in some diversity by recruiting participants from both the larger population centers in Washington County as well as the small towns and more rural areas. I also attempted to include members of all political parties in this proposed study as I do not want political affiliation to be the only significant factor of vaccination decisions. Because of the diminished threat of COVID-19, and because I am vaccinated and have received all boosters, basic masking and distancing precautions should be sufficient when interviewing. Aside from this, there are several limitations in this study, including the geographical area surveyed, the political climate of the area in general, and the age group which does not include adults underage 30 or over age 71. While the attempt was made to balance gender, due to the recruiting process there were more males than females, despite recruiting widely within Washington County. In-person interviews reveal unspoken communication that was captured via field notes. All interviews were recorded, and each subject was made aware of the recording and signified this by signing the interview form. It should be noted that interviewees may at any time withdraw from the agreement and the data collected will be deleted. Because I am a clinical epidemiologist, researcher bias must be considered and guarded against through the use of daily post-interview notes. As a practiced researcher, I feel I am well versed in recognizing and controlling personal and professional bias.

Significance

This study may provide insight into the lived experiences of adults who chose to forgo COVID-19 vaccination and a better understanding on the information provided by media, social media, and other information sources. The results of this study may also reveal the major concerns of adults and the age group 30 to 70 years concerning news of the pandemic including sources of information, their educational background, their political beliefs, issues that they see as distressing or concerning and problems that they have experienced due to their vaccination status and what they have learned from these experiences. I chose this population for a number of factors including that people under age 30 have significantly less concerns about infectious disease in general (Quadros et al., 2021), were not able for all groups (16+ years) until Mid-April 2021, and while more interested in social media, young adults are less interested in politics (Boulianne & Theocharis, 2020) although that is starting to change.

Perhaps the greatest significance in understanding this age group is that the United States has an aging population, and it is becoming an increasing percentage of the total population, especially in rural states (Smith & Trevelyan, 2019). A better understanding of the political thought processes of older members of the population and a better grasp of the political currents that are popular among members of this demographic may help better formulate public health approaches and preventative communications. Understanding the reasoning that older adults decided against COVID-19 vaccination may be crucial to lessening the impact of future epidemics and pandemics. While this study focused on the middle-aged and older populations in Washington County, Maine,

the outcomes of this study may be transferable to other populations including younger adults, some of whom have also chose to forgo vaccination, and who will become the older demographic in coming years.

Positive social change has been described as a process of transforming patterns of thought, behavior, social relationships, institutions, and social structure to generate beneficial outcomes. I feel that a better understanding of the thoughts, behaviors, and beliefs of this population may inform communities, organizations, and society on the reasons why the PH messaging failed for some members of the community, and how future messaging may benefit social transformations.

Summary

In this chapter, I have framed the research question, the methodological lens, and the population for this proposed study. The focus is that middle age and older adults who choose to forgo vaccinations for COVID-19. I sought insight into the influence of media, including social media, the messaging from state and federal governments concerning precautions, pronouncements from politicians about the seriousness of the pandemic, and an understanding of the population's perception of their own health care knowledge. A better understanding of this phenomenon may help bridge the gap between public health policy, public health communication, and perceptions of the public. Results from this study may help educate policymakers on the concerns of middle-aged adults when provided with alternative views, what information sources that they chose to refer to, and understanding why middle-aged adults chose to risk their health rather than become vaccinated. In this chapter, I have briefly discussed this pandemic coronavirus, discussed

the problem statement, described research focus and purpose, outlined the philosophical

framework and approach, and outlined the nature of the proposed study. I discussed the

definitions, assumptions, scope, limitations, and delimitations as well as the boundaries

of the study, the population, significance, and positive social change. In Chapter 2, I will

provide a review of current relevant literature, the literature research process, keywords,

and the review process.

Chapter 2: Literature Review

Introduction

The purpose of this study is to explore the lived experiences of anti-COVID vaccine health beliefs for Americans who forgo the COVID-19 vaccination. Despite the belief that the world is in a post-covid era, the virus continues to make the news and impact the lives of hundreds of thousands of Americans. The total number of positive lab-confirmed COVID-19 cases from February 2020- September 2020 was 6.9 million (Covid et al., 2020). According to the WHO, the total number of cases of COVID-19 in the United States currently stands at over 102,544,598, with 1,114,970 deaths (Kim & Yeniova, 2022; Ruhm, 2022). According to the most current data from the CDC, From January 2023 to March 2023, the average number of daily hospitalizations in the United States was 2,551, and 1,706 deaths related to COVID-19 (CDC, 2023). The average weekly new cases of COVID-19 were 149,955, and those with updated boosters were 54,295,167, or approximately 16.4% of the population. According to Muthanna and Samad (2022), the substantial increase in hospitalizations for breathing issues with organ dysfunction globally brought about significant disruptions to medical care. In fact, from March 2021 to October 2021, COVID-19 became the third leading cause of death for Americans accounting for 12.2% of deaths, and among patients 12 months and older, the number of deaths increased across age groups (Balmford et al., 2020; Lango, 2020; Shiels et al., 2022). Once vaccines became available, hospitalization and death from COVID-19 or COVID-19 -complicated conditions dropped by 50% (Vilches et al., 2022). In this

chapter, I will elucidate my literature review, discuss the framework and methodology of this proposed study, and summarize the findings as a foundation for this proposed study.

Literature Search Strategies

The search for appropriate literature targeted peer-reviewed articles relevant to the vaccination, hospitalization, and death of Americans infected with the SARS2-CoV-19 virus. Search strategies included variables and terminology regarding incidence rate, prognosis, hospitalization, death, and vaccination rates for Americans during the COVID-19 pandemic. Websites for public health organizations, including the CDC, The WHO, and public health and medical journals, were referenced using multivariable reference techniques to identify relevant materials. Finally, abstracts were collected and reviewed for application to this research utilizing a speech program. Once identified, appropriate materials are downloaded in PDF format and placed in folders for quick access by term search. The following repositories were accessed: Cumulative Index for Nursing and Allied Health Literature (CINAHL), Elton B. Stephens Company (EBSCO), Google Scholar, PubMed, Research Gate, Science Direct, The CDC, the WHO, the University of Oxford, Johns Hopkins University, and the Walden University library. Search terms and keywords used for repository scans included: *COVID-19, SARS2, COVID-19 Vaccination Rates in the United States, Political affiliation in Washington County, Maine, State of Maine Political Parties, Covid Vaccinations for Maine Citizens, Hospitalizations for COVID-19, COVID-19 deaths,* and *Vaccine rates among Americans*. The literature review included articles from peer-reviewed sources within the libraries of Walden University, Harvard University, Academic Search Complete, Pub Med, ProQuest Central,

Science Direct, Medline, CINAHL Plus, PsycINFO, PsycARTICLES, and Psychology:

SAGE. Articles were also drawn from prescribed print journals, including the *American*

Journal of Epidemiology, The Lancet, New England Journal of Medicine, Annals of

Epidemiology, Social Psychiatry, Psychiatric Epidemiology, Journal of Personality and

Social Psychology, Cognition, and Emotion, Journal of Psychiatry and Neuroscience,

and *Depression and Anxiety.*

Through investigating articles and information on the variables of interest, the

original review produced more than 97 articles that have been accessed in their entirety

for review, of which approximately 60 have been included in this work.

Conceptual Framework

Hermeneutics and hermeneutic phenomenology are considered an approach to

interpretation. It is believed that life cannot be separated from language, so hermeneutics

is necessary to understand and interpret language. In this relationship between thoughts,

emotions, speech, and action, we are all in the continual work of interpretation and

understanding. The central ideas in hermeneutics include understanding the idea of

grammatical and psychological interpretation introduced by Friederich Schleiermacher

(Redeker, 1968), who believed that the interpreter is only influential when they

understand and accurately interpret the intentions, hidden motivations, and strategies of

subjects.

Wilhelm Dilthey, a follower of Schleiermacher, argued that the individual's

history was a critical part of the hermeneutical discussion stating that individuals are the

product of their history and non-mental activity (Makkreel, 2015). Dilthey understood

history as both a lens and the process of understanding historical events. Martin

Heidegger introduced objective phenomenology to hermeneutics and the notion of

interpretation based on transcendental phenomenological methods (Heidegger, 1988).

According to Heidegger, the subjective connection between the interpreter's life

experience should be explored and understood by both the person's knowledge and

sensitivity to the situation when compared to the interpreter's world. Moreover, an

existential understanding based on a standard logical method should refer not to

philology but to the cognitive consciousness of lived experience. Finally, E.D. Hirsch, Jr.

supposed that the author's intentions are a deciding entity; when the information is

gathered, it should be understood as universal, and the meaning of texts determined by

the present reality of the individual (Hirsch, Jr., 1988). Understanding the views figures

in hermeneutics and phenomenology all suffer from strengths and weaknesses. This

hermeneutic phenomenology of qualitative research, conducted through the empirical

collection of experiences and reflective analysis of those meanings, can be approached

through descriptions of individual experiences, conversational interviews, and close

observation (Kafle, 2011).

The health belief model (HBM), first proposed by Rosenstock and associates

(Rosenstock, 2000a; Rosenstock, 2000b), found that people's beliefs about who they are

and how they view themselves influence their health behaviors and actions and that

people will likely act when experiencing a personal threat or risk, but only if the benefits

of taking that action outweighs perceived barriers. The HBM can focus on individual

beliefs about health conditions and may effectively predict behaviors. The modified

HBM (mHBM) can be used to understand the factors that most heavily influence behaviors related to perceived susceptibility, perceived consequences, and confidence in one's ability to understand and adequately make decisions based on current information. It is necessary, therefore, to understand the decisions individuals make related to health and the influences that impact those decisions (knowledge, politics, education, tribal identity, economics, perception). Khumros et al. (2018) used the mHBM to effectively assess and alter the behavior of youth, who are often uneducated in health-related matters, have limited cognitive ability compared to adults, and may harbor illogical or unrealistic beliefs.

Literature Review Related to Key Variables and Concepts

Key Concepts

COVID-19 has impacted the entire global population, and the vaccination rates, exposure, comorbidities, age, hospitalization, and deaths suggest a largely preventable disease, at least for many. Hermeneutic phenomenology aims to understand human action within context, the methods that describe firsthand experiences to understand the individual's life (Giorgi, 2009). Regardless of age or population, everyone has a personal story concerning COVID-19 and the impact the pandemic has brought.

Infectious outbreaks, epidemics, and pandemics are fundamentally disrupting forces that impact personal health, population health, economics, the service industry, the healthcare industry, public health, and virtually every aspect of daily life (Broomé, 2011). Once developed, vaccinations to lessen the spread of the pandemic, hospitalizations and death, and complications from the outbreak are among the most effective means of

mitigating impact. While the availability of vaccines effective against COVID-19 infection recreated and ready for routine use by the general public began on December 11, 2020, when the Pfizer-BioNTech COVID-19 vaccine was made available to individuals 16 years of age and older, and the authorization was expanded to include those 12 through 15 years of age on May 10, 2021. However, social media and conservative news shows warned of an exaggerated risk of illness, side effects, and microchipping by covert governmental entities prevented many adults from obtaining vaccines or allowing their children to become vaccinated (Ash et al., 2020). A basic understanding of risk assessment, infectious disease, and preventative measures is necessary to lessen the impact of infectious outbreaks. However, some media outlets, online bloggers, and political and religious leaders acted against the scientific findings of research results in the United States and globally going back at least five decades (Simonov et al., 2022). Many argue that the average American was more concerned with the Ebola outbreak than the real threat of COVID-19. According to Gesser-Edelsburg and Shir-Raz (2017), in 2016, nearly 40% of Americans polled believed that there would be an enormous outbreak of Ebola in the United States and that an immediate family member or friend would be infected and die within the following year. Despite assurances from the CDC and the WHO that Ebola is unlikely to spread into North America, even in countries under outbreak, the odds of any individual becoming infected are very low. In the first world nations, the odds are very close to zero. This poll demonstrates that, at least for many, their perceptions of threats from diseases are far from accurate. When asked about the state of public health in the United States, more

Americans said that public health is less important than privacy (Champion & Skinner, 2008; Zang et al., 2020). Other researchers reported as far back as 2000 that when asked about healthcare in the United States as being better or worse than in the past, several adults indicated that both adult and children's health have declined over the past few decades (Lillie-Blanton et al., 2000).

Moreover, Howe et al. (2019), Alsan et al. (2021), and Shao and Hao (2020) found that while many Americans pay careful attention to health information concerning ways to protect themselves from exposure or risk of disease, many are easily swayed by political discussions and contradictory reports. It is not surprising that, given the process of scientific investigation in health, discoveries often change what is known and unknown about any condition, and politicians often use this to further an agenda (Shao & Hao, 2020). Furthermore, while a minority of Americans say that research and the healthcare system cannot be trusted because of conflicting studies and opinions, they are often the loudest and most persuasive, mainly when people are not open to other opinions or narratives (Ash et al., 2020; Fuster Guillen, 2019).

As a result of the COVID-19 pandemic's effect on the economy and small businesses, the American public has become more pessimistic about public health. Many Americans polled said they believe that the economy and health of the population in the country have been worse since the pandemic than before (Gourinchas, 2020); moreover, this belief is not isolated to the United States, as many areas of Europe are similarly impacted (Kaushik & Guleria, 2020). The United States has among the best healthcare professionals in the world. Yet there are those with little to no education or training in

health or science who argue against the seriousness of infectious disease and exaggerate the dangers of vaccination and public health. Where do these divergent beliefs come from?

According to McCoy (2020), economic status and political party identity are strongly correlated with opposition to vaccination. While research has produced somewhat conflicting results, the potential influence on social environmental factors needs further investigation. Fisk (2020) found that there were two significant barriers to a robust vaccine uptake: these were structural and attitudinal. Structural barriers included availability of vaccination providers, transportation, time to travel to clinics, and geographical location. Attitudinal barriers were found to be largely based on beliefs and perceptions of individuals who are at risk to become vaccinated and included personal beliefs about infectious disease, fear of vaccination, distrust in government and healthcare agencies, and the belief that the pharmaceutical companies had created the virus simply as a means to enrich their coffers. This author suggested that disparities including ethnicity, education level, and income reduced the likelihood of positive perceptions of vaccination programs. Padamsee et al. (2022) investigated the intention of persons of color to obtain vaccination when compared to white counterparts. These authors discovered an increase in vaccination for persons of color associated with changes in vaccine beliefs when compared to those increases in White Americans. They also found that while overall vaccination rates are lower for persons of color, the hesitancy of vaccination is likely correlated with distrust in the healthcare system and the government. Walker et al. (2022) used a health belief model to investigate maternal

COVID-19 threat perceptions and a willingness to become vaccinated based on refusal to adhere to required childhood vaccinations. These authors found a positive correlation between anti vaccination parents and the resulting vaccine hesitancy of adult children. Moreover, this skepticism seems to be structurally taught, as many believed that the vaccine was rushed, and the contradictory and evolving COVID-19 information were significant barriers to acceptance of vaccination (Dell'Ariccia et al., 2020). The study also found that some study subjects felt that more time should pass after others have been vaccinated to judge the outcomes.

In investigating the pro-versus-anti vaccine sentiments among subjects with strong political beliefs, Schneider et al. (2021) found that group members who identified as conservative were more likely to be anti-vaccine and held more concerns than the pro-vaccine subjects. Lueck and Callaghan (2022) found a significant factor to intention to obtain COVID-19 vaccination was correlated with perceptions of government trust and education level. Bass et al. (2022) examined the correlation between ethnicity, gender, income level, and trusted healthcare providers. These authors also looked at the personal impact of COVID-19 infection and the likelihood that the pandemic was a hoax. Over half of the subjects in this study earned less than $25,000 per year and had a mean age of 44 years; this group also suggested that minorities should be suspicious of government information, and vaccine messages did not account for distrust in pharmaceutical companies or the evolution of COVID-19 information. Highlighting personal responsibility and protection of others was also found to be less likely to increase personal responsibility and vaccination.

Finally, Stoler et al. (2022) surveyed adults and found that even during the height of the pandemic, political viewpoints, a belief in conspiracy theory, misinformation significantly impacted vaccination rates among adults in the United States (McKeever et al., 2022; Rasmussen et al., 2020). This cross-sectional study investigated vaccine hesitancy and vaccine refusal and the associations with a belief in conspiracy theories and misinformation about the pandemic, about the safety of the COVID-19 vaccines, and the willingness to believe politicians and other non-experts about the seriousness of the pandemic and the dangers of vaccination (Hopf et al., 2019; Ravetz, 1987). According to these authors, political beliefs underpinned more variation in vaccine refusal and a greater degree of denial concerning the seriousness of the pandemic.

Other researchers (Behera et al., 2022) found that even the shaming of others on social media was insufficient to alter perceptions for some. Initially, many on social media felt that shaming COVID-19 deniers and those who refused to follow pandemic guidelines would alter their perceptions and behavior, however, this was not entirely successful. Of the 375 respondents in the study by Behera and associates (2022), adverse effect of online shaming tended toward self-destructive behavior rather than social positive behavior, moreover this was a stronger indicator for males versus females and higher for middle-aged and older adults.

A mistrust in science, particularly research conducted by or on behalf of the federal government. Mork et al. (2022) and Motta (2021) found secondary impacts of pandemic isolation to carry significant implications for deterioration of mental health. Mork (et al., 2022) found that 33% of individuals reported deterioration of family

members mental health and believe that isolation was a significant factor in reported self-harm and suicide, and among those who denied the seriousness of the COVID-19 pandemic felt personally attacked by the requirements to isolate and quarantine, which produced anger and resentment towards friends and family that accepted the messages of public health. Some researchers (Kalaf-Hughes & Leiter, 2020; Neimeyer & Lee, 2022; Shale, 2022) found that especially for those people who get the majority of their information on the COVID-19 pandemic from social media are more likely to feel resentment and confrontational towards authorities during lockdown and there is a greater likelihood that they will also confront other citizens who follow the rules. According to these authors, over half the population had reported feeling angry with others who were adhering to COVID-19 safety protocols, particularly among those who obtained their COVID-19 information from Twitter. Other researchers (Soto-Perez-de-Celis, 2020) cited concerns about finances, heavy social media use, and conservative leaning as being more angry and confrontational concerning government lockdowns.

Social media platforms have borne much of the blame for misinformation (Suarez-Lledo & Alvarez-Galvez, 2021), other popular media including news channels Like FOX and MSNBC (Bauer et al., 2022; Pennycook & Rand, 2019), and recent announcements concerning the ongoing and historical evidence of suppression of free speech on popular platforms like Twitter (Overton, 2019; VanLandingham, 2017). Given state and federal authorities to control the narratives and the information passed on to consumers, suspicion on the part of the population should not be unexpected. Extreme cases of reactions to information released by the CDC and other government agencies,

including the belief that the government requires masks to help identify those willing to comply (Tisdell, 2020), nearly 25% of Americans polled stated they were confronted while wearing a mask by others (Young et al., 2022) while less than 10% of the American public states that they followed the pandemic rules including social distancing, masking, and isolation (Flaskerud, 2020). Moreover, several researchers (Overton, 2019; Tisdell, 2020; VanLandingham, 2017) Found that more than half of people polled reported feeling angry about how others behaved during the COVID-19 pandemic. Many people in Washington County Maine who grew angry about the government and enforcement of shutdowns and isolation directives, did so not out of fear of infection or illness, but out of financial necessity. The majority of residents who live full time in this rural county depend on their jobs, particularly those directly related to the service industry. When stay in place orders directives closed many establishments that are service based, for example restaurants, Barber shops, beauticians, and other services; many workers were left without a source of income. This coincided with shortages on paper goods and some food products which many felt as a *false scarcity* and an excuse to increase profits (Nagurney, 2021). Rothgerber et al. (2020) and Darling-Hammond et. al. (2020) and Chun et al. (2020) suggests that illogical and unrealistic beliefs about the seriousness of the pandemic, combined with poor understanding of their own health conditions, the closing of businesses, the loss of liberty, and the general mistrust of government and scientists combined to create a perfect storm of pushback from conservative oriented citizens.

According to Ioannidis (2020), the average American's view on public health has become increasingly hostile, and the government's handling of recent health crises was further evidence of mismanagement and ignorance (Sekerka & Benishek, 2018). It is widely accepted by some authors (Ash et al., 2020; Kaushik & Guleria, 2020; Shao & Hao, 2020) that there are widely varying views about public health and health care depending on age group, with seniors being one of the only age groups that see public health as improving. Some see the period of the pandemic as halting progress across a host of research areas including healthcare, technology, and research (George et al., 2020). Pandemics across history have had several social impacts, including economic and far-reaching cultural and educational effects.

The Nature of Pandemics

Public health defines communicable diseases using the terms endemic, outbreak, epidemic, and pandemic to define a disease condition at a point in time relative to an earlier time (Akin & Gözel, 2020). Moreover, while the terms endemic, outbreak, epidemic, and pandemic are sometimes used to describe chronic conditions such as hypertension, cancer, or other conditions, they are most often used to describe infectious or communal diseases (Piret & Boivin, 2021). In simplest terms, these categories are based on the number of cases of a condition compared with the expected or "natural" number of cases over a given period of time, and how these cases have moved geographically (Hays, 2005). A condition is said to have become endemic when it is present in nature at a steady and predictable rate (Akin & Gözel, 2020). When epidemiologists find that the observed rate of cases of a particular condition is what is

expected for a population, the condition is said to be endemic. Some examples of endemic diseases include malaria in Africa and dengue in tropical regions. An outbreak is a sudden increase in cases more significant than expected, such as a particularly bad flu season. If a disease is found outside of an area of endemic infection, it can be labeled an outbreak. An example would be a case of malaria in Alaska (Smith et al., 2014). Outbreaks are generally limited to small geographical areas or populations; one example is the Escherichia coli outbreak associated with lettuce farming in rural areas of Canada (Macieira et al., 2021).

An epidemic denotes an outbreak spread over a larger geographical area than expected. Zika virus spread from Brazil in 1914 to Texas by 2017 (Harris et al., 2019). If an influenza epidemic spreads globally, for example, the 1918-1919 avian influenza (H1N1), the 1957-1955 influenza (H2N2), the 1968 influenza (H3N2), or the 2009 influenza (H1N1pdm09 virus), it is said to be pandemic. Influenza viruses are described by surface proteins, including hemagglutinin (H) and neuraminidase (N), for example, the often-cited Spanish Flu H1N1. These viruses are further separated into subtypes by number; 18 different H subtypes and 11 different N subtypes, and thus far, over 130 subtype combinations have been detected. The influenza virus remains one of the deadliest seasonal illnesses, and the CDC estimates that influenza results in an average of 40 million illnesses, up to 500,000 hospitalizations, and between 10,000-60,000 deaths annually (Chung et al., 2020; Jester et al., 2020). One often-cited example of a pandemic is the 1918 H1N1 influenza which infected over a third of the population and killed between 50 and 100 million people (Aassve et al., 2021). The spread of the pandemic

influenza was significantly aided by the movement of troops during World War I.

Another much slower-moving pandemic was the Bubonic plague which originated in

China in the mid-14th century (Álvarez et al., 2021), spreading via trade routes to the

Mediterranean and North Africa, reaching England in 1348 and Scandinavia by 1350,

killing over 33% of the European population (Bramanti et al., 2021).

  Although many communicable diseases and associated mortality have been

significantly reduced through antibiotics and antiviral medications in the West, they

remain a significant threat throughout much of the underdeveloped world. Ancient

pathogens, including bubonic plague, remain in some areas. New pathogens, including

the human immunodeficiency virus (HIV), continue to mutate, spilling over from animal

reservoirs (Mishra et al., 2021; Rahman et al., 2020). Some communicable diseases

remain endemic to many areas, including tuberculosis and malaria, imposing substantial

and continuous burdens on those areas' health systems and economies; influenza visits

many nations annually, often wreaking havoc in developed economies when in outbreak

or epidemic. The cost to the health system, both public and private, of treating infection

outbreaks in an attempt to control spread can be extremely costly, and a pandemic or

even major outbreak can quickly overwhelm many health systems, limiting capacity to

deal with more routine or more severe health issues. During the COVID-19 pandemic,

numerous more mundane health conditions, including routine health maintenance, were

largely ignored as people were instructed to isolate (Bezerra et al., 2020; Williams et al.,

2020; Zhang et al., 2020). While caretakers often suffer similar infections to their

patients, COVID-19 infection combined with a lack of personal protective equipment

(PPE) helped ensure the virus's rapid spread among healthcare providers and patients. Many healthcare providers lost their lives in the opening months of the COVID-19 pandemic, and many others were isolated from their families for several weeks at a time. Through a combination of a lack of effective treatment for the SARS-2CoV19 virus, a lack of PPE, or effective prevention measures, panic and the resulting fear of infection, the closing of schools and businesses, the halting of public transportation and many public services significantly disrupted economic and socially critical activities (Pietrabissa & Simpson, 2020).

Furthermore, while the economic cost of the COVID-19 pandemic to the US is estimated to be about $16 trillion (Bartsch et al., 2020; Richards et al., 2022), the pandemic caused far more mental health and educational damage than could have been predicted. The quality of disease outbreaks is that they are not equally distributed throughout the economy, as some sectors, for example, from ascetical companies, may benefit financially. At the same time, other groups may experience disproportionate effects. Health insurance companies, and in many cases life insurance companies, would suffer heavy financial losses over the short term, and vulnerable populations, including the poor, elderly, and children, may have even less access to health care and often significantly fewer resources with which to deal with shortages of food and other necessities. According to the US Census Bureau (2022), this county's population was just over 31,000 in July 2021. The average age of residents of Maine was 44.8 years in 2020; in Washington County, the average age is 48.5, and the age for the cohort group will range from 25-75 to draw a meaningful sample from the population. Washington County,

particularly the coastal areas in the small towns along what is referred to as the bold coast, comprises year-round residents and summer residents who often own cottages or camps along the Atlantic Ocean and the Bay of Fundy. While the county is relatively small in total population, the average income is $31,121.

In contrast, the State of Maine has an average income of $57,617, or over $25,000 more than the average in Washington County (Lin & Meissner, 2020). Education and political identity are assumed to factor in several decisions concerning beliefs about public health, health care in general, vocation, income level, and political affiliation. Given the average age of residents in Washington County of just under 50 years, this population might be expected to have a higher morbidity and mortality rate from COVID-19 infection, thus, be more inclined to become vaccinated. According to Rooms (2021), Maine voters are predominantly Democratic or more liberal-leaning overall and voted in the past ten elections for the Democratic presidential candidate. Considering that Maine is the first state to approve ranked-choice voting (Anthony et al., 2021), the people of Maine have a long and proud tradition of "Yankee Ingenuity" (Dunning, 2019), often the mindset includes dismissing the ideas and opinions of outsiders or, as they are commonly referred to "Flatlanders" (Coe, 2010). My experience of living over seven decades in Maine with the occasional year or two away allows me to understand the attitudes and mindset of rugged individualism and self-reliance.

Research suggests that unvaccinated communities are the most significant contributors to continued COVID-19 infection (Alcendor, 2021; Ranjan & Ranjan, 2020). Rural populations, including the more rural counties of Maine, have a long history of

political conservatism, a general distrust of government, poor health literacy, and a higher likelihood to believe conspiracy theories. Accepting this reality, I propose conducting this study in remote areas of Washington County, one of New England's poorest and most conservative counties. It is critical to understand the vaccine refusal for the adults living in such areas to decrease future pandemics' spread.

As a predominantly quantitative researcher, investigating the lived experiences of adults refusing the COVID vaccine would necessarily be qualitative. Lived experiences, by definition, are subjective. To extract meaning and information that may benefit future quantitative and qualitative researchers, it is necessary to approach this subject and population through a phenomenological framework.

What is needed in a shrinking world where pathogens can traverse the globe in less than two days is risk management that applies to epidemic disease. Policymakers must ensure that risk management does not outweigh the risk in a world where people travel for business or pleasure (Becchetti et al., 2020). Tools to minimize the effect of pandemic disease will logically be less effective than tools used to prevent outbreaks of those diseases. Currently, researchers are tracking several variants of the COVID-19 virus, and the emergence of a highly contagious or more deadly strain and other unknown pandemic diseases is possible. It is not a matter of if but of when the next pandemic strikes (Davis, 2022). Given the response to isolation, quarantine, and vaccination, there are founded concerns for the next epidemic. Although The United States boasts some of the world's leading scientists and health agencies, the involvement of politics and political appointments in the National Institutes of Health (NIH), the FDA, and the CDC

should give us at least some concern as a society. We have little assurance that the

leaders of these organizations will necessarily be the best in that field (Lewis, 2008;

Miller, 2015; Waterman & Ouyang, 2020). As a result of misinformation, political

appointments, and division politics, those highly skilled health workers on the front lines

caring for those ill with COVID-19 have come under both psychological and physical

assault, and many have left the field for other vocations (Sinsky et al., 2021). The

resentment of public health experts, healthcare providers, and health workers is rising,

but it is not without precedence.

Historical Context and Precedence of Vaccine Resistance

The first inoculation was created to combat smallpox. A physician, often referred

to as the father of modern medicine, Dr. Edward Jenner, noticed that milkmaids in the

areas of Derby where he lived never suffered from smallpox. Jenner surmised that the

condition of cowpox that often infected milkmaids somehow protected them from much

more severe smallpox (Eisen, 2020; Gallegos et al., 2023). As soon as Jenner could

demonstrate 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). For some parents, the fear of their children

becoming infected with cowpox was based on a belief by local clergy that it was

unchristian because it came from an animal; others distrusted medicine and were

skeptical about Jenner's theory. During that period, they believed that disease came from

decay or vapors called miasma (Kannadan, 2018). One of the reasons for discussions

concerning a law to force children to be given this new vaccination (Vacca is Latin for

Cow) was that it violated personal liberty, and opposition grew as the government began to implement mandatory vaccine policies.

The vaccination act of 1853 instituted mandatory vaccination for infants from birth to three months (Durbach, 2000). The act of 1867 extended the requirements for children up to age 14 and instituted penalties for refusal. The arguments given in 1867 and after are familiar: people have a right to control their bodies and those of their children, and the Antivaccination League was formed in response to these mandates (Williamson, 1984). Demonstrations included 100,000 "anti-vaccinators," and protestors carried banners and a child's coffin. The opposition led to a study investigating the effectiveness of vaccination, and in 1896 it was determined that vaccination with cowpox protected children from smallpox (Badar, 2021). Despite this ruling and the acceptance by a majority of the public that vaccination prevented smallpox, at the end of the 19th century, smallpox outbreaks in the United States also generated anti-vaccine groups.

In 1879 a visit from English antivaccination organizers spurred the creation of The Antivaccination Society of America (Tolley, 2019). This was followed by the New England Anti-Compulsory Vaccination League and The Antivaccination League of New York (Wolfe & Sharp, 2002). Unlike their European counterparts, the anti-vaccine groups in the United States waged court battles to repeal vaccination laws in states like California, Wisconsin, Illinois, and Massachusetts. It was inevitable that a smallpox outbreak would sweep through many areas of New England, and the Board of Health in Cambridge, MA passed a law mandating all residents be vaccinated against smallpox (Parmet et al., 2005). Resistance by antivaccination groups continued long after the

research into the effectiveness of vaccinations had been established. This is a familiar occurrence.

During the First World War, nations across the globe moved vast numbers of people to various fronts. In an overcrowded and unsanitary barracks at Ft. Riley in Kansas, one of the first recorded cases of H1N1 influenza was diagnosed on March 11, 1918 (Patterson & Pyle, 1991). This pandemic was among the most severe in history; approximately 500 million, or 35% of the world's population at that time, became infected, and the number of those who died from the pandemic disease is thought to be between 50 and 100 million (Beach et al., 2022; Morens & Fauci, 2007). Nearly 675,000 people in the United States died of the pandemic, and the hardest hit age group were children under five years of age and adults 20 to 40 years. The high mortality rate of otherwise young and healthy adults was alarming at a time when nations needed their fighting men. At the time, no vaccine against influenza existed, and antibiotics to treat secondary infections were not yet available. Efforts to control the spread were limited to isolation, quarantine, disinfectants, and limited gatherings (Greenberger, 2018). Then, as now, precautions were not spread evenly among various populations, and many people carried on as before. In many parts of the US, Daily life came to a standstill. Officials in many cities, including Boston, closed public schools, bars, restaurants, and church services. The police in many cities were ordered to arrest anyone sneezing or coughing in public (Quinn et al., 2011). many cities and larger towns, all public gatherings, including restaurants, barbershops, and business meetings, were prohibited. Many families, particularly the poorer populations living in slums or tenements, often face a crisis. The

adults were too sick to shop for and prepare food, or the breadwinner was either sick, dying, or dead (Quinn et al., 2011). With so many ill, there was a massive shortage of medical care, and state and local healthcare systems were already strained by the war in Europe; therefore, triage and ongoing care often fell to nurses (Robinson, 2021).

Every year, The United States and much of the world face a new strain of influenza virus, often a naturally enhanced version of strains known as antigenic drift. Because of the ability of viruses to adapt quickly and evolve, humans are faced with a new influenza outbreak every year. Millions are infected, and many die. While mutations generally cause simple adaptations, pharmaceutical companies can often stay up to pace with vaccines. However, every 40 years or so, we face a significant flu pandemic (Iwami & Liu, 2009; Kim et al., 2022) caused by significant antigenic drift. This results in an alien virus that the human body does not recognize and has no defense specifically for it. This was the underlying cause of the 1918 influenza pandemic. In the case of the 1918 pandemic influenza, the virus spread faster than researchers could isolate an effective vaccine, produce, and distribute it. Furthermore, many were against the vaccine even as those around them died from the virus.

In the late 1970s, documentaries began reporting on the controversy of the safety of tetanus- diphtheria-pertussis vaccine (TDP) after a hospital in England reported the connection to supposed neurological damage, and antivaccination groups were quick to denounce the safety of vaccination in children (Kulenkampff et al., 1974). Researchers would eventually debunk much of the antivaccination rhetoric, yet the damage was done, and parents were understandably confused about the safety and the likelihood of adverse

effects. Parents, upset and frightened, began to form advocacy groups; however, despite instigating several lawsuits against vaccine manufacturers, the only event was increased vaccine costs and several companies no longer creating some childhood vaccines. The result was an expected increase in both diphtheria and pertussis. Parents were once again confused about vaccine safety as the antivaccination researcher Andrew Wakefield falsely suggested a relationship between the measles-mumps-rubella (MMR) vaccine and autism (Flaherty, 2011; Rao & Andrade, 2011). Wakefield and his associates published their falsified study in *The Lancet,* which would later retract the article and apologize for publication. After a lengthy investigation, it was discovered that Wakefield had committed medical fraud and that a law firm had paid him to falsify information to generate lawsuits against pharmaceutical companies. Even now, thousands of studies have failed to find any association between the MMR vaccine and autism. Even today, parents are mainly ignorant of Wakefield's fraud and continue to quote the study as proof. In 1999, manufacturers removed *Thimerosal,* a preservative, from vaccines because of fears of autism, not from medical researchers or scientists but from non-scientific spokespeople (Chamberlain, 2020).

Gaps in the Existing Literature

While many argue that the COVID-19 pandemic is in the rearview mirror, those working in public health organizations continue to see morbidity and mortality reports from COVID-19 hospitalizations. In recent studies (Goldberg, 2021; Raballo et al., 2022), discussions concerning improving vaccination rates need to delve further into two, not only the beliefs but the political subculture that overarches many decisions, including

health care and vaccine acceptance. While concerns about vaccine side effects or a lack

of knowledge about vaccination are often cited as significant, few authors have examined

the beliefs affecting political, religious, and social bubbles that dictate individual beliefs

and group identity. While some individuals prefer to wait for others to be vaccinated first

to see if there are any issues, these people could be considered overly cautious rather than

rejecting vaccines altogether. For this reason, it is necessary to investigate the lived

experiences of people who reject vaccines outright.

Summary and Conclusions

In this chapter I have investigated the major themes in current literature.

Historically, there have always been members of the public both lay and professional

who have questioned the necessity and at times the safety of vaccination against

communicable disease. Often these studies are rooted in a poor understanding of Health

Science or medicine, or in some cases, a belief that natural solutions to disease are to be

preferred. Science and medicine have made significant improvements in lifespan and

public health since Jenner and the smallpox vaccine, emotions then, as now, are deeply

rooted in beliefs that may be political, social, or philosophical and these underlie their

perceptions of public health, health care, science, and politics (Rutledge, 2019). Tribalism

and subpopulations based on political ideology, particularly the political figures, are a

relatively new development in the antivaccination arguments. It may be argued that

politics and tribalism may be the governing lens through which subjects view information

or news, however, once this information has proved false, there is little agreement on

why individuals insist on following a path they know to be destructive to themselves and

others. Simply claiming a "poor health understanding" or a "political agenda" as response to the research question is simplistic and unhelpful; this phenomenon seems to cross socioeconomic status lines, educational strata, gender, and even age groups. Therefore, there is a need to better understand the lived experiences of subjects who have chosen to forgo vaccination against COVID-19 despite the establishment of both safety and efficacy, even by political leaders in their parties.

I discussed what is currently understood about antivaccination sentiments based on history and current studies. COVID-19 is an evolving situation, and it will continue to do so for the near future, therefore, while the condition is new, there are a number of researchers examining the effects of the pandemic on various populations, however, in very rural counties in economically poorer states, there is much that remains unknown about income, education, health knowledge, and political belief. In chapter three I will discuss the methods, data collection process, and framework for this proposed study. I will discuss the gap in their literature connected in chapter three, as well as discussing the methodology and framework that will be used in this proposed study including the interview process, role of the researcher, the selection process, issues of trustworthiness, and ethical procedures needed to secure approval from the Institutional Review Board (IRB).

Chapter 3: Research Method

Introduction

In Chapter 2, I outlined the current literature focused on the COVID-19 pandemic, information on vaccination and the historical context of vaccination refusal, social response to government mandates, and ideas surrounding personal liberty and individual freedom. In this chapter, I will discuss the results of the research study, methodology, framework, and findings.

This qualitative study examines the lived experiences of adults living in Washington County in Downeast, Maine, who chose to forgo vaccination for COVID-19. This cohort of individuals are full time residents of Washington County in the state of Maine between the ages of 30 and 70, the fastest growing population group in rural Maine. The question first arose during an online discussion about the safety of COVID-19 vaccinations. Many claims were made by adults in this age group, who were often the hardest hit by the pandemic and most affected by COVID-19 either health wise or economically (Sun & Monnat, 2022). I conducted this study to determine how this cohort had been holistically impacted by COVID-19 and their decision to forgo vaccination against the pandemic.

According to Smith et al. (2020), in-depth interviews in qualitative research can best be understood as a conversation directed towards a purpose. The purpose is implied by the researchers' questions, and in this regard, the researcher becomes the instrument of data collection by listening and reflecting. As a quantitative research scientist, my worldview is very scientifically oriented, and a priori data must always be confirmed. I

believe this approach of neutral observer; non-judgmental acceptance of the data collection and processing process fostered a more accurate result that will be deductive than inductive. This understanding of data and interaction assisted me in gathering accurate unfiltered data, although it is understood that I was not completely independent from the research as the instrument of principle data collection.

I recruited subjects by flyer and snowball sampling from the residence of Washington County Maine who live beyond a 10-mile radius of my home. And interview protocol consisted of semi structured questions, that were audio recorded. Due to recall error, transcription of each interview was completed as soon as possible after the interview no more than 24 hours after interview completion. I recruited participants through online social media posts and snowball sampling from the residents of Washington County, in Maine. An interview protocol was be based on semi-structured interviews that were audio-recorded with participants, and each interview will be transcribed within 24 hours. A "test drive" was used to fine-tune the interview guide, questions, and approach. Further, it was my plan to use MAXGDA software for thematic analysis and coding and to manage the data collection process, however, because of the computer system I us, I used MS EXCEL for these purposes.

Research Design and Rationale

Central Concepts

This qualitative study examines the lived experiences of adults living in Washington County, Maine, who forgo COVID-19 vaccination after the vaccines were readily available. Based on this assumption, the following research question was created:

"What are the lived experiences of adults in Washington County Maine who forgo COVID-19 vaccines?"

Quantitative studies are experimental, while qualitative studies are historical (Creswell & Creswell, 2017). A qualitative study may be beneficial to understand the lived experiences of those subjects who chose to forgo vaccination against Sars-Cov-2 the virus that causes COVID-19. Further, these authors noted that qualitative research is foundationally social; therefore, may be an effective method for understanding lived experiences among members of a rural, working community. Unlike a quantitative study, which tends to be concerned with associations between different variables, qualitative approaches tend to be constructive, suggesting that an individual's reality is socially constructed. Thus, there is no one reality or perception of an experience (Marigold et al., 2020). At the foundation of perceptual reality is the belief that someone is superior, more thoughtful, or more intelligent because they are like us or have the same values. In this study, two essential understandings helped direct the approach: the Fundamental Attribution Error (Harvey et al., 1981), people tend to explain the behavior or thinking of others in terms of their characteristics as opposed to the situation. The Exposure Effect (Bornstein & D'agostino, 1992) - the more often people have been exposed to a stimulus, for example, a source of information, the more they are to believe it—even when the stimulus is subliminal. Therefore, personal beliefs direct behaviors, and these should be examined within the theme that they reside, unfiltered by the judgment of the researcher. Obtaining data from multiple sources, including interviews, observations, and thematic analysis, is necessary to understand the subject's lived experience. Researchers must

distinguish between systematic observations and theories, the phenomenon, and the unique understanding or interpretation. The qualitative method is not based on any theoretical construct or established hypothesis but on experimental settings where data are gathered in a natural environment through multiple sources.

Study Goal

The goal of this study was to understand better the lived experiences of adults who refused vaccination for COVID-19 after the vaccines were readily available. I focused on the rural area of Washington County because I live there. I know that we were hard hit by the pandemic, that Washington County tends to be very conservative in its social politics, and that most adults work in the fishing industry or forestry. While dismissing anti-vaccination sentiments through ignorance or a lack of education is easy, the conscious decision to refuse COVID-19 vaccination is likely more complicated.

Research Tradition and Rationale

I used a hermeneutic phenomenological design based on a mHBM in this study. While this is a generic form of research, data were collected through interviews, observation, and social interactions. Data analysis consisted of identifying themes or patterns in the data grouped into leitmotifs that repeat across separate interviews, which may support the finding of this proposed study. According to Mayer (2015), the primary goal of qualitative research is uncovering and interpreting the meaning of events; when paired with mHBM, the events and the assigned meanings by the subject will be housed in understanding and perception of health conditions, risks, and determined inaction.

Role of the Researcher

Unlike quantitative research, where the researcher is external to the subjects and data, qualitative research requires the researcher to be the instrument of collection and thus be part of the environment. This reality places the researcher in a dilemma, as spoken and unspoken communication may affect responses from the subject. Therefore, the researcher must identify their biases, personal backgrounds, and values that should be controlled to avoid influencing subjects. The qualitative researcher is the instrument of data collection through the observations, documentation, and interview process. Unlike quantitative methods, this places the qualitative researcher at the very center of the research. According to Creswell and Creswell (2017), the ethical and personal issues should be identified by the researcher in order to understand and control for biases, background, and personal values which may shape the interactions with the subjects and fault the study. As much as can be reasonably expected, personal and professional relationships should be identified. This includes conflict of interest; therefore, this study drew subjects from a diverse geographical population in Washington County Maine. I focused on areas that are a minimum of 10 miles from my location to avoid any possibility of social contamination.

Personal Background

I am a Caucasian male 63 years of age, a full-time resident of the town of Milbridge located on the bold coast of Washington County. I am highly educated, and I am not involved in politics; however, I am a member of two boards that are involved with community improvement, and I routinely work with and converse with people of a wide

range of political opinions, politics, and vocations. I am a clinical epidemiologist and author as well as a visiting research professor; however, I have kept most of my views on public health to myself. It is my neutral standpoint on most health related topics or political discussions that I feel allows me to function in this role as researcher has helped me avoid imposing my values on subjects unconsciously. In designing interview questions, I listened carefully as well as recording the responses allowing me to take accurate field notes to code the interviews, recognize the themes, and arrive at accurate conclusions. I used an ongoing journal during my data gathering stage to check for biases. In previous courses, I have learned that journaling can be an efficient way of guarding against bias. To avoid bias when reviewing data, detailed records must be kept. This reduced the chance of recall error. Finally, it is necessary to report all results, even those that do not seem important.

Study Subject Population and Data Saturation

As stated previously, predicted sample size is 12 to 20 participants or until the point of data saturation. It is not possible to predict when data saturation will occur; therefore, it is necessary to review all transcription immediately after each interview to understand when saturation has been reached. After 16 subjects were interviewed, saturation was reached, and recruitment ceased.

<div align="center">

Methodology

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Participant Selection Reasoning

I performed a purposeful sampling strategy to obtain a sample from which the themes pertinent to the proposed study can be obtained. According to Thomas (2022) and

Clements and Baum (2022), purposeful sampling can be an effective way of identifying and selecting information rich cases, by identifying and selecting groups that are especially experienced are knowledgeable about a particular phenomenon of interest, possess experience about said phenomenon, are willing to participate, can communicate there lived experiences surrounding this phenomenon, and can express those experiences in an articulate and reflective manner. It is essentially a sample of the population with an identified purpose.

Because vaccinations are currently available across the United States and the state of Maine, adults aged 30-70 years, living independently and a full-time resident of Washington County, Maine can obtain one or more of the vaccines against COVID-19. Subjects will be able to read and speak English, have not been vaccinated for COVID-19, and agree to participate in this study. Informed consent will be obtained from subjects, who will be informed that they can change their mind about participating at any time. Proactively I will interview subjects on agreed upon dates and times, understanding that each interview will take 45-60 minutes. The predicted sample size is 12 – 20 subjects and saturation was reached at 16 participants. This population was sufficient for this study, and because saturation could not be predicted, data analysis was begun after five interviews have been completed and coded. All data was coded and kept confidential, stored on an encrypted drive on a secure computer. Cloud storage was not used.

Instrumentation

For this study, an open-ended interview was created to solicit information on demographics, political ideation, education level income level, and health understanding

concerning the COVID-19 pandemic and the decision to forgo vaccination against the virus, which will be comprised of approximately 14 questions listed in the research guide. This interview guide was developed with my chair and member to answer the research question. A digital recorder and field notes were used to capture spoken and unspoken communication. MS EXCEL was used for thematic analysis.

Procedures For Test Drive

In order to measure the effectiveness of the study guide and questions, I recruited several friends who are similar in outlook to the study population, and who were not part of the study population. A test drive helped me assess if subjects will understand the terminology used in the interview, ensure that questions that prompt emotional responses are not used to avoid defensive responses that could invalidate answers, check that leading questions have been avoided that may bias subject answers, and to ensure that the questions can be completed in the appropriate amount of time and will gather the correct information with and sufficient level of strength.

Procedures for Recruitment, Participation, and Data Collection

Subject Recruitment

I posted a flyer on social media, focusing on community Facebook pages for the local population centers to recruit subjects, and snowballing for additional volunteers. Once a subject responds favorably to participate in this study, they received the informed consent form, an introduction to the study written by me, and the purpose of the research sent by post or email. After the subject reviews the information and returns the signed consent form, they verified informed consent verbally during the phone scheduling of the

interview. An anonymous computer generated four-digit code was assigned as an ID to the participants. A telephone interview date and time was arranged for a date and time in agreement with the researcher and the participant. All interviews were audio recorded on a digital recorder (Sony ICD-UX570) and used a researcher-created instrument containing 10 open-ended questions which will be submitted to Walden's Institutional Review Board (IRB) for approval. Effective open-ended questions asked how, what, why, and can; subjects had more opportunity to express lived experiences providing richer insights.

Once the signed permission sheet has been verified, the study guide was used to ask open ended questions predetermined by myself and my committee, all responses were recorded, and field notes taken during the interviews to capture unspoken communication via an observation sheet. All data was processed via notes and word-trees were expected to be entered into MAXQDA software. However, this software proved incompatible with my system.

Data Analysis Plan

For this study thematic analysis as described by Braun and Clarke (2012) and Lochmiller (2021) as this process may prove effective in data interpretation especially when using an inductive approach. According to Braun and Clarke (2012), thematic analysis can be divided into six stages: familiarization with the data, coding the data, constructing themes, reviewing themes, defining themes, writing the analysis. These authors state that every final (stage six) thematic analyses should consist of an introduction (aims and prior knowledge), methodology (how data was gathered), results

(categories identified), and a conclusion (detailing what has been drawn from the previous stages). Qualitative data may generate confirmed, discordant, or expanded findings. Discordant results must be identified and reported to ensure transparency in order to expand future research. It is considered comprehensive to examine discordant data in the early stage of analysis and step by step examples: first a matrix is used to identify the discordant findings under each identified theme (Younas et al., 2019). Second, a sociocultural profile of each discordant result is defined and cataloged providing a description of the context (education level, belief system, socioeconomic status), and third, discordant findings will be labeled as either significant or trivial. If trivial, this may indicate that the discordant findings are defined as highly contextualized to one subset of the population, as such these findings would not be integrated to draw conclusions but will be noted. If they are significant, they would be subjected to inference.

Issues of Trustworthiness

Trustworthiness can be broken down into several areas including credibility, which simply asks are the findings of this research believable? Do they represent an accurate description of what subjects have said and why? Because qualitative research involves smaller numbers of subjects, it is expected that similar themes will emerge among those subjects with similar backgrounds. One tool I will use is reflective commentary, asking subjects if I have understood their responses, as depicted by Carl Rogers in his person-centered approach (Rogers, 1986). Although subject responses will be recorded, clarification may be necessary; it is less likely to create misunderstanding

and Inaccurate thematic review if clarification is applied. The use of passive reflective attending will also enhance summarizing subject responses at the conclusion of the interview to ensure that the researcher has understood responses. This not only helps ensure accuracy but provide an opportunity for subjects to clarify any responses or add any information.

Credibility

Credibility in any study is crucial, and in qualitative research credibility can be assured through using multiple perspectives across the data collection process to ensure the information collected is accurate and appropriate (Cutcliffe & McKenna, 1999). One method to support credibility is prolonged data engagement, persistent subject observation, and negative case analysis (Patton, 1999).

Transferability

A significant impact of the issue of trustworthiness in qualitative research is the transferability of findings. Are the findings generalized and are they applicable to other subjects or other groups? To create a viable study that is transferable, the study must be dependable and reliable so that another researcher would arrive at similar conclusions. Purposeful sampling comments is the key to identifying subjects within a particular category which are already known and therefore researchers can recruit a sample using selective criteria (Suri, 2011).

Dependability

The dependability of the qualitative data is demonstrated through assertions that the results of the study were accurately established despite any changes within the setting

or participants during the data collection process. Rigorous data collection techniques, attention to details, and adherence to established procedures can assure dependability of the study outcomes.

Confirmability

Confirmability requires that the data represents the subject populations responses to the questions rather than the researcher's viewpoint, bias, or political beliefs which can be apparent in tone, language, and demeanor (König & Jucks, 2019).

Ethical Procedures

Participant recruitment for this proposed study will consist of the distribution of a flyer on social media, and a determination questionnaire to ensure suitability for the study. No data will be collected, or procedures begun prior to IRB approval. This proposed study will limit subject population to in full-time residents of Washington County Maine between the ages of 30 and 70 years, living independently, with no self-reported cognitive decline, are and able to read and speak English, and will use a *Demographics Survey* at the data collection process. In order to maintain study procedures, I will not select any participants who are known to me, who are public figures, or are related to me in any way. Any information that becomes known to me during my interviews that suggest safety issues that would impact the subjects or others, for example elder abuse, child abuse, or domestic violence I would be required to report this information to the appropriate authorities. All subjects will be assigned a *code ID* in place of a personal identification and any responses or analysis will be attributed to that code for the length of the study and in the study analysis. Audio recordings, field notes,

and other physical copies of data will be kept in a locked cabinet; any electronic data including output files from MAXQDA will be kept on a password protected hard drive for a minimum of five years as per Walden University requirements after which this data will be destroyed.

Summary

In this chapter I have provided a description of the proposed study, an explanation of the research design, and methodology needed to answer the research question. The purpose of this proposed study is to investigate the lived experiences of adults who chose to forgo vaccination against COVID-19 since the vaccinations became available. The qualitative paradigm and the researcher's role have been outlined and defined, researcher bias and influence has been described. Once this proposed study is approved, IRB permission will be sought by submitting the required forms, research guide, recruitment flyer, and CITI. In chapter four I will discuss the results of my findings.

Chapter 4: Study Results

In Chapter 3, I outlined the results of the research study, methodology, framework, and general findings. In this chapter, I will present the factors that subjects stated had influence there is this journey, the COVID-19 vaccines when they were available for the general public. The population of the study was limited to the full-time citizens of Washington County in the state of Maine. This geographic focus was considered as viable for a number of reasons, including the proximity to the researcher, familiarity with the population, and willingness of citizens to discuss their decision-making processes. Because the COVID-19 vaccines are still considered necessary, this research may help define improved public health messaging campaigns to increase vaccination rates, add reduce mobility and mortality. The study explored perceptions and beliefs concerning the safety and necessity of COVID-19 vaccines.

This study collected data collected through semi structured interviews that investigated subjects' lived experiences. In this chapter, I will be discussing the demographics, data collection process, purpose of the study, results, data collection, processing, and management, storing and protection, reliability, confirm ability, transferability, and an analysis of the findings. This chapter will conclude by identifying, categorizing, and coding key words, statements, and themes derived from the interviews.

Research Question

RQ: What are the lived experiences of adults in Washington County Maine who forgo COVID-19 vaccines?

Research Setting

After receiving approval from my committee and Walden's IRB, I posted a request for participants on Facebook, collected the signed consent forms and demographics survey via email, and performed the interviews via Zoom meetings which was the preferred medium for subjects. I used semi-structured interviews to obtain additional data from the participant as needed. Interviews were conducted in the participants choice of location or via Zoom. Prior to scheduling the interview, I obtained signed consent forms that specified the process, protocols, and assured participants that their information would be kept confidential, used for this study, as described on the informed consent form, along with the demographic survey to ensure the subjects met the criteria. Participants were provided a four-digit random number that was provided to the subject and was used in all correspondence and written materials associated with this study. information would be used in the study. All data and materials obtained are converted to digital medium, stored on a password protected in a locked desk drawer in my home office for five years.

Interviews (either in-person or via Zoom) were scheduled for dates and times between August 1 and August 20, 2023, via email and confirmed. Before beginning interviews, participants were asked if they had any questions or concerns about the study.

Demographics

The participants in this study are citizens of Washington County, State of Maine who are full-time residents, 30-70 years old, have not been vaccinated for COVID-19, do not live in communal housing, and do not have a self-reported cognitive impairment. A

sharable recruitment flier was posted on local town Facebook groups. All participants met the requirements; thus, no vulnerable populations were included.

Data Collection

The IRB at Walden University reviewed and approved the study (07-10-23-0195306). This study approval expires on July 9, 2024. Prior to the scheduling of interviews, the signed consent form and demographic data were obtained using the demographic survey. At the beginning of each interview, I explained the purpose of the study, that the study was voluntary, that each participants had a right to confidentiality, they also had the right to change their mind about participating at any time, and that they would be provided a summary report of the findings. Semi-structured interviews were used to collect data and were scheduled to meet the subjects preferred schedule from August 1, 2023, and September 30, 2023. Three of the interviews were conducted face-to-face, the remaining thirteen were conducted via Zoom. All interviews were digitally recorded and were simultaneously transcribed via speech-to-text software in real time; field notes were also collected. The interviews averaged 45-minutes, and unspoken cues were observed and noted to better capture communication, and to avoid situations of stress or unease by using a system of watching for non-verbal communication (Burgoon et al., 2021).

Procedures for Test Drive

The first step was to identifying the need for a test drive to review the objectives of the survey, clearly identify the risks associated with the demographic survey, determine the scope of the test drive—what will be tested, how, where, and when,

establish what criteria will be used to judge whether the test drive was successful or not, select participants to take part in the test drive, set up any materials, equipment, or technology that will be required. The first step was to identifying the need for a test drive to review the objectives of the demographic survey, clearly identify the risks associated with the demographic survey, determine the scope of the test drive—what will be tested, how, where, and when, establish what criteria will be used to judge whether the test drive was successful or not, select participants to take part in the test drive, set up any materials, equipment, or technology that will be required. For the test drive I selected four individuals that fit the subject requirements but were not among the test population. Upon reviewing the demographic survey and interview questions, I reviewed the detailed notes from feedback, and altered the wording of two interview questions and one demographic question to increase clarity. No other issues or challenges emerged, and refinement of the material was considered necessary based on the feedback from this test drive.

Data Saturation

In qualitative research, data saturation refers to the point at which collecting more data no longer contributes any new or relevant information to the research question (Guest et al., 2020). At this point, additional data tends to be repetitive or redundant, not adding substantial value to the understanding of the topic.

Data saturation is particularly important in the context of qualitative studies, such as interviews, focus groups, or ethnographic research, where researchers are often trying to understand complex, nuanced phenomena that cannot be easily quantified. Here, the

goal is typically to gather as many perspectives or experiences as possible until a full, rich understanding of the phenomenon is achieved. However, at a certain point, new perspectives or experiences stop emerging, and this is the point of saturation.

How quickly data saturation is reached can depend on various factors, such as the diversity of participants, the complexity of the phenomenon being studied, and the depth of the data being collected. It is often a judgement call on the part of the researcher when to stop collecting data, and there can be some debate about when true saturation has been reached. Still, reaching data saturation is generally considered a marker of good qualitative research, indicating that the topic has been thoroughly explored. Upon the sixteenth interview, it became apparent the study would not benefit from additional interviews as saturation as (Fusch & Ness, 2015).

Data Analysis

Data analysis commenced after all data from interviews, field notes, and recordings had been transposed into transcripts from participant interviews. Each interviewer was assigned a random four-digit number upon initial communication to ensure confidentiality before, during, and after the coding process. All data are stored on an encrypted and password protected USB locked in my desk in my home office where only I have access. Finally, all data information about the study will be destroyed by file deletion using Clean my Mac Software's Deep Delete Function 5 years after study completion.

In order to have the best representation of the population, the study recruited from a wide and diverse population. Table 1 provides the information of the demographics of the participants including age, sex, political identification, and education level.

Table 1

Demographics of Participants

ID	Age	Sex	Political identification	Education in years
1236	47	M	Rep	High school or equivalent 12
1899	67	M	Independent	High school or equivalent 12
3987	38	M	Dem	Bachelor's degree 16
4490	55	F	Dem	Master's degree 18
5120	68	M	Rep	High school or equivalent 12
8897	44	F	Dem	High school or equivalent 12
2298	32	F	Dem	Bachelor's degree 16
5464	38	F	Independent	Doctorate 18
3669	50	M	Rep	Bachelor's degree 16
1988	35	F	Dem	High school or equivalent 12
1272	55	M	Rep	High school or equivalent 12
1784	43	F	Rep	Bachelor's degree 16
1212	32	M	Rep	Bachelor's degree 16
9952	44	F	Independent	High school or equivalent 12
2202	67	F	Dem	High school or equivalent 12
9016	32	F	Dem	Bachelor's degree 16
Averages	**46**	**F-56%**	**Dem-43%**	**14.25 years/education**

Upon primary write up, statistical analysis (brief) was charted according to the Demographic Survey Questions. Initial codes were captured from responses to Survey Questions. After the initial codes were generated, the coding process began using MAXQDA (V2022), which involved importing notes and audio files to create textural outputs that can be examined for common themes. However, because of my computer system this operation failed. To effectively describe the issues, it is necessary to discuss my computer system in some depth.

My current system was developed by SUN Micro as is a learning disability enhanced computer system, which possesses an operating system and software tailored to support individuals with learning disabilities. These systems are designed to address and mitigate the challenges faced by people with various learning disabilities, making the use of technology more accessible and productive for them. My current system is tailored to my needs, providing a learning experience that suits my specific strengths and weaknesses. This system includes various assistive technologies, screen reader, voice-to-text software for dyslexia, interactive features, gamification, and other engaging elements text magnification, contrasting colors, and voice output can assist with visual/spacial learning issues. As a result, I relied on the process I leaned in Qualitative Measures, and Advanced Qualitative Research Courses that use EXCEL to map the themes, sub themes, action words, and provided an efficient method of speech-to-text to capture the nuances of the interviews. Nevertheless, several cycles of analysis of the coding were required in this study including the isolation of common terms, repeated phrases, etc. Thematic analysis is a method used in qualitative research to identify, analyze, and report patterns or themes within data. It is used to systematically identify and organize data into themes that are relevant to the research question. Thematic analysis in this study involved six steps:

1. Familiarization with the data: This involved data collection, transcribing interviews, reading and re-reading the data, and making initial notes.
2. Generating initial codes: This step involved generating succinct labels (codes) that identify important features of the data that might be relevant to answering

the research question. It involved coding the entire dataset, and after, collating all the codes and all relevant data extracts, together for later stages of analysis.

3. Searching for themes: This step generally involved collating codes into potential themes and gathering all data relevant to each potential theme. This was done through the creation of theme maps.

4. Reviewing themes: In this step, I checked if the themes work in relation to the coded extracts and the entire data set. It required two levels of reviewing: level-1 involved reviewing at the level of the coded data extracts; level-2 involved reviewing at the thematic map level. Any themes that did not have sufficient support were discarded.

5. Defining and framing themes: I identified the essence of what each theme was about, and determined what aspect of the data each theme captures. The themes were then defined and refined to tell a compelling aspect of the data story.

6. Production of the outcome: The final step involved weaving together the analytic narrative and data extracts and contextualizing the analysis in relation to existing literature and/or the research questions.

It should be recognized that thematic analysis is a flexible and useful research tool that can provide a rich and detailed, yet complex account of data. It is not tied to a particular theoretical framework, so it can be applied within different frameworks. However, this flexibility also means that care must be taken to conduct thematic analysis in a way that is theoretically and methodologically sound.

Evidence of Trustworthiness

Evidence of Trustworthiness is a term used in qualitative research to provide a framework for evaluating the quality, integrity, and validity of the research study. This framework is similar to the concepts of reliability and validity in quantitative research, but it is adapted for the unique nature of qualitative data. Trustworthiness involves four main criteria:

Credibility refers to the confidence that the research findings accurately reflect the data and the perspectives of the participants. To establish credibility, researchers often use strategies such as member checking (giving participants the chance to review and confirm the accuracy of their own data or interpretations), prolonged engagement (spending sufficient time in the field to understand the culture, context, and phenomena under study), and peer debriefing (discussing and reviewing data and interpretations with colleagues).

Transferability refers to the extent to which the findings can be applied in other contexts or with other participants. In qualitative research, it is typically the responsibility of the person seeking to make the transfer to determine the applicability of the findings to another context. To facilitate this, researchers provide thick descriptions (detailed and rich accounts of the data and context) to enable others to make informed judgments about transferability.

Dependability refers to the stability of data over time and under different conditions. It concerns whether the study could be repeated by other researchers and yield the same results. Dependability is often established through an audit trail, where the

researcher keeps detailed records of the research process, decisions, and changes in the study design or implementation, allowing others to review and evaluate the process.

Confirmability refers to the extent to which the findings of the study are influenced by the respondents and not by the researcher's own biases or prejudices. This is equivalent to *objectivity* in quantitative research. To establish confirmability, researchers often use a reflexive journal (where they reflect on their own biases, feelings, and perceptions throughout the study) and an audit trail. When combined as a single process, these four components provide a comprehensive approach for researchers to demonstrate that their study is conducted in a way that ensures the data collected is authentic, reliable, and applicable to other similar contexts. They also provide a mechanism for reviewers or readers to assess the quality and validity of the study.

Study Results

For this study I used Semi-structured open-ended questions to obtain data from 16 participants to address the following research question:

RQ1: *What are the lived Experiences of Americans Who Forgo COVID-19 Vaccination?*

The population of this study included nine males and seven females before saturation was reached. Of those participants, the average age of the males was 49.5 years, while the average age of the 7 female participants was 35.7 years. The participants (1236, 5120, 3669, 1272, 1784, 1212) identified as Republican; participants (2987, 4490, 8897, 2298, 1988, 2202, 9016) identified as Democrats, the remainder (1899, 5464, 9952) identified

as Independent (37%, 43%, 18%). The reasons given for not being vaccinated for CoV-

19 emerged in several primary and secondary themes.

<div align="center">**Principle Themes**</div>

Theme 1: Distrust of Experts

A number of participants expressed skepticism and distrust in the entities

responsible for vaccine development, approval, and distribution. Subject 3369 stated his

wife was a physician and had warned him not to be vaccinated due to the side effects she

had witnessed. Several of his friends were vaccinated, and two had bad effects, so he

thought it prudent to avoid. Other subjects (9016, 5120, 5464, 22983669, 1272, 1784, and

1212) believed that the government intentionally misled the public on the effectiveness of

the vaccines, while others felt that the public health officials were acting on the best

interests of the county but were using insufficient data or that the data was manipulated

by politics. "Either public health experts were lying, or were given the wrong

information, and the end result was the same" (9016). "I think maybe the average person

puts far too much stock and people like Anthony Fauci, and others who are behind the

push for total vaccination" (5464, 1784).

Secondary Themes

Vaccine Safety and distrust of pharmaceutical companies. According to subjects

(3369, 916, 1236, 4490, and 2298) the vaccine was "rushed" and "untested." Others

(1236, 4490, 3987, and 1899) believed the science (research) was not given adequate

time to be vetted, and the government rushed the release for profit. While all subjects

with the exception of 2298 (the youngest subject at 32 years) had taken the seasonal

influenza vaccine, they believed it had been tested adequately. "From what I read; it took seven years to develop the latest influenza vaccine" remarked 5120. Subjects 3669, 1272, and 1784, made similar comments about vaccines in general as being "researched and not rushed out." Another secondary theme that emerged included *Vaccine Efficacy*. Several subjects (236, 5120, 3669, 1272, 1784, and 1212) stated that they were concerned about the potential side effects and the long-term safety of the vaccines, due to the rapid development and deployment of the vaccines. All subjects questioned if the vaccines were truly effective at reducing illness, and a belief in *Natural Immunity* as a better immunity than vaccination, even though the severity of natural infection can be unpredictable and potentially fatal. Of those subjects (3987, 8897, 2298, 2202, 9016, 5464, and 1899) that believed natural immunity was preferable, all but one was female, and either democratic or independent in their political affiliation. This group had an average education of 14 years.

Theme 2: Misinformation and Disinformation

Both "disinformation" and "misinformation" refer to false or misleading information, but the distinction between the two primarily lies in intent. Disinformation is defined as deliberately fabricated or manipulated information that is spread with the intent to deceive (Guess & Lyons, 2020). The creator of disinformation knows that the information is false and intends to mislead. According to these same authors, misinformation is false, but not created or spread with the intent to deceive. Misinformation can be spread by those who believe it to be true. In today's digital age, both disinformation and misinformation can spread rapidly, especially on social media

platforms. Itis crucial for individuals to develop media literacy skills, which include the

ability to critically evaluate the credibility and source of information, in order to discern

between factual information and falsehoods. A majority of participants for this study

suggested that misinformation (inaccurate information spread regardless of intent to

mislead) and disinformation (deliberately misleading or biased information) especially on

social media platforms, contributed to their confusion about vaccine safety. Subjects

3369, 916, and 2298 stated that there seemed to be "no agreeable information" available,

and that the news agencies were "slanting the narrative toward their beliefs" (3369, 2298,

and 1899).

Secondary Themes

A secondary theme that emerged suggested it was often difficult to discern the

facts from opinions from health experts, and the media were often significantly different

in what and how they reported. Subjects 1236, 4490, 5120, and 5464 expressed concern

that the media was, they believed "pushing a narrative that seemed to change constantly"

(5120) resulting in a "confusion about what to do and what not to do" (8897). Further,

several subjects (2298, 1988, 1550, 1272, and 2202) stated that "no news outlet or social

media reported on the truth" largely because it was not yet known. While I had originally

considered political affiliation to be a significant factor in choosing not to be vaccinated

for COVID-19 , I was surprised to learn that the political affiliations were almost evenly

distributed between the two major parties with some identifying as independents.

Another, less mentioned secondary theme was a belief in *conspiracy* by the government,

the CDC, or the WHO. A few subjects said they believed in the conspiracies that the

government was trying to "manipulate" or "intentionally destroy the economy" (5120 and 1899), but most believed it was a genuine if misguided attempt to protect Americans.

Theme 3: Perceived Low Risk of COVID-19 Illness

Complacency emerged as a significant impactor for many subjects, as their perceived risk of catching the disease or having severe outcomes from the disease was low to non-existent. Individuals (1899, 5464, and 1236) perceived their personal risk of severe illness from COVID-19 as low, particularly as they were "healthy" and thus felt that vaccination is unnecessary. Statements including, "There were too many bad effects being reported" (5120, 2298, 3987); others (1236, 1899, 5464, 3669) did not believe that the vaccine would enhance their protection, instead may only lead to side effects. 4490 reported that their sibling had suffered side effects from the *J&J* original vaccine but was forced to "take the shot" as they worked in healthcare. 1236, 1899, 4490, 5120, 2229, 3669, and 5464 believed they could avoid "sick people" as they lived in remote areas and were at little risk of serious infection. When asked about masks, most acknowledged they were of some use, but 1550 and 1272 stated that the masks were useless at stopping the spread of viruses because they were too "loose fitting" and "poorly made."

Secondary Themes

A secondary theme that emerged concerned the need to isolate to protect others. All but one subject (1272) stated that isolation did slow the spread of the virus, and all but two subjects (1899 and 2120) (the eldest subjects) stated that masks and isolation might slow the spread of the pandemic, but these would have devastating effects on society especially when children were isolated, and businesses closed.

Theme 4: Economic Upheaval and Job Loss

Of the subject population, nearly all respondents believed that the mandated masks, isolation order, business closures, and closing of schools were an example of government overreach. Many believed the masks may have been helpful, but the government had no right to force people to wear them. Several (4490, 5120, 8897, 2298, 5464, 3669, 1988, 1550) saw the often changing story from experts as proof that "no one really knew what was actually happening" (8897), and the resulting closure of business cost people their jobs, that few could afford.

Secondary Themes

The apparent confusion or changing pronouncements at the CDC was often sighted as a reason to *avoid trusting in public health reports*, including vaccines. "We were told you could get infection grocery bags, or other surfaces, one week, and then a few weeks later, they told us we couldn't" claimed 3669, a 30-year-old, female with a PhD in English. While one subject (8897) claimed the government could not be trusted in any way, the majority felt the government and experts were operating on changing data and were "just guessing" (9016, 8897, 5464) about what would be effective to avoid infection. Those subjects with children under 18 (8897, 2298, 5464, 3669, 1550, and 1988) stated that the closing of schools was "detrimental" to children's education, and that the loss of revenues "hurt many businesses." Several subjects were either in the Lobster industry or who had family of friends who lost their livelihoods because of the shutdowns. 2298, 4490, 2298, and 1988 had family members who were forced to stop fishing due to the market drop when restaurants closed due to mandates. The majority of

subjects reported frustration at the closures of schools, restaurants, and government offices. Only one subject (2298) believed the closing of businesses was justified at first to slow the spread. Still, many subjects (1236, 1899, 4490, 5120, 2229, 3669, 5464, 2298, 1550 and 1272) suggested *that news media and social media reporting claims about vaccine ingredients, side effects, and long-term impacts,* accurate or not, had an effect on vaccine trust.

Results

After completing the interviews, all but three were done via zoom, it seems clear that a lack of accurate information, conflicting views, politization by politicians and social media, and a failure to provide a clear message was often an issue. In many cases, it was not an active refusal but rather a lack of clear information or access to vaccines. Some subjects stated they may have gotten the vaccine the information had the messages from news providers and experts been more cohesive. Only one subject, the youngest, claimed to be antivaccination. Understanding these themes can help public health officials, community leaders, and healthcare providers address concerns, dispel myths, and increase vaccine uptake. It was of interest that none of the participants, when asked if the public would act the same during the next pandemic, all said no, because "we have been though it and we will ne be so easily scared again" (5120), and "fool me once.." (2298), while others simply said the government would try to overreach but more people would push back next time (1236, 1899, 4490) or would *refuse to follow the mandates* (3987, 5120, 8897, 2298, 5464, 3669, 1988, 1550, 1272, 9952, 2202, 9016).

When asked if they had experienced negative consequences from choosing to forgo

COVID-19 vaccines, all subjects stated they had experienced some degree of adverse

effects. Some stated they had lost once close friends (8897, 2298, 5464, and 3669) others

had lost jobs (1988, 1550, 1272, 9952, 2202). When asked if there were positive

experiences, only three subjects commented; 1550 said that time spent with family

strengthened their bonds, 3669 mentioned time for hobbies and family, and 2298

commented that "any friend who would turn their back on you for your own choice was

not worth keeping."

Summary

This qualitative study focused on the lived experiences of adults who chose to

forgo the COVID-19 Vaccinations. The focus of this study was to examine the factors

that influence the decision-making process of these adults. This chapter includes the

study's introduction, setting, demographics, the analysis results of the data collected from

the sixteen subjects, evidence of trustworthiness, results, and summary.

Views on the COVID-19 vaccines can vary significantly within any broad

political or ideological group, including conservatives, liberals, and independents. Many

of the subjects recognized the benefits of vaccines as "major public health achievements"

and nearly all respondents opted for seasonal influenza vaccines. In fact, some subjects

saw the need to be vaccinated as a personal responsibility to protect oneself, one's family,

and the broader community. However, this changed with the mandates, the unclear

messaging, and the impositions to free movement by the government. These impacts to

personal freedom and autonomy directly impacted those who believe that vaccination

should be a personal choice without government mandates or restrictions. They may not be against the vaccine itself but oppose mandates or any punitive measures against those who choose not to get vaccinated. The vague, changing, and politicized narratives helped create skepticism and distrust. The rapid development and approval process for the CoV-19 Vaccines, potential long-term side effects, especially given the new mRNA technology used in some vaccines, was cited as a reason to forgo vaccination. Finally, economic concerns saw the widespread shutdowns as disastrous for the economy and the imposition on individual freedom. The factors of this study including age, geography, education, and personal experience influence individual perspective on the CoV-19 vaccines. Finally, it is worth acknowledging that vaccine opinions can evolve. As new data emerges, and messaging becomes clearer, people across the political spectrum may change their views on the safety, efficacy, and importance of the COVID-19 vaccines. As always, it is crucial to approach this topic with nuance and understanding.

Finally, Chapter 5 will include the interpretation of the findings, study limitations, recommendations, implications of social change, and conclusion.

Chapter 5: Discussion, Conclusion, and Recommendations

The purpose of this study was to investigate the lived experiences of adults who chose to forgo vaccination against COVID-19 via individual interviews to delve into the complexities and nuances of COVID-19 refusal within its specific context. Despite being into the third year of the COVID-19 pandemic, some adults remain reluctant to be vaccinated, even as new strains emerge (Algara et al., 2022). The research design supported the lived experiences of 16 subjects who felt it was important to share their experiences, and the hope that the information gleaned from this study can help fill the knowledge gap concerning public health messaging, and this study should be repeated after the next pandemic to gauge the effectiveness of the response. This qualitative phenomenological study design used a mHBM to understand the responses to the interview questions. This chapter aims to elucidate from a hermeneutical perspective to specific outcomes of this study.

Findings of this study suggest that the lived experiences of this group were revealed in several themes including how public health messaging, news and social media, and politics impacted their perceptions and behaviors surrounding vaccination for COVID-19. The data were collected from 16 semi structured interviews with adults who chose to forgo vaccination for COVID-19. The participants were aged 30 years to 70 years, include both males and females, and were nearly evenly split between liberal and conservative political views. The remainder of this chapter will include a summary of the results, discussion of the study, findings and conclusions, or discussion of the limitations and recommendations for future research, and the implications of the study.

Interpretation of the Findings

The structure of this study through the identification of themes that emerged during the COVID-19 pandemic by focusing on the lived experiences of adults who chose to forgo COVID-19 vaccination, and I sought to explore, describe, and analyze the meaning of individual lived experiences during COVID-19 (Bartoli et al., 2022). Phenomenological studies look at the experience as a whole, rather than breaking it down into isolated variables. This is crucial for understanding perception, which is a complex interplay between sensory information, cognitive processes, and emotional responses to fully comprehend the decisions of adults who chose to forgo vaccination for COVID-19 (Fisk, 2021; Flaskerud, 2020). The approach considers the context within which perception occurs. It considers the environmental, cultural, social, and historical factors that could influence an individual's perception, providing a rich, contextual understanding of the experience (Giorgi, 2009). This approach to research is often less structured than other research methods, allowing for flexibility in data collection. This is particularly useful when studying perception, as it enables researchers to adapt their methods to better capture the nuances of participants' experiences (Gao & Radford, 2021; Hornsey, 2022). Through in-depth interviews and detailed descriptions, phenomenological studies can uncover the underlying meaning that individuals ascribe to their experiences. This is vital for understanding not just what people perceive but also how they make sense of those perceptions when they are counter to accepted knowledge (Hotez, 2021; Linden et al., 2022). A mHBM helped explain and predict health behaviors based on individual beliefs and perceptions concerning the viability of vaccines against COVID-19 (Lueck &

Callaghan, 2022). The model considers several factors, such as perceived susceptibility to a disease, perceived severity of a disease, perceived benefits of taking preventive action, and perceived barriers to taking that action.by shedding light on the complex, lived experiences of individuals. According to Malik et al. (2020), there are several determinants of vaccine beliefs in the United States including a distrust of scientists due to misinformation on social media (Alkhair et al., 2023; Balmford et al., 2020), perception of risk to illness (Allington et al., 2023), education and scientific literacy (Aljassim & Ostini, 2020), and a willingness to follow political leaders, even when those leaders are admittedly not experts (Algara et al., 2022; Allington et al., 2023). Moreover, Allington et al. (2023) stated that conspiracy theories, general vaccination, attitudes, and distrust of health experts were accurate predictors of vaccine hesitancy among residents of the United Kingdom. Thus, this phenomenon is not entirely American. Other researchers (Bass et al., 2022; Burki, 2020) suggested that the phenomena of refusing COVID-19 vaccination is an offshoot of general vaccine hesitancy, however, in this study all but one subjects stated they had gotten their regular immunizations, and all but one received season influenza vaccines. Other researchers (Darling-Hammond et al., 2020; Dorman et al., 2021) suggested those not wanting to receive the COVID-19 vaccine do not fully comprehend the risk-safety association; however, of the subjects for this study, all seemed very cognizant of the risks, and most were very aware of the other precautions to avoid infection (social distancing, masking, isolation). Of the 16 subjects in this study, 14 felt that the precautions (aside from vaccination) were necessary and prudent.

The results of this study illustrate the complexities of the decision to forgo COVID-19 vaccine. The reasons cannot be simplified to a lack of education, health understanding, political ideation, misinformation, or a distrust of all authorities. To answer the research question: "What are the lived experiences of adults in Washington County Maine who forgo COVID-19 vaccines?" several themes emerged.

Theme 1: A Distrust of Experts

The first finding that aligns with the research question was identified as a distrust of experts. While all but one subject received seasonal influenza vaccines, all participants expressed significant doubts about Anthony Fauci. All 16 participants expressed a desire to follow public heath protocols with the exception of vaccination and acknowledged that most precautions were necessary. A secondary theme that emerged was significant concerns about the *safety* of the COVID-19 vaccines, and all subjects voiced deep concern that the vaccine had been rushed and was untested. Another secondary theme that emerged was vaccine *efficacy*. Most subjects were uncertain the vaccine would be protective and that they might be subjected to side effects and the long-term safety of repeated vaccinations. All subjects questioned if the vaccines were truly effective at reducing illness.

Theme 2: Misinformation and Disinformation

The second finding that aligns with the research question was identified as the experience of misinformation and disinformation on news and social media. All subjects stated that this misinformation contributed to their confusion about vaccine safety. Many

stated that media slanting the narrative toward their beliefs, and several subjects

commented that it was hard to know what to believe.

Secondary Themes

A secondary theme that emerged was the *lack of believability* the subjects felt

toward public health experts. Others felt that it may have been a *conspiracy by the*

government to limit freedom and to impose social controls. Most thought the protocols

were an honest, yet misguided attempt to control the pandemic.

Theme 3: Perceived Low Risk of COVID-19 Illness

The third finding that aligns with the research question was identified as

complacency. The beliefs and experiences of subjects can be understood by applying the

tenets of the HBM, and their personal experiences led them to believe that they were in

little to no danger from COVID-19 infections. All subjects perceived their personal risk

of severe illness from COVID-19 as low, particularly as they were "Healthy" and thus

felt that vaccination is unnecessary.

Secondary Themes

Another secondary theme that emerged concerned that understanding that subjects

needed to isolate to protect themselves and others. All but one subject stated that

isolation did slow the spread of the virus, and 14 of the 16 stated that masks and isolation

might slow the spread of the pandemic, but these would have devastating effects on

society especially when children were isolated, and businesses closed.

Theme 4: Economic Upheaval and Job Loss

Of the subject population, nearly all respondents did not believe that the mandated masks, isolation order, business closures, and closing of schools were an example of *overt government overreach*. However, all subjects believed that businesses and schools allowed themselves to be *Manipulated by the state*. All but one subject was angry at the perceived lack of support from state government, especially after the *Federal Money* had been dispersed to the states but Maine had no system to handle such high numbers of applicants. These closures created significant financial, and by extension, psychological hardships for all subjects, even the one subject who continued to work throughout the pandemic.

Secondary Themes

All 16 subjects felt that the State of Maine *manipulated businesses* to close longer than unnecessarily. This was seen by all subjects as unnecessary given the almost daily *changes in precautions* and *conflicting narratives*.

This study suggests that those who chose to forgo vaccination for COVID-19 were not simply following a political ideology, religious belief system, were poorly educated, or blindly following pandemic denial media. This study is appropriate for researchers seeking to understand the motivations of people whose lived experiences and behaviors are counter to some of the current understanding of vaccine refusal (Algara et al., 2022; He et al., 2022; Lipscy, 2020; Mahale et al., 2020). This finding of this study supports the use of the mHBM to inform the HP model to examine the lived experiences of adults who chose to forgo COVID-19 vaccination. Further, this study confirms that the

underlying reasons for refusing COVID-19 vaccination cannot be simply placed in the "Antivax" camp, as all but one subject have seasonal influenza vaccines as well as other vaccines, suggesting the reasons given by these subjects for forgoing COVID-19 vaccines is complex (Lueck & Callaghan, 2021). Subjects agree that they were given "changing" information from "experts" and this led to their not trusting that anyone really had any answers about the pandemic or the safety of the vaccines.

Limitations of the Study

This study provided a far-reaching description of adults living in Washington county in the state of Maine, who chose to forgo COVID-19 vaccination. The practices of the participants were limited to their perceptions and behaviors that are exclusive to their own experiences. The study may be generalizable to other populations in other geographical locations. However, this study had several limitations. The recruitment process, interview scheduling, and data collection were kept open to ensure participant safety and reduce judgment concerns, relying on those with Facebook access or participants referred by others. Due to the study's location, small sample size, and socioeconomic factors, it might not fully represent the views of all unvaccinated adults against COVID-19. Another limitation is the use of self-reported demographic information. My vaccination status was not discussed, and efforts were made to avoid personal bias during data collection and analysis. Additionally, the study's applicability is limited to adults residing full-time in Washington County, Maine, making it non-generalizable to other contexts. Another issue emerged after all data had been collected when some subjects reported their gift cards were not working. After replacing three, I

received another email from the same initial group. I reached out to Amazon, and they confirmed that all gift cards had been used for purchasing, including the three I had replaced. It seems that four of the 16 felt they could defraud me. Two even emailed me, threating to "Tell your school about this." I notified them that they were of course free to do so, and I provided them with the phone number to the program director and the IRB.

A larger sample size may provide better results. According to Creswell (2014), subject population can be determined by the riches of the data and the complexity of the examination. For the study, differences in subjects' beliefs, education, level, political, affiliation, and gender may impact their lives experiences, and as a result, any future research endeavors. Because qualitative investigation invokes observed hypotheses, a foundation for perceptible themes is established. The final sample size of this study was based upon reaching the saturation of the data. This study was created to explore the lived experiences of adults who chose to forgo COVID-19 vaccines. As the themes were identified through subjective experiences, future investigation may solidify these themes, or may illicit unique findings.

Recommendations

This study helps fill the gap in understanding why some adults refused COVID-19 vaccination. While this study focused on adults living in rural Maine, the results may be suggestive of other populations. Improving public health messaging to enhance vaccination adherence during future pandemics requires a comprehensive and strategic approach. Here are several key strategies to consider:

1. *Clear and Consistent Communication*: Ensure that public health messages are clear, concise, and consistent across different communication channels. Avoid jargon and technical language, scare tactics, sensationalizing messaging, and making information accessible to a wide range of audiences.

2. *Trusted/Respected Messengers:* Use trusted figures such as healthcare professionals, community leaders, and celebrities to deliver messages. People are more likely to listen to and trust information from sources they respect. One clear takeaway from this study is that the government at any level is not considered a trusted messenger.

3. *Tailored Messaging*: Customize messages to address specific concerns and demographics. Understand the unique barriers and motivations within different communities and adapt messaging accordingly. Avoid condescension and try to understand the fear triggers that create inaction.

4. *Emphasize Collective Responsibility*: Highlight the role that individual vaccination plays in protecting not only oneself but also vulnerable populations and the broader community. Emphasize the concept of "we're all in this together." While the majority of subjects in this study agreed that a shared commitment was needed, beliefs differed as to what that action(s) should entail.

5. *Appeal to Emotional and Rational Factors*: Combine emotional appeals with evidence-based information. Address fears and concerns while providing

factual information about the safety and benefits of vaccinations. Answer questions honestly and transparently. Avoid "heavy-handed" actions.

6. *Address Misinformation and Myths*: Actively counter misinformation by providing accurate information through various channels. It is insufficient to point out that others are incorrect, we must also explain why. Simply stating the opinions of experts is not sufficient in and of itself.

7. *Use Positive Framing*: Frame messages positively, focusing on the benefits of vaccination rather than the potential risks. All subjects commented that the news was filled with "gloom and doom." Highlight success stories and positive outcomes related to vaccine use, rather than focusing on the negatives.

8. *Leverage Social Norms*: Highlight the norm of getting vaccinated for other more common diseases. People are often influenced by the behavior of those around them.

9. *Utilize Visuals*: Incorporate visuals like infographics, videos, and animations to convey complex information in an engaging and easy-to-understand manner. Simple tables and scatter graphs as provided by the CDC and others convey information work well for public health practitioners and others in the medical field but may be misunderstood or ignored as "too complicated" by the general public. Several subjects reported going to the CDC website for information on COVID-19 but were unable to ascertain any usable results

from the graphs and tables. Perhaps, as some noted, a short animation about how the vaccines worked, rather than simply stating "facts and figures."

10. *Address Accessibility Barriers*: Try to ensure that information is accessible to all, including those with disabilities, different language preferences, and limited access to technology.

11. *Behavioral Nudges*: Use behavioral economics principles to encourage vaccination. For instance, send reminders, offer incentives, or create a sense of urgency without instilling (or seeming to instill) panic.

12. *Engage in Two-Way Communication*: Foster a dialogue by addressing questions and concerns from the public. Encourage open discussions that allow for a better understanding of people's viewpoints. Do not simply label questions and concerns as "disinformation" or "conspiracy theories."

13. *Use a Feedback Loop*: Collect feedback on the effectiveness of messaging and adjust strategies accordingly. Continuous improvement is key to resonating with the public to avoid the social backlash that has occurred over the pandemic.

14. *Preparedness Messaging*: Start public health messaging well before a pandemic emerges. This helps establish a foundation of awareness and readiness. The pandemic was not handled well by public health, the media, or politicians who sought to capitalize on the chaos.

15. *Collaboration and Partnerships*: Collaborate with community organizations, influencers, media outlets, and other stakeholders to amplify messaging

efforts. Do not simply focus all messaging from "experts" or government

agencies. Accept and understand that many people have varying levels of

suspicion and distrust concerning any form of government backed mandates

or the implementation of policies that impact personal liberties.

By implementing a combination of these strategies, public health messaging can

be more effective in fostering greater adherence to vaccinations during future pandemics.

Flexibility, empathy, and a deep understanding of the public's concerns are essential to

creating impactful messaging campaigns. Moreover, further research into this phenomena

could help frame participant's perceived lived experiences and may suggest a better

understanding of public health messaging.

Implications

This study suggests that the lived experiences of adults who chose to forgo

COVID-19 vaccination negative impacted their interest to become vaccinated. The

phenomenon of interest is the lived experiences of adults in Washington county, Maine,

and the findings of the study may contribute to the current knowledge base on vaccine

refusal among adults in the United States for this and future pandemic infectious disease.

Further, this study holds the potential to play a crucial role in refining public health

messaging, contributing to a more effective approach in conveying accurate and

comprehensible information. By delving into the insights gathered from the participants'

experiences, the study offers a valuable resource for public health professionals to

enhance their communication strategies. The nuances and complexities uncovered within

the participants' narratives provide a deeper understanding of the factors influencing

vaccine decisions. This understanding can serve as a foundation for crafting messages that resonate with individuals' concerns, beliefs, and motivations. Consequently, the study's findings offer a roadmap for public health messaging to bridge the gap between technical information and public comprehension. This, in turn, can empower individuals to make informed choices, fostering a stronger connection between public health initiatives and the diverse perspectives of the population. Drawing from the detailed lived experiences of the 16 participants, whose ages ranged from 30 to 70, it becomes evident that the decision to refrain from receiving the COVID-19 vaccine was far from being a straightforward choice. The narratives of these individuals underscore the complexity that underlies their vaccination decisions. Rather than a binary or one-dimensional determination, their accounts illuminate a multifaceted array of considerations, emotions, and circumstances that factored into their ultimate choice. The participants' stories reveal that their decisions were molded by a tapestry of personal beliefs, societal influences, medical perspectives, and emotional responses. This complexity is a testament to the intricate interplay of individual histories, fears, cultural factors, and information sources that collectively informed their stance on COVID-19 vaccination.

Conclusion

This phenomenological study resulted in 16 participants and their lived experiences, health, beliefs, and perspectives in relation to the COVID-19 pandemic, and specifically the COVID-19 vaccination. 16 semi structured interviews were conducted to attempt to understand the lived experiences and perceptions to COVID-19 pandemic, public health messaging, health, beliefs, and opinions on COVID-19 vaccination.

Experiences of the 16 participants described a similar narrative that resulted in the dissemination of four major themes that included: 1) Distrust of Experts 2) Misinformation/Disinformation, in media 3) A Perceived Low Risk of Illness, and 4) Resentment of Economic Upheaval. While initially it was considered that these subjects refused vaccination based upon political or religious reasoning, the lived experiences were far more nuanced and complex. The idea that "Vaccine deniers" were poorly educated, or religiously indoctrinated may be a simplistic dismissal of those forgoing COVID-19 vaccines (Linden et al., 2022). As a clinical epidemiologist and researcher, I found it interesting that the reasons given for forgoing COVID-19 were more complicated than previously considered. These findings offer new insights into vaccine refusal for COVID-19 such including a political cross-section of adults across several age groups who refused vaccination for COVID-19. While not generalizable, the findings contribute valuable context-specific knowledge to the field of infection control and public health. This research interview sought to gain a perspective on the individuals' perceptions of a number of aspects of the COVID-19 pandemic including media coverage, vaccine safety, public health messaging, media, and social media use, positive or negative consequences from vaccine decisions, financial and social hardships of the pandemic including shutdowns, job loses, and the economic outcomes including inflation and economic depression, the effectiveness of masking and isolation, and perceptions of future pandemics. This study critically examined the firsthand experiences of adults who made the deliberate choice to abstain from receiving the COVID-19 vaccines. The challenges surrounding the dissemination of public health messaging during the COVID-

19 pandemic have been significant, contributing to perceptions of ambiguity and inconsistency. The initial lack of comprehensive understanding about the virus, including its patterns of transmission, posed a difficulty in offering clear and consistent guidelines. As scientific knowledge progressed, our comprehension of the virus evolved. For instance, early recommendations downplayed the significance of mask usage due to limited initial insights. However, as evidence mounted about asymptomatic transmission was likely, and the effectiveness of masks in curbing the spread was established, guidance shifted to align with new findings (Wang et al., 2021). While this scientific evolution is a natural part of the process, the public often perceived these adjustments as contradictory information. A substantial source of confusion emerged from the concurrent dissemination of sometimes conflicting advice by various entities, ranging from global bodies like the WHO to national health departments and local officials. The situation was exacerbated in some countries where pandemic responses, such as mask-wearing or lockdown measures, became entangled with political dynamics, resulting in mixed messages conveyed by political leaders and public health experts by both government and NGOs. The contemporary media landscape, characterized by 24/7 news cycles, social media platforms, and a blend of professional and amateur journalism, facilitated the swift propagation of both accurate information and misinformation. The intricacies of information were often compromised or met with skepticism, leading to the emergence of contradictory narratives. Throughout the pandemic, the proliferation of both misinformation and disinformation further obscured the clarity of public health messaging. Therefore, it is important to recognize that differing societies possess diverse

attitudes toward matters of public health, authority, individual rights, and collective responsibility. Messaging that effectively resonates within one cultural context may prove ineffective in another. The study underscores that the effectiveness of public health communication strategies must be tailored to the nuances of each society's values and perceptions, and the lived experiences of individuals who chose not to take the COVID-19 vaccines and sheds light on the complexities of public health messaging during the pandemic. It highlights the challenges arising from evolving scientific understanding, conflicting sources of advice, media landscape dynamics, and cultural variations, all of which contributed to the intricate web of perceptions and decisions surrounding vaccine uptake.

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Appendix A: Research Guide

QUALITATIVE RESEARCH IN-DEPTH INTERVIEW GUIDE

Greetings

My name is Bill Davis, and I am a doctoral student in psychology at Walden University. I am concentrating on Health Psychology. For this research project I will be asking questions about COVID-19 Vaccines. I want you to be as open an honest when answering these questions and know that you are free to decline to answer any questions. Before getting started, we need to go over some basic rules.

1. All information collected during the course of this project will be kept anonymous.

2. I will not use your name or any other identifying information and everything that you say will only be used for research purposes.

3. Each person participating in this study will be assigned a random 4-digit identifier before data is entered, so there will be no possibility of confidential information being disclosed.

Interview Guide

1 How are you doing today?

2. Perceptions/Preferences

    a. Can you tell me the reason you chose not to be vaccinated for COVID-19 ?

    b. Can you tell me if you know how COVID-19 is spread?

    If yes, tell me more.

3. Can you tell me if you talk about COVID-19 in your house?

    If yes or no, what are some of the reasons?

4. What did you like about meeting with me for this project?

    What did you not like?

5. How do you think the news media and politicians have affected the public's perception of the pandemic?

6. Can you tell me if you feel that political parties' influences people's public health opinions?

       How?

7. Can you tell me if you have experienced any positive or negative consequences because of your vaccine decisions?

       What were they?

8. Can you tell me if the shut down during the pandemic was a hardship?

       If yes, please tell me more? If not, please tell me more?

9. Can you tell me if you have ~~you~~ been tested or have you used at home tests for COVID-19 .

       Do you think these tests are useful?

10. Do you think that masks were or are useful is slowing the spread of COVID-19 ?

       Why or why not?

11. If there is another pandemic, do you think people will respond the same or different?

       Can you please tell me more?

Appendix B: Recruitment Flyer for Social Media

Social media post: Facebook Community

There is a new study about the experiences of adults aged 30-70 who are full-time residents of Washington County who did not receive any of the COVID-19 vaccinations. This study will help public health experts and policy makers understand the lived experiences of people. For this study, you are invited to describe your experiences in an in-person interview.

About the study:
- One 30-45 minute phone interview that will be audio recorded.
- You would receive a $20 Visa gift card as a thank you.
- To protect your privacy, the published study would use a series of four random numbers rather than names.

Volunteers must meet these requirements:
- 30-70 years old
- Live full time in Washington County, Maine
- Have not been vaccinated for COVID-19

This interview is part of the doctoral study for W Sumner Davis, a Ph.D. student at Walden University. Interviews will take place from June 1- July 15, 2023.

Please message - - - - privately to let me know of your interest.