THE IMPACT OF COERCIVE COVID 19 VACCINATION ON THE MENTAL HEALTH OF PEOPLE IN ITAMAGA COMMUNITY, IKORODU, LAGOS

Omorefe Daniel OGBESOYEN
SSC1810074

DEPARTMENT OF SOCIAL WORK
FACULTY OF SOCIAL SCIENCES
UNIVERSITY OF BENIN
BENIN CITY

SEPTEMBER, 2023

THE IMPACT OF COERCIVE COVID 19 VACCINATION ON THE MENTAL HEALTH OF PEOPLE IN ITAMAGA COMMUNITY, IKORODU, LAGOS

Omorefe Daniel OGBESOYEN
SSC1810074

A RESEARCH PROJECT WRITTEN IN THE DEPARTMENT OF SOCIAL WORK, FACULTY OF SOCIAL SCIENCES, UNIVERSITY OF BENIN, BENIN CITY IN FULFILING THE REQUIREMENTS FOR THE AWARD OF A BACHELOR OF SCIENCE DEGREE (B.SC.) IN SOCIAL WORK.

SEPTEMBER, 2023

CERTIFICATION

This is to certify that this project titled **"The Impact of Coercive Covid 19 Vaccination on the Mental Health of People in Itamaga Community, Ikorodu, Lagos"** was carried out by **Omorefe Daniel OGBESOYEN** in the Department of Social Work, Faculty of Social Sciences, University of Benin, Benin City.

_____	_____
DR. K.A. IMAFIDON	**DR. S.O. IBOBOR**
PROJECT SUPERVISOR	**HEAD OF DEPARTMENT**
_____	_____
DATE	**DATE**

DEDICATION

This research is dedicated to GOD ALMIGHTY, for his grace, mercy and protection throughout my academic sojourn in this great citadel of learning. I am grateful to you, Lord Jesus Christ. Also to my parents that have provided financial and moral support for me throughout the period of my studies in the University of Benin.

ACKNOWLEDGMENTS

Praise be to God Almighty for the gift of life, sustenance, wisdom, knowledge and understanding that He bestowed on me during the course of my study and while carrying out this research. Special thanks to my parents Mr. and Mrs. OGBESOYEN for your support and contribution to the success of this work. Also my sincere gratitude goes to my supervisor Dr. K.A. IMAFIDON for finding time out of his busy schedule to read through this work and effect corrections which enriched this research. I remain eternally grateful to you sir. Special thanks to my best friend M.I AYEMIEN for your love and support to the success of this work.

Special thanks also goes to the head of department Dr. S.O. IBOBOR and to all my lecturers and colleagues in the Department of Social work, University of Benin for impacting me academically and adding immense knowledge to me which has helped shape my thoughts.

TABLE OF CONTENTS

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

ABSTRACT

The study aimed to examine the impact of coercive COVID-19 vaccination on the mental health of people in Itamaga community, Ikorodu, Lagos State. The specific objectives were to investigate the perceived mental health effects of vaccination, to understand people's reactions towards the COVID-19 vaccine, and to assess the level of stigma on those who were vaccinated. A survey methodology was employed, with data collected from a sample of 150 respondents in the Itamaga community. The data was analyzed using descriptive statistics, with frequencies and percentages used to interpret the responses. The findings revealed a significant perception among respondents that COVID-19 vaccination affects mental health. Additionally, a high level of vaccine hesitancy and fear was observed, with many respondents expressing fear of taking the vaccine due to concerns about death or sickness. Stigma associated with vaccination was also prevalent in the community. Based on these findings, it is recommended that mental health support be integrated into vaccination programs, targeted education and communication strategies be implemented to address vaccine hesitancy and fear, and efforts be made to address the stigma associated with vaccination.

CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND TO THE STUDY

Vaccines save millions of lives by limiting the spread of disease to the unvaccinated and by preventing disease (Li et al. 2021). However, prevention of disease is not the only benefit of vaccines. Vaccines can also reduce stress and anxiety caused by the threat of infection, and particularly relevant during the COVID-19 pandemic, also reduce the adverse consequences of risk mitigation strategies such as social isolation. In part due to uncertainty about the future of the course of the pandemic, concerns about COVID-19 infection, social isolation while under shelter-in-place policies, and economic uncertainty or job loss, many experts predicted a "second pandemic" of mental and behavioral health problems due to the pandemic (Breslau et al. 2021). By December 2020, over 40% of U.S. adults reported symptoms of anxiety or depression (Vahratian et al. 2021). However, the introduction of vaccines in December offered hope and optimism. The ongoing COVID-19 pandemic has prompted global efforts to develop and distribute vaccines as a means to control the spread of the virus. Vaccines may improve mental health through both private and external pathways (Baden et al., 2021). Vaccinated individuals face dramatically lower risks of COVID-19 infection and lower severity of COVID-19 illness (Sadoff et al. 2021). This direct impact of vaccines reduces uncertainty about the future – what will

happen if I get infected – which in turn might reduce a vaccinated person's anxiety or depression associated with fears of infection risk (Perez-arce et al. 2021). Vaccinations can also have spill over effects. In particular, increased vaccination by others within a community also reduces private risks of infection, which can also reduce private concerns of COVID-19 infection. Increased community vaccination also reduces social distancing and willingness to stay at home (Polack et al. 2020), which can reduce the mental health effects of social isolation. Broader vaccination can enable large-scale social gatherings (e.g., restaurants, return to work, in-person school), more than when just isolated social networks are vaccinated. Through this pathway, the increase in community vaccination rate can have spill over effects on mental health of others in the community including the unvaccinated. Vaccine programs have been met with various levels of acceptance and resistance, leading to debates on the ethical implications and potential mental health consequences of coercive vaccination strategies.

There are external benefits to having as many individuals vaccinated as possible. As a result many economic policies focus on increasing vaccination rates (Carpenter and Lawler 2019). During the COVID-19 pandemic, these policies range from free Krispy Kreme donuts, to state-run lotteries (Walkey, Law, and Bosch 2021; Brehm, Brehm, and Saavedra 2021; Barber and West 2021), to workplace requirements that require vaccination (Klompas, Pearson, and Morris 2021). These

policies are aimed to address the primary external benefit of COVID-19 vaccination's impact on COVID-19 transmission. However, the potential spillover effects of such vaccine campaigns on mental health have not been studied. The potential mental health benefits of COVID-19 vaccines might be an important part of the total benefits of COVID-19 vaccines. Prior to the COVID-19 pandemic, mental health disorders accounted for over $200 billion in annual medical spending in the United States (Roehrig 2016). Cutler and Summers (2020) estimate that the total cost of the COVID-19 pandemic may reach as high as $16 trillion. Given the striking increase in anxiety and depression during the pandemic, cutler and Summers give particular attention to the mental health costs of the pandemic and estimate that the costs of depression and anxiety approximates $20,000 per-person per-year. Assuming that the mental health symptoms last for only one year, they conclude that valuation of mental health costs due to the pandemic can be as high as $1.6 trillion. If vaccines do have an impact on mental health conditions, then the expected cost of the pandemic could be greatly reduced.

1.2 STATEMENT OF THE PROBLEM

The COVID-19 pandemic has had a profound impact on the global population's mental health, with Nigeria being no exception. The introduction of coercive vaccination policies, where individuals are compelled to receive the vaccine,

has further complicated this issue. This project aims to explore the mental health implications of such policies on the Nigerian population.

The first aspect to consider is the general impact of the COVID-19 pandemic on mental health. According to Pfefferbaum and North (2020), the pandemic has led to increased rates of anxiety, depression, post-traumatic stress disorder, and other mental health disorders worldwide. This is due to a variety of factors, including fear of the virus, social isolation due to lockdown measures, and economic instability. In Nigeria, a study by Umukoro and Baba (2020) found similar results, with a significant increase in mental health issues since the start of the pandemic.

The introduction of coercive vaccination policies can exacerbate these mental health issues. According to a study by Bish et al. (2021), mandatory vaccination policies can lead to increased stress and anxiety. This is due to a variety of factors, including fear of the vaccine, perceived infringement on personal freedoms, and the potential for social conflict. In Nigeria, where vaccine hesitancy is high due to a variety of cultural, religious, and socio-economic factors (Afolabi et al., 2020), these issues may be particularly pronounced.

Furthermore, coercive vaccination policies can have a negative impact on trust in government and healthcare institutions. According to a study by Lazarus et al. (2020), such policies can lead to decreased trust, which can in turn lead to increased

stress and anxiety. In Nigeria, where trust in government and healthcare institutions is already low (Onyishi et al., 2020), this could further exacerbate mental health issues.

Finally, the potential for social conflict resulting from coercive vaccination policies can also have a negative impact on mental health. According to a study by Taylor et al. (2019), social conflict can lead to increased rates of depression, anxiety, and other mental health disorders. In Nigeria, where social conflict is already a significant issue (Akinola et al., 2020), coercive vaccination policies could further exacerbate these problems.

1.3 SIGNIFICANCE OF THE STUDY

The study on coercive COVID-19 vaccination and its impact on the mental health of people in Itamaga community Ikorodu, Lagos, is significant in several ways. Firstly, it contributes to the academic literature on the intersection of public health and mental health. The study provides insights into the potential psychological consequences of mandatory vaccination policies, which can inform future research in this area.

Secondly, the study has contributed to put the study area on the academic map.

Thirdly, the study is based on empirical data collected through surveys and interviews, which provide evidence of the mental health impact of coercive vaccination policies. The findings of the study can inform policy and practice in Nigeria and other countries facing similar challenges.

Fourthly, the study adds to the existing body of knowledge research on the mental health impact of COVID-19 vaccination policies. It highlights the need for policymakers to consider the potential psychological consequences of mandatory vaccination policies and to implement strategies to mitigate any negative effects.

Fifthly, the study can serve as a tool for policy formulation in Nigeria and other countries to develop evidence-based policies that prioritize the mental health of citizens when implementing vaccination programs. The findings of the study can help policymakers to make informed decisions about the best approach to vaccination, taking into account the potential mental health impact.

Finally, the study can serve as a stepping stone to further research on the mental health impact of mandatory vaccination policies. The findings of the study raise important questions about the long-term effects of coercive vaccination policies on mental health outcomes. Longitudinal studies that track the mental health of individuals over time can help to answer these questions and inform future policy decisions.

1.4 SCOPE/AREA OF THE STUDY

The scope of the study examines the coercive COVID-19 vaccination on the mental health of people in Itamaga community Ikorodu, Lagos. The study also look at the prevalence of mental health problems in people who have been coerced into getting the COVID-19 vaccine, the types of mental health problems that are most

common in people who have been coerced into getting the COVID-19 vaccine, the factors that contribute to the development of mental health problems in people who have been coerced into getting the COVID-19 vaccine, the effectiveness of different treatments for mental health problems in people who have been coerced into getting the COVID-19 vaccine, and the ways in which the mental health of people who have been coerced into getting the COVID-19 vaccine can be protected.

1.5 AIM AND OBJECTIVES OF THIS STUDY

The main objective of the study is to examine coercive COVID-19 vaccination on the mental health of people in Itamaga community, Ikorodu. The specific objective are to:

1. examine the coercive impact of COVID-19 vaccination on the mental health of people in Itamaga Community Ikorodu, Lagos.
2. examine the reaction of people towards COVID-19 vaccine in Itamaga Community, Ikorodu, Lagos.
3. examine the level of stigma on those who were vaccinated.

1.6 RESEARCH QUESTIONS

In order to achieve the above objectives, the study came up with the following research questions. The research questions are stated as follows:

1. What are the coercive impact of COVID-19 vaccination on the mental health of people in Itamaga Community Ikorodu, Lagos.

2. What are the reaction of people towards COVID-19 vaccine in Itamaga Community, Ikorodu, Lagos.

3. What is the level of stigma on those who were vaccinated.

1.7 DEFINITION OF TERMS

1. **Covid-19**: The coronavirus disease of 2019 (COVID-19) is a communicable respiratory disease caused by a new strain of coronavirus that causes illiness in humans.

2. **Vaccination:** The treatment with a vaccine to produce immunity to a particular infectious disease or pathogen.

3. **Mental Health:** Mental health includes our emotional, psychological, and social wellbeing. It affects how we think, feel, and acts. It also helps determine how we handle stress, relate to others, and make healthy choices.

CHAPTER TWO

LITERATURE REVIEW

2.1 GLOBAL OVERVIEW OF COVID-19

COVID-19, a novel coronavirus disease, emerged in December 2019 and rapidly spread worldwide, bringing about a global pandemic unprecedented in recent history (Zhou et al., 2020). The pandemic has affected all dimensions of human life, from health to economic and social facets, leading to a glut of research aimed at understanding, mitigating, and ultimately overcoming the crisis through epidemiology, transmission dynamics, clinical characteristics, diagnosis, treatment, vaccine development, and societal impacts.

However, the epidemiological studies of COVID-19 have helped to define the scale and trajectory of the pandemic. Early research from China outlined the initial outbreak and provided an understanding of the disease's basic reproduction number (R0), case fatality rate, and incubation period (Li et al., 2020). Subsequent studies expanded these findings to other contexts, revealing variations in these variables depending on the population and public health measures employed (Kissler et al., 2020). Understanding the transmission dynamics of COVID-19 has been another crucial area of research. The virus predominantly spreads through respiratory droplets and close person-to-person contacts (van Doremalen et al., 2020). However, airborne

transmission in closed environments, fomite transmission, and even possible fecal-oral transmission have also been identified and studied (Morawska and Cao, 2020).

Furthermore, beyond epidemiology and transmission, the clinical characteristics of COVID-19 have been a critical focus. Huang et al. (2020) initially described the clinical features of COVID-19, outlining its presentation, progression, and severity. Subsequent research has expanded our understanding of the disease's clinical spectrum, which ranges from asymptomatic or mild illness in many cases to severe or critical illness, especially in elderly patients and those with comorbidities (Zhou et al., 2020). In terms of diagnosis, the reverse transcriptase-polymerase chain reaction (RT-PCR) remains the gold standard for detecting COVID-19 (Corman et al., 2020). However, the development and advancement of other diagnostic tools, including rapid antigen tests and antibody tests, have been crucial in expanding testing capacity and understanding the disease's prevalence and immunity (Peeling et al., 2020).

Moreso, the treatment strategies for COVID-19 have evolved significantly since the start of the pandemic. Initially, supportive care, including oxygen therapy and mechanical ventilation for severe cases, was the primary treatment (Wang et al., 2020). However, research has led to the repurposing of existing drugs, such as dexamethasone, for COVID-19 treatment and the development of new therapeutics, such as monoclonal antibodies and antivirals (RECOVERY Collaborative Group,

2020; Weinreich et al., 2021). Vaccine development has been a particularly vibrant field of research. The rapid development of effective vaccines, including mRNA vaccines from Pfizer-BioNTech and Moderna, vector vaccines from Johnson & Johnson and AstraZeneca, and inactivated vaccines from Sinovac and others, have been major achievements (Polack et al., 2020; Baden et al., 2020). Lastly, the societal impacts of COVID-19 have been profound and wide-ranging. Researchers have examined the effects on mental health researchers have examined the effects on mental health, economic consequences, healthcare systems, and social dynamics. Studies have documented increased rates of anxiety, depression, and stress among individuals during the pandemic (Pierce et al., 2020). The economic impact has been substantial, with job losses, business closures, and disruptions in global supply chains (McKibbin and Fernando, 2020). Healthcare systems have faced immense strain, with overloaded hospitals, shortages of medical equipment, and challenges in providing care for non-COVID-19 patients (Remuzzi and Remuzzi, 2020). Social dynamics have shifted as well, with changes in social interactions, travel restrictions, and the adoption of remote work and virtual learning (Nicola et al., 2020).

2.2 THE COERCIVE IMPACT OF COVID-19 VACCINATION ON INDIVIDUAL MENTAL HEALTH

Studies have shown that vaccinations, in general, can arouse fear and anxiety among the public due to potential side effects, misinformation, and a general mistrust

of medical interventions (Larson et al., 2014; Dubé et al., 2015). In the Nigerian context, these fears have been amplified by the rapid development and distribution of COVID-19 vaccines, leading to increased levels of vaccine hesitancy and associated mental health issues (Salako et al., 2021). However, the way in which the COVID-19 vaccination has been presented and delivered has been suggested to have a coercive impact on individuals. Coercion, in this context, refers to the perceived pressures, both direct and indirect, exerted on individuals to receive the vaccine (Pierik, 2018). According to Gostin et al.. (2021) argue that coercive vaccination refers to the implementation of strategies that restrict individual freedoms, using pressure or legal measures to ensure compliance. This concept is further explored by Selgelid (2020), who emphasizes that coercion can encompass both overt tactics, such as mandates or requirements, as well as more subtle pressure from social norms or economic incentives. For instance, the implementation of policies that restrict unvaccinated individuals from certain activities or access to certain facilities may lead to feelings of coercion, contributing to mental health distress (Schaffer, 2021).

In Nigeria, a country with a high prevalence of mental health disorders and insufficient mental health services (Gureje et al., 2006), the coercive impact of the COVID-19 vaccination may be particularly severe. The combination of the pandemic, the vaccination campaign, and pre-existing mental health problems could exacerbate the mental health crisis in the country (Adewuya & Afolabi, 2020). Anecdotal reports

suggest that the vaccination campaign has caused increased levels of stress, anxiety, and depression among the public, but empirical studies are needed to confirm and quantify this effect (Adewuya & Afolabi, 2020;).

Moreso, several scholars have examined the psychological distress and anxiety that can result from coercive vaccination. In a study by Taiwo & Abayomi (2020), individuals who experienced coercion during the Severe Acute Respiratory Syndrome (SARS) outbreak reported higher levels of psychological distress. Similarly, Schaffer (2021) highlighted the potential negative impact of coercion on mental well-being, including increased anxiety and reduced trust in healthcare systems. In addition, research has shown that coercion during vaccination campaigns can lead to trauma and even post-traumatic stress disorder. In a compelling study, Wheaton et al. (2020) examined the experiences of forcibly vaccinated individuals during the 2009 H1N1 influenza pandemic. They found that those who were coerced reported higher rates of PTSD symptoms compared to those who were vaccinated voluntarily, emphasizing the potential long-term psychological consequences of coercion.

2.3 IMPACT OF COVID-19 VACCINATION ON MENTAL HEALTH:

Emerging research has shed light on the impact of COVID-19 vaccination on mental health. Many individuals experience a range of emotions during the vaccination process, including anxiety, fear, and relief. According to a study by Smith et al. (2021), these emotional responses can mirror the stages of crisis outlined in crisis

intervention theory, such as the initial impact, regression, and reintegration. The study found that individuals who experienced high levels of distress during the vaccination process were at higher risk of developing post-vaccination anxiety and related mental health issues.

Furthermore, the fear of adverse reactions or long-term side effects associated with COVID-19 vaccines has been identified as a stressor that can exacerbate mental health symptoms. A study by Johnson et al. (2022) found a significant association between vaccine-related anxiety and symptoms of depression and anxiety disorders. These findings align with crisis intervention theory, which highlights the role of fear and uncertainty in exacerbating psychological distress during times of crisis.

On the other hand, COVID-19 vaccination has also been associated with positive mental health outcomes. Research by Chen et al. (2021) suggests that vaccination can alleviate anxiety and depression symptoms by reducing the fear of contracting the virus. Vaccination provides individuals with a sense of control and protection, alleviating the psychological burden associated with the pandemic. This finding aligns with crisis intervention theory, which emphasizes the importance of restoring a sense of safety and stability during a crisis.

2.4 IMPACT OF COVID-19 VACCINATION ON VIRUS REDUCTION

Vaccination is a proven method to prevent the spread of infectious diseases and has historically played a crucial role in controlling epidemics and pandemics

(WHO, 2020). The introduction of COVID-19 vaccines has provided hope for curtailing the virus's transmission and reducing its overall impact. Recent studies have demonstrated the real-world effectiveness of COVID-19 vaccines in reducing virus transmission. A study by Dagan et al. (2021) conducted in Israel, which included the Pfizer-BioNTech vaccine, found a significant decline in the SARS-CoV-2 infection rate among vaccinated individuals compared to unvaccinated individuals. The findings indicated a 92% reduction in confirmed COVID-19 cases, suggesting that vaccination plays a substantial role in reducing the virus's spread. Similarly, Vasileiou et al. (2021) found that vaccination reduced hospitalizations in the United Kingdom.

Moreso, as new COVID-19 variants emerge, understanding the impact of vaccination becomes increasingly important. A study by Lopez Bernal et al. (2021) focused on the Oxford-AstraZeneca vaccine and found it to be highly effective against the Alpha variant. However, the efficacy was lower against the Beta variant. These findings highlight the need for continued monitoring of vaccine efficacy against different variants and the potential impact on virus reduction.

However, studies investigating the impact of COVID-19 vaccination on virus levels in developing countries have been limited but essential for a comprehensive understanding of the global situation. A study conducted by Gaziano et al. (2022) in South Africa demonstrated a notable reduction in COVID-19 transmission and hospitalizations following the rollout of vaccines. The study emphasized the

significance of equitable vaccine distribution and targeted vaccination campaigns in curbing virus levels.

Moreover, scholars have highlighted the challenges faced by developing countries in vaccine acquisition and rollout. Wouters et al. (2021) pointed out the global inequality in vaccine access, while Nachega et al. (2021) explored the logistical and infrastructural issues faced by African countries in vaccine distribution. These challenges may affect the impact of vaccination in reducing virus levels in Nigeria, necessitating context-specific research.

2.5 PUBLIC PERCEPTIONS TOWARDS COVID-19 VACCINE

2.5.1 Factors Influencing Vaccine Acceptance

2.5.1.1. Knowledge and Information

Scholars have emphasized the crucial role of knowledge and information in shaping vaccine acceptance. Adequate and accurate information plays a vital role in dispelling misconceptions and addressing concerns related to vaccine safety and efficacy (Otu et al., 2020). Access to accurate and reliable information about COVID-19 vaccines is crucial for promoting vaccine acceptance in Nigeria (Otu et al., 2020).

2.5.1.2 Vaccine Hesitancy

Vaccine hesitancy refers to the delay in acceptance or refusal of vaccines despite their availability. Several studies have highlighted the presence of vaccine hesitancy among Nigerians, attributed to factors such as distrust in the healthcare

system, religious beliefs, and misinformation (Balogun et al., 2021; Oleribe et al., 2021). Vaccine hesitancy among Nigerians can stem from concerns about vaccine safety, side effects, and a lack of trust in the healthcare system (Akande et al., 2022).

2.5.1.3 Vaccine Confidence and Trust

Trust in the healthcare system and the government's ability to deliver safe and effective vaccines is crucial for vaccine acceptance. Scholars have emphasized the need for building trust and confidence in COVID-19 vaccines through transparent communication and community engagement (Wilder-Smith et al., 2021). Building trust in COVID-19 vaccines requires transparency, clear communication, and a focus on equity in vaccine distribution (Oleribe et al., 2021).

2.5.2 Stigmatization and Vaccination

Stigmatization has been defined as the process of labeling and discriminating against individuals or groups based on perceived differences or characteristics. In the context of vaccination, stigmatization can occur due to a lack of trust in the vaccine or fear of side effects. Studies have shown that stigmatization can negatively impact the effectiveness of vaccination programs and result in social exclusion, discrimination, and decreased uptake of vaccines (Larson et al., 2014). In Nigeria, a significant proportion of the population is skeptical about the COVID-19 vaccine due to misinformation and conspiracy theories (Okolie et al., 2021). This skepticism has led to stigmatization of those who received the vaccine, with some individuals facing

discrimination and social exclusion from their communities. The stigmatization has been fueled by false information circulating on social media and other platforms, leading to fear and mistrust in the vaccine.

2.5.2.1 Factors Contributing to Stigmatization

Several factors contribute to stigmatization of those who received the COVID-19 vaccine in Nigeria. Firstly, the government's communication strategy on the vaccine has been inadequate, leading to misunderstandings and rumors about the vaccine. Secondly, the media has played a significant role in spreading misinformation and conspiracy theories, fueling skepticism and fear of the vaccine (Otu et al., 2021). Thirdly, cultural beliefs and practices have contributed to stigmatization, with some communities viewing vaccination as a form of witchcraft or a plot by the government to depopulate the country.

2.5.2.2 Impact of Stigmatization

The stigmatization of those who received the COVID-19 vaccine in Nigeria has had various negative impacts. Firstly, it has led to decreased uptake of the vaccine, which has hindered the country's efforts to achieve herd immunity. Secondly, it has resulted in social exclusion and discrimination, leading to mental health issues such as anxiety and depression (Afolabi et al., 2021). Thirdly, it has eroded public trust in the government's ability to manage the pandemic, leading to further skepticism and resistance to public health measures.

2.6 RECOMMENDED WAYS TO CURB PUBLIC PERCEPTION OF COVID-19 VACCINE

1 Educational campaigns should focus on addressing common misconceptions and providing evidence-based information to improve public understanding of vaccine safety and efficacy (Ezeibe et al., 2021).

2 Health authorities and policymakers should collaborate with trusted community leaders, healthcare professionals, and local influencers to disseminate accurate information about COVID-19 vaccines through multiple channels, including mass media, social media, and community outreach programs (Oleribe et al., 2021).

3 Efforts should be made to tailor vaccine information to diverse populations, considering language, literacy levels, and cultural beliefs, to ensure effective communication (Balogun et al., 2021) and debunking vaccine misinformation and promoting evidence-based facts to counteract vaccine hesitancy (Anzani et al., 2021).

4 Leveraging social networks and peer-to-peer communication can play a significant role in disseminating accurate vaccine information and addressing concerns within communities (Ogundele et al., 2020).

5 Engaging with vaccine-hesitant individuals through open dialogue, empathy, and active listening can help address their concerns and increase vaccine acceptance (Olumorin et al., 2021).

6 Addressing the historical context of vaccine development and the role of colonialism in shaping vaccine perceptions can be vital in fostering trust and overcoming vaccine hesitancy (Wilder-Smith et al., 2021).

7 Healthcare providers play a crucial role in addressing vaccine hesitancy by providing accurate information, addressing concerns, and building trust with patients (Ezeibe et al., 2021).

8 Johnson et al. (2018) emphasize the importance of considering local beliefs, values, and historical experiences when assessing the impact of coercive vaccination. Furthermore, a study by Moin et al. (2019) highlights the significance of community engagement in building trust and addressing vaccine hesitancy.

9 Strengthening the healthcare system's capacity to deliver vaccines effectively and efficiently can enhance public trust in the vaccination process (Otu et al., 2020).

10 Monitoring and addressing vaccine-related adverse events in a timely and transparent manner can reinforce confidence in the safety of COVID-19 vaccines (Wilder-Smith et al., 2021).

2.7 THEORETICAL FRAMEWORK

Crisis Intervention Theory

The theoretical framework for this study is based on the Crisis Intervention Theory, which posits that a crisis can disrupt a person's equilibrium and normal functioning, leading to distress and requiring intervention (Roberts, 2005). The COVID-19 pandemic, and the subsequent introduction of vaccines, can be seen as a crisis situation, with the coercive aspect of vaccination potentially exacerbating the mental health impact on individuals.

The first objective of this study is to examine the coercive impact of COVID-19 vaccination on the mental health of people in Itamaga Community, Ikorodu, Lagos. According to the Crisis Intervention Theory, the forced nature of vaccination could lead to increased stress and anxiety, potentially exacerbating existing mental health issues (James & Gilliland, 2017). This is particularly relevant in the context of the COVID-19 pandemic, where fear and uncertainty are already high. The coercive aspect of vaccination could further increase these feelings, leading to a crisis situation that requires intervention.

The second objective is to examine the reaction of people towards the COVID-19 vaccine in Itamaga Community, Ikorodu, Lagos. The Crisis Intervention Theory suggests that people's reactions to a crisis can vary widely, depending on their personal characteristics, previous experiences, and available resources (Roberts, 2005).

Some people may react with fear and resistance, while others may accept the vaccine as a necessary measure to control the pandemic. Understanding these reactions is crucial for developing effective interventions and supports.

The third objective is to examine the level of stigma on those who were vaccinated. Stigma can be a significant barrier to seeking help and can exacerbate the impact of a crisis on mental health (Link & Phelan, 2001). In the context of COVID-19 vaccination, stigma could arise from misconceptions about the vaccine, fear of side effects, or societal pressure against vaccination. This stigma could further increase the mental health impact of the coercive vaccination, making it even more important to address in crisis intervention efforts.

CHAPTER THREE

METHODOLOGY

The methods used to explore the impact of coercive COVID-19 vaccination on mental health of people in Itamaga community, Ikorodu Lagos state is the main emphasis of this section. The methodology is broken down into numerous smaller areas, including design, study population, sample size and sampling techniques, research instrument, instrument research validity, data reliability, method of data collecting, and method of data analysis.

3.1 RESEARCH DESIGN

The survey research design was adopted for this study. The survey research strategy was chosen because it is the most effective technique to respond to the queries posed by the study's objectives. Survey research is the process of collecting information from a sample of people by asking them questions (Check & Schult, 2012). This kind of approach allows for the use of a wide range of participant recruiting. collecting, and instrumentation strategies. In order to achieve the primary goal of the study's design.

3.2 POPULATION OF THE STUDY

The study population comprises youths and adults of Itamaga community of Lagos State with a population of 1,725 according to the National Bureau of Statistics (NBC, 2006). However, the study used the 2022 projected population figure of 4,678.

The study population was chosen because it was expected to be a true representation of all youths and adults between the ages of 18 to 50 years of age in Ikorodu local government area of Lagos State.

3.3 SAMPLE SIZE AND SAMPLING TECHNIQUE

A sample size refers to the number of observations or individuals in a sample. The sample is a subset of the population that is being studied. It is a measure of the amount of data collected in a study. The size of the sample can greatly affect the accuracy of the conclusions drawn from the study. A larger sample size can lead to more accurate results, as it is more likely to be representative of the population. However, larger samples also require more resources to collect and analyze. Determining the appropriate sample size for a study is a complex process that involves considering factors such as the population size, the margin of error that can be tolerated, and the level of confidence desired in the results. There are various statistical methods and formulas that can be used to calculate the optimal sample size for a study.

Sampling technique refers to the process of selecting a subset of a population to obtain information about the characteristics of the entire population. Sampling techniques are used in various fields, including statistics, research, and data analysis, to draw inferences about a population based on the observations made from the sample, e.g simple random sampling, systematic sampling, stratified sampling etc.

A simple random selection technique was used for the purpose of this study as it provides an equal opportunity for all individuals within the study population to be selected, minimizing biases and increasing the generalizability of the findings. Simple random was used to select the quantitative sample of 150 respondents of the coercive COVID-19 vaccination in the Itamaga community of Lagos State as the study sample. Vicinity covered during the course of this research include churches, health centers, transport services, market and schools where by respondents were randomly selected from each vacinity.

3.4 RESEARCH INSTRUMENT

The researcher developed a structured questionnaire on coercive COVID-19 vaccination and it impact on the mental health of people, which was taken into consideration as the instrument of data collection which enables the researcher get more respondents within a shorter time. The questionnaire contains two sections. The section A of the questionnaire contained socio demographic characteristics of the respondents. The section B of the questionnaire focused on the objective of study:

3.5 VALIDITY OF INSTRUMENT AND RELIABILITY OF THE INSTRUMENT

The authenticity of the instrument was checked to make sure that the questions are set up in a way that allowed the researcher to collect information pertinent to the study's goal. The draft questionnaire was content validated by professionals from the

Department of Social Work, University of Benin. Based on their feedback and ideas, changes were be made before the questionnaires were finally administered.

3.6 METHOD OF DATA COLLECTION

The methods of data collection is through the use of questionnaire. The questionnaires were distributed personally to the study's selected population and the researcher guided the respondents with regards to filling the questionnaires. To generate data from the fabric of the community who were largely the victims of the coercive COVID-19 vaccination a hundred and fifty copies of the questionnaire were made, administered, satisfactorily completed, and returned.

3.7 METHOD OF DATA ANALYSIS

In order to promote objectivity and clarity, the quantitative data was gathered during the administration of the questionnaires to be presented and analysed using the Statistical Package for the Social Science (SPSS) software application. Analysis entailed use of statistical tables showing frequency distribution and percentage of variables investigated. All other analyses considered necessary were also performed with aid of this package.

3.8 ETHICAL CONSIDERATION AND INFORMED CONSENT

Participants' responses were kept confidential and followed international best practises. It's important to emphasise that there was no safety concerns. The participants didn't experience any harm because this study won't carry any hazards.

Participants will be given the opportunity to withdraw their consent at any point during the interview and had the right to clarify any aspects of the study that was unclear to them.

CHAPTER FOUR

DATA PRESENTATION ANALYSIS AND HYPOTHESIS TESTING

This chapter contains the data presentation, analysis and interpretations of the various data collected for this study. Consequently, it entails the application of both mathematics and statistical techniques to provide the basis for analyzing the research objectives listed in chapter one. Hence, it is a vital part of this study since it forms the basis for conclusion and policy recommendations.

Tables and percentages were used in this chapter in this research work; the use of table was the most appropriate means of interpreting information for easy understanding. In analyzing the data, judgment was based on the number of favourable or unfavourable responses received on each statement in the questionnaire. Generally, the favourable responses are, “strongly agree” and “agree” while the unfavourable responses are “disagree” and ‘strongly disagree’. The results of the data collected are analyzed below based on each research questions.

4.1 DEMOGRAPHIC CHARACTERISTICS OF THE RESONDENTS

Table 4.1 Distribution of Respondents by Socio-Demographic

1	**Gender**	**Frequency**	**Percent**
	Male	32	21.3%
	Female	118	78.7%
	Total	**150**	**100%**
2	**Age**		
	18 -23 years	22	14.7%
	24 – 29 years	71	47.3%
	30 – 35 years	34	22.7%
	36 years and above	23	15.3%
	Total	**150**	**100%**
3	**Religion**		
	Christian	101	67.3%
	Muslim	41	27.3%
	Traditional Worshipper	8	5.3%
	Total	**150**	**100%**
4	**Marital Status**		
	Single	25	16.7
	Married	112	74.7
	Divorced	13	8.7
	Total	**150**	**100%**

Source Field work, 2023

Table 4.1 and the graph contains and shows the demographic characteristics of the respondents. Accordingly, 21.3% of the total respondents are male while 78.7%

percent of the total respondents are female. This implies that we had more female respondents. 14.7% of the total respondents are between the age brackets of 18 - 23 years; 47.3% of the total respondents are between the age brackets of 24 – 29 years; 22.7% of the total respondents are between the age brackets of 30 - 35 years; and 15.3% of the total respondents are in the age brackets 36 years and above. It also shows that 67.3% of the total respondents are Christians; 27.3% percent of the total respondents are Muslim and 5.3% of the total respondents are traditional worshippers. This implies that the majority of the respondents are practicing Christianity. Itn also shows that 16.7% of the total respondents are single; 74.7% of the total respondents are married and 8.7% of the total respondents are divorced.

4.2 MAJOR RESEARCH

4.2.1 Research Question one: What are the coercive impact of COVID-19 vaccination on the mental health of people in Itamaga Community Ikorodu, Lagos?

Table 4.2: Distribution of Respondents by whether covid-19 vaccination affect the mental health of the people of Itamaga Community?

Responses	Frequency	Percent
Agree	21	14.0%
Disagree	7	4.7%
Strongly Agree	101	67.3%
Strongly Disagree	9	6.0%
Undecided	12	8.0%
Total	**150**	**100.0**

Source: Field Survey, 2023

Table 4.2 above revealed that 14.0% of the total respondents were agree; 4.7% of the total respondents were disagree; 67.3% of the total respondents were strongly agree; 6.0% of the total respondent were strongly disagree; and 8.0% of the total respondent were undecided. This implies that the majority of the respondents strongly agreed.

Table 4.3: Distribution of respondents by whether covid-19 vaccination hinder logical reasoning?

Responses	**Frequency**	**Percent**
Agree	5	3.3%
Disagree	57	38.0%
Strongly Agree	9	6.0%
Strongly Disagree	68	45.3%
Undecided	11	7.3%
Total	**150**	**100.0**

Source: Field Survey, 2023

Table 4.3 above, it revealed that 3.3% of the total respondents were agree; 38.0% of the total respondents were disagree; 6.0% of the total respondents were strongly agree; 45.3% of the total respondent were strongly disagree; and 7.3% of the total respondent were undecided. This implies that the majority of the respondents strongly disagreed.

4.2.2 Research Question two: What are the reaction of people towards COVID-19 vaccine in Itamaga Community, Ikorodu, Lagos?

Table 4.4: Distribution of Respondents by whether the people of Itamaga community are not taking the covid-19 vaccine for fear of death?

Responses	Frequency	Percent
Agree	24	16.0%
Disagree	0	0%
Strongly Agree	105	70.0%
Strongly Disagree	6	4.0%
Undecided	15	10.0%
Total	**150**	**100.0%**

Source: Field Survey, 2023

Table 4.4 above, it revealed that 16.0% of the total respondents were agree; 0% of the total respondents were disagree; 70.0% of the total respondents were strongly agree; 4.0% of the total respondent were strongly disagree; and 10.0% of the total respondent were undecided. This implies that the majority of the respondents strongly agreed.

Table 4.5: Distribution of Respondents by whether majority of the people taking the vaccine in Itamaga community are the youths, with the elderly still scared of taking the vaccine?

Responses	Frequency	Percent
Agree	41	27.3%
Disagree	27	18.0%
Strongly Agree	61	40.7%
Strongly Disagree	9	6.0%
Undecided	12	8.0%
Total	**150**	**100.0%**

Source: Field Survey, 2023

Table 4.5 above, it revealed that 27.3% of the total respondents were agree; 18.0% of the total respondents were disagree; 40.7% of the total respondents were strongly agree; 6.0% of the total respondent were strongly disagree; and 8.0% of the total respondent were undecided. This implies that the majority of the respondents strongly agreed.

4.2.3 Research Question three: How did members of the community react to those who were vaccinated?

Table 4.6: Distribution of respondents by whether persons to have collected the vaccine were avoided in the community?

Responses	**Frequency**	**Percent**
Agree	101	67.3%
Disagree	0	0%
Strongly Agree	39	26.0%
Strongly Disagree	2	1.3%
Undecided	8	5.3%
Total	**150**	**100.0%**

Source: Field Survey, 2023

Table 4.6 above, it revealed that 67.3% of the total respondents were agree; 0% of the total respondents were disagree; 26.0% of the total respondents were strongly agree; 1.3% of the total respondent were strongly disagree; and 5.3% of the total respondent were undecided. This implies that the majority of the respondents agreed.

Table 4.7: Distribution of respondents by whether the persons that took the vaccine were closely watched to see if they die or develop sickness?

Responses	Frequency	Percent
Agree	71	47.3%
Disagree	7	4.7%
Strongly Agree	51	34.0%
Strongly Disagree	9	6.0%
Undecided	12	8.0%
Total	**150**	**100.0**

Source: Field Survey, 2023

Table 4.7 above revealed that 47.3% of the total respondents were agree; 4.7% of the total respondents were disagree; 34.0% of the total respondents were strongly agree; 6.0% of the total respondent were strongly disagree; and 8.0% of the total respondent were undecided. This implies that the majority of the respondents agreed.

4.2.4 Research Question four: What is the level of stigma on those who were vaccinated?

Table 4.8: Distribution of respondents by whether the level of stigma on those who were vaccinated is very high due to ignorance?

Responses	Frequency	Percent
Agree	57	38.0%
Disagree	20	13.3%
Strongly Agree	62	41.3%
Strongly Disagree	0	0%
Undecided	11	7.3%
Total	**150**	**100.0**

Source: Field Survey, 2023

Table 4.8 above revealed that 38.0% of the total respondents were agree; 13.3% of the total respondents were disagree; 41.3% of the total respondents were strongly agree; 0% of the total respondent were strongly disagree; and 7.3% of the total respondent were undecided. This implies that the majority of the respondents strongly agreed

Table 4.9: Distribution of respondents by whether the uneducated people in the community stigmatize and laugh at the persons who took the vaccination?

Responses	Frequency	Percent
Agree	74	49.3%
Disagree	0	0%
Strongly Agree	55	36.7%
Strongly Disagree	6	4.0%
Undecided	15	10.0%
Total	**150**	**100.0%**

Source: Field Survey, 2023

Table 4.9 above, it revealed that 49.3% of the total respondents were agree; 0% of the total respondents were disagree; 36.7% of the total respondents were strongly agree; 4.0% of the total respondent were strongly disagree; and 10.0% of the total respondent were undecided. This implies that the majority of the respondents agreed.

4.4.5 Research Question Five: What are the impact of COVID-19 vaccination in reducing the level of the virus in Itamaga Community Ikorodu, Lagos?

Table 4.10: Distribution of respondents by whether the covid-19 vaccination did not have much impact because a large number of persons did not get vaccinated?

Responses	Frequency	Percent
Agree	101	67.3%
Disagree	0	0%
Strongly Agree	39	26.0%
Strongly Disagree	2	1.3%
Undecided	8	5.3%
Total	**150**	**100.0%**

Source: Field Survey, 2023

Table 4.10 above, it revealed that 67.3% of the total respondents were agree; 0% of the total respondents were disagree; 26.0% of the total respondents were strongly agree; 1.3% of the total respondent were strongly disagree; and 5.3% of the total respondent were undecided. This implies that the majority of the respondents agreed.

Table 4.11: Distribution of respondents by whether it helped protect the persons that took the correct dosage from the virus?

Responses	Frequency	Percent
Agree	71	47.3%
Disagree	7	4.7%
Strongly Agree	51	34.0%
Strongly Disagree	9	6.0%
Undecided	12	8.0%
Total	**150**	**100.0**

Source: Field Survey, 2023

Table 4.11 above revealed that 47.3% of the total respondents were agree; 4.7% of the total respondents were disagree; 34.0% of the total respondents were strongly agree; 6.0% of the total respondent were strongly disagree; and 8.0% of the total respondent were undecided. This implies that the majority of the respondents agreed.

4.3 DISCUSSION OF FINDINGS

Demographic Characteristics of the Respondents

The demographic data reveals a significant gender disparity among the respondents. With females making up 78.7% of the total, compared to males who constitute only 21.3%, it's clear that the female perspective may be overrepresented in

these findings. This could potentially skew the results towards the experiences and perceptions of females, which might differ from those of males in the context of COVID-19 vaccination. It would be interesting to explore whether there are any gender-specific trends or patterns in the data.

In terms of age distribution, the majority of respondents (47.3%) fall within the 24-29 years age bracket, followed by those within the 30-35 years age bracket (22.7%). This suggests that the findings are largely representative of younger adults' perspectives. It would be worth investigating whether age influences attitudes towards vaccination, as younger individuals may have different health beliefs and behaviors compared to older adults.

The religious breakdown shows a predominance of Christians (67.3%), with Muslims making up 27.3% and traditional worshippers accounting for a small minority (5.3%). This could potentially influence attitudes towards vaccination, as religious beliefs can often impact health behaviors. For instance, certain religious doctrines or practices may discourage vaccination or promote alternative health remedies. Understanding these religious dynamics could be key to addressing vaccine hesitancy in this community.

The marital status of respondents is predominantly married (74.7%), which could indicate a higher level of responsibility and concern for health-related matters,

including vaccination. Married individuals may be more likely to get vaccinated to protect not only themselves but also their families from COVID-19.

Impact of COVID-19 Vaccination on Mental Health

A significant majority (67.3%) strongly agreed that COVID-19 vaccination affects the mental health of people in Itamaga Community, while only a small percentage (4.7%) disagreed with this statement. This suggests that there is a perceived impact of vaccination on mental health within this community, which warrants further investigation.

It would be interesting to explore what specific mental health issues are associated with vaccination. For instance, are individuals experiencing anxiety or stress related to potential vaccine side effects? Or is there a fear or phobia of needles involved? Understanding these mental health impacts could inform interventions to support individuals' mental well-being during the vaccination process.

COVID-19 Vaccination and Logical Reasoning

In contrast to the above, a large proportion of respondents disagreed (38.0%) or strongly disagreed (45.3%) with the statement that COVID-19 vaccination hinders logical reasoning. This indicates that most people in this community do not associate vaccination with any negative effects on cognitive function.

This finding is reassuring as it suggests that fears or misconceptions about vaccines causing cognitive impairment are not prevalent in this community. However,

it would be worth exploring why a small percentage of respondents agreed or strongly agreed with this statement - what experiences or beliefs are driving this perception?

Reaction Towards COVID-19 Vaccine

The data shows that a large number of respondents agreed (38.0%) or strongly agreed (41.3%) that people in their community were afraid to take the COVID-19 vaccine due to fear of death or sickness. This highlights a significant level of vaccine hesitancy and fear, which could be addressed through targeted education and communication strategies. Similarly, there seems to be a stigma associated with vaccination in this community, with 49.3% agreeing and 36.7% strongly agreeing that uneducated people stigmatize and laugh at those who get vaccinated.

Impact of COVID-19 Vaccination on Virus Levels

The majority of respondents agreed (67.3%) or strongly agreed (26.0%) that the COVID-19 vaccination did not have much impact because many people did not get vaccinated. This underscores the importance of achieving high vaccination rates in order to effectively reduce virus levels in the community.

However, most respondents also agreed (47.3%) or strongly agreed (34.0%) that vaccination helped protect those who took the correct dosage from the virus, indicating an understanding of the personal benefits of vaccination.

In conclusion, these findings highlight several key issues related to COVID-19 vaccination in Itamaga Community, including gender disparities, vaccine hesitancy

and stigma, and perceptions about the impact of vaccination on mental health and virus levels.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 SUMMARY

The study aimed to examine the impact of coercive COVID-19 vaccination on the mental health of people in Itamaga community, Ikorodu. The specific objectives were to examine the coercive impact of COVID-19 vaccination on mental health, to examine people's reactions towards the COVID-19 vaccine, and to assess the level of stigma on those who were vaccinated.

Coercive Impact of COVID-19 Vaccination on Mental Health

The data revealed that a significant majority (67.3%) of respondents strongly agreed that COVID-19 vaccination affects the mental health of people in Itamaga Community. This suggests a perceived impact of vaccination on mental health within this community. However, it's important to note that this perception may be influenced by various factors such as misinformation, personal beliefs, or experiences related to vaccination.

Reaction Towards COVID-19 Vaccine

The study found that a large number of respondents agreed (38.0%) or strongly agreed (41.3%) that people in their community were afraid to take the COVID-19

vaccine due to fear of death or sickness. This highlights a significant level of vaccine hesitancy and fear in the community. Additionally, there seems to be a stigma associated with vaccination in this community, with 49.3% agreeing and 36.7% strongly agreeing that uneducated people stigmatize and laugh at those who get vaccinated.

Level of Stigma on Those Who Were Vaccinated

The data shows that there is indeed a level of stigma associated with getting vaccinated in the Itamaga community. A significant number of respondents agreed (49.3%) or strongly agreed (36.7%) that uneducated people in their community stigmatize and laugh at those who get vaccinated.

5.2 CONCLUSION

The study aimed to examine the impact of coercive COVID-19 vaccination on the mental health of people in the Itamaga community, Ikorodu. The findings revealed several key issues related to COVID-19 vaccination in this community, including perceived impacts on mental health, significant vaccine hesitancy and fear, and prevalent stigma towards those who choose to get vaccinated.

A significant majority of respondents perceived that COVID-19 vaccination affects mental health, indicating a need for further investigation into this issue. Additionally, a large number of respondents expressed fear of taking the COVID-19 vaccine due to fear of death or sickness, highlighting a significant level of vaccine hesitancy in the community.

Furthermore, the study found that there is a level of stigma associated with getting vaccinated in the Itamaga community. A significant number of respondents agreed or strongly agreed that uneducated people in their community stigmatize and laugh at those who get vaccinated.

5.3 RECOMMENDATIONS

Based on these findings, the following recommendations are proposed:

1. Mental Health Support: Given the perceived impact of vaccination on mental health, it is recommended that mental health support be integrated into vaccination programs. This could include providing information on managing stress and anxiety related to vaccination, offering counselling services at vaccination sites, or referring individuals to mental health resources in the community.
2. Education and Communication Strategies: To address vaccine hesitancy and fear, targeted education and communication strategies should be implemented. This could involve providing clear and accurate information about the safety and efficacy of vaccines, addressing common misconceptions and fears, and sharing stories from individuals who have been successfully vaccinated.
3. Addressing Stigma: Efforts should be made to address the stigma associated with vaccination. This could involve community outreach

programs to educate people about the importance of vaccination, as well as initiatives to promote positive attitudes towards those who choose to get vaccinated.

4. Engaging Religious Leaders: Given the religious breakdown of respondents, engaging religious leaders could be an effective strategy for promoting positive attitudes towards vaccination. Religious leaders can play a key role in addressing misconceptions and fears about vaccination within their communities.

5. Gender-Sensitive Approaches: Considering the gender disparity among respondents, gender-sensitive approaches should be considered in vaccination programs. This could involve addressing gender-specific concerns or barriers to vaccination, or ensuring that vaccination services are accessible and welcoming to both men and women.

REFERENCES

Adebowale, O. O., Adegboye, O. A., Chukwuemeka, I. K., Kuyinu, Y. A., & Adeyeri, K. (2021). COVID-19 vaccine acceptability in Lagos, Nigeria. *Human Vaccines & Immunotherapeutics,* 1-7.

Adepoju, P. (2020). Nigeria's weak healthcare system, brain drain and COVID-19. *The Lancet Respiratory Medicine*, 8(7), e54-e55.

Adewuya, A. O., & Afolabi, M. O. (2020). The mental health burden of the COVID-19 pandemic and vaccination in Nigeria. *Journal of Psychosomatic Research, 146*, 110543.

Afolabi, A. A., Ilesanmi, O. S., Dealing, B. S., & Adeyemi, O. A. (2021). COVID-19 vaccine hesitancy among Nigerian population: Influence of religious affiliations and practices. *Journal of Religion and Health,* 1-16.

Baden, L.R., Sahly, E.L., H.M., Essink, B. et al. (2020). Efficacy and Safety of the mRNA-1273 SARS-CoV-2 Vaccine. *New England Journal of Medicine*, 384(5), 403-416.l

Corman, V.M., Landt, O., Kaiser, M. et al. (2020). Detection of 2019 novel coronavirus (2019-nCoV) by real-time RT-PCR. *Eurosurveillance,* 25(3), 2000045.

Dagan, N., Barda, N., Kepten, E., Miron, O., Perchik, S., & Katz, M., et al. (2021). BNT162b2 mRNA COVID-19 Vaccine in a Nationwide Mass Vaccination Setting. *New England Journal of Medicine,* 384, 1412-1423.

Dubé, E., Gagnon, D., MacDonald, N. E., & SAGE Working Group on Vaccine Hesitancy. (2015). Strategies intended to address vaccine hesitancy: *Review of published reviews. Vaccine,* 33(34), 4191-4203.

Ferreira, J. C., Assunção, M. S., Ferrantini, C., Cavalcante, S. B., Dultra, J. A., & Lima, L., et al. (2021). Community activation and social support during COVID-19 vaccination: A qualitative study in Brazil. *PLoS One*, 16(7), e0253615.

Gostin LO, Salmon DA. The Dual Epidemics of COVID-19 and Influenza: Vaccine Acceptance, Coverage, and Mandates. *JAMA*. 2021;325(9):823–824.

Gu, J., Han, B., Wang, J. (2020). COVID-19: Gastrointestinal Manifestations and Potential Fecal-Oral Transmission. *Gastroenterology,* 158(6), 1518-1519.

Gureje, O., Lasebikan, V. O., & Ephraim-Oluwanuga, O. (2006). Community study of knowledge of and attitude to mental illness in Nigeria. *The British Journal of Psychiatry*, 188(5), 467-472.

Huang, C., Wang, Y., Li, X. et al. (2020). Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China. *Lancet*, 395(10223), 497-506.

James, R. K., & Gilliland, B. E. (2017). Crisis intervention strategies. Boston, MA: Cengage Learning.

Johnson NF, Velásquez N, Restrepo NJ, et al. The online competition between pro- and anti-vaccination views. *Nature*. 2018;582(7811):230–233.

Kissler, S.M., Tedijanto, C., Goldstein, E. et al. (2020). Projecting the transmission dynamics of SARS-CoV-2 through the postpandemic period. *Science*, 368(6493), 860-868.

Larson, H. J., Cooper, L. Z., Eskola, J., Katz, S. L., & Ratzan, S. (2014). Addressing the vaccine confidence gap. *The Lancet*, 383(9923), 698-700.

Larson, H. J., Jarrett, C., Eckersberger, E., Smith, D. M., & Paterson, P. (2014). Understanding vaccine hesitancy around vaccines and vaccination from a global perspective: A systematic review of published literature, 2007–2012. Vaccine, 32(19), 2150-2159.

Li, Q., Guan, X., Wu, P. et al. (2020). Early Transmission Dynamics in Wuhan, China, of Novel Coronavirus–Infected Pneumonia. *New England Journal of Medicine*, 382(13), 1199-1207.

Link, B. G., & Phelan, J. C. (2001). Conceptualizing stigma. *Annual review of Sociology*, 27(1), 363-385.

Lopez Bernal, J., Andrews, N., Gower, C., Gallagher, E., Simmons, R., & Thelwall, S., et al. (2021). Effectiveness of COVID-19 vaccines against the B.1.617.2 (Delta) variant. *New England Journal of Medicine*, 385, 585-594.

Moin A, Malik MR, Ali S, et al. (2019).Essential interventions: implementation strategies and practices in the context of local culture, history, and belief systems in Pakistan. *Health Policy Plan,* 34(3):179–189.

Morawska, L., Cao, J. (2020). Airborne transmission of SARS-CoV-2: The world should face the reality. *Environment International,* 139, 105730.

Nachega, J.B., Sam-Agudu, N.A., Masekela, R. et al. (2021). Addressing Challenges to Rolling Out COVID-19 Vaccines in African Countries. *Lancet Global Health,* 9(6), e746-e748.

Nicola, M., Alsafi, Z., Sohrabi, C. et al. (2020). The socio-economic implications of the coronavirus pandemic (COVID-19): A review. *International Journal of Surgery,* 78, 185-193.

Okolie, M. N., Adebisi, Y. A., Otuonye, N. M., Okojie, R., Balogun, M. S., & Akinola, O. I. (2021). Infodemic and the spread of fake news in the COVID-19 era: The Nigerian perspective. *Pan African Medical Journal*, 38(1), 2.

Olapegba, P. O., Ayandele, O., Kolawole, S. O., Oguntayo, R., Gandi, J. C., Dangiwa, A. L., ... & Iorfa, S. K. (2020). COVID-19 knowledge and misconceptions in Nigeria. *The Journal of Community Health*, 45(6), 1264-1269.

Otu, A., Charles, C. H., Yaya, S., & Ganesh, G. (2021). Global demand and supply of COVID-19 vaccines: A review. *Journal of Clinical Medicine*, 10(3), 445.

Pierce, M., Hope, H., Ford, T. et al. (2020). Mental health before and during the COVID-19 pandemic: A longitudinal probability sample survey of the UK population. *Lancet Psychiatry,* 7(10), 883-892.

Pierik, R. (2018). Coercion in healthcare and the rights-based approach. *Journal of Medical Ethics*, 44(1), 37-43.

Polack, F. P., Thomas, S. J., Kitchin, N. et al. (2020). Safety and Efficacy of the BNT162b2 mRNA Covid-19 Vaccine. *New England Journal of Medicine*, 383, 2603-2615.

RECOVERY Collaborative Group. (2021). Dexamethasone in Hospitalized Patients with Covid-19. *New England Journal of Medicine*, 384(8), 693-704.

Remuzzi, A., Remuzzi, G. (2020). COVID-19 and Italy: what next? *The Lancet*, 395(10231), 1225-1228.

Roberts, A. R. (2005). Crisis intervention handbook: Assessment, treatment, and research. Oxford, UK: Oxford University Press.

Salako, O., Okunade, K., Allsop, M. J., Habeebu-Adeyemi, F. M., & Olubajo, O. (2021). COVID-19 vaccine hesitancy in Nigeria: A survey of COVID-19 knowledge, attitudes and beliefs among healthcare workers. *Journal of Community Health*, 46(4), 731-740.

Schaffer, D. E. (2021). Coercion, vaccination, and the law. *New England Journal of Medicine, 384(14), e54.*

Selgelid MJ. Pandethics. *Public Health Ethics*. 2020;13(2):229-36.

van Doremalen, N., Bushmaker, T., Morris, D.H. et al. (2020). Aerosol and Surface Stability of SARS-CoV-2 as Compared with SARS-CoV-1. *New England Journal of Medicine*, 382(16), 1564-1567.

Vasileiou, E., Simpson, C.R., Shi, T. et al. (2021). Interim findings from first-dose mass COVID-19 vaccination roll-out and COVID-19 hospital admissions in Scotland: a national prospective cohort study. *The Lancet*, 397, 1646-1657.

Wang, D., Hu, B., Hu, C. et al. (2020). Clinical Characteristics of 138 Hospitalized Patients With 2019 Novel Coronavirus–Infected Pneumonia in Wuhan, China. *JAMA*, 323(11), 1061-1069.

Weinreich, D.M., Sivapalasingam, S., Norton, T. et al. (2021). REGN-COV2, a Neutralizing Antibody Cocktail, in Outpatients with Covid-19. *New England Journal of Medicine,* 384(3), 238-251.

Wheaton, M., Abramowitz S, Wardle, H., & McKee, M. (2020). Experiences of coercion to vaccination: A systematic review. *Vaccine,* 38(50):7977-7988.

World Health Organization. (2020). Ten threats to global health in 2020.

Wouters, O.J., Shadlen, K.C., Salcher-Konrad, M. et al. (2021). Challenges in ensuring global access to COVID-19 vaccines: production, affordability, allocation, and deployment. *The Lancet,* 397, 1023-1034.

Zhou, P., Yang, X.L., Wang, X.G. et al. (2020). A pneumonia outbreak associated with a new coronavirus of probable bat origin. *Nature*, 579(7798), 270-273.

APPENDIX
QUESTIONNAIRE
DEPARTMENT OF SOCIAL WORK
FACULTY OF SOCIAL SCIENCES
UNIVERSITY OF BENIN
BENIN CITY

CONSENT FORM

RE: IMPACT OF COERCIVE VACCINATION ON THE MENTAL HEALTH OF PEOPLE IN ITAMAGA COMMUNITY, IKORODU, LAGOS STATE, NIGERIA

Dear Madam/Sir,

My name is Ogbesoyen Omorefe Daniel; an undergraduate student in the Department of Social work, Faculty of Social Sciences, University of Benin, Benin City, Nigeria. As part of the requirements for the award of B.Sc. in Social Work, I am required by the University to develop and conduct a research dissertation under the supervision of Dr. Kelly Alfred Imafidon. This consent form is one of the first steps in fulfilling this requirement. I will greatly appreciate your participation in the study titled: **Impact of Coercive Covid-19 Vaccination on the Mental Health of People in Itamaga Community, Ikorodu, Lagos State, Nigeria.**

Your participation in this study is strictly voluntary not compulsory. All information that you provide will be treated as confidential and anonymous. If you agree to take part in this study, you will be given a questionnaire which comprises seven (2) sections, A-B. Upon the completion of this research, you will be invited to read my findings because it will be useful to government agencies, non-governmental organizations international, national and local policy makers including social workers in fostering enlightenment and advocacy against coercive COVID-19 vaccination measures.

I have read and understood the above consent requirement and desire shall freely participate in study.

Omorefe Daniel OGBESOYEN	**Dr. K.A. Imafidon**
(Researcher)	**(Supervisor)**

SECTION A: Socio Demographic Profile

Please tick the column of your choice below: Yes [ ] No [ ]

- AGE: 18 -23 years ( ) 24 – 29 years( ) 30 – 35 years ( ) 36 years and above( )
- GENDER: Male: ( ) Female: ( )
- RELIGION: Christian: ( ) Muslim: ( ) Traditional Worshipper: ( )
- Marital Status: Single : ( ) Married : ( ) Divorced : ( )

SECTION B: RESEARCH QUESTIONS

Nos	**What are the coercive impact of COVID-19 vaccination on the mental health of people in Itamaga Community Ikorodu, Lagos?**	**Agree**	**Disagree**	**Strongly Agree**	**Strongly Disagree**	**Undecided**
1	Does covid-19 vaccination affect the mental health of the people of Itamaga Community?					
2	Does covid-19 vaccination hinder logical reasoning?					
Item	**What are the reaction of people towards COVID-19 vaccine in Itamaga Community, Ikorodu, Lagos?**	**Agree**	**Disagree**	**Strongly Agree**	**Strongly Disagree**	**Undecided**
3	The people of Itamaga community are not taking the covid-19 vaccine for fear of death?					
4	Majority of the people taking the vaccine in Itamaga community are the youths, with the elderly still scared of taking the vaccine?					

Item	How did members of the community react to those who were vaccinated?	Agree	Disagree	Strongly Agree	Strongly Disagree	Undecided
5	The persons to have collected the vaccine were avoided in the community?					
6	The persons that took the vaccine were closely watched to see if they die or develop sickness?					
Item	**What is the level of stigma on those who were vaccinated?**	**Agree**	**Disagree**	**Strongly Agree**	**Strongly Disagree**	**Undecided**
7	The level of stigma on those who were vaccinated is very high due to ignorance?					
8	The uneducated people in the community stigmatize and laugh at the persons who took the vaccination?					
Item	**What are the impact of COVID-19 vaccination in reducing the level of the virus in Itamaga Community Ikorodu, Lagos?**	**Agree**	**Disagree**	**Strongly Agree**	**Strongly Disagree**	**Undecided**
9	The covid-19 vaccination did not have much impact because a large number of persons did not get vaccinated?					
10	It helped protect the persons that took the correct dosage from the virus?					