

DOI: 10.36108/wjss/4202.90.0110

COVID-19 AND PUBLIC SCEPTICISM OF VACCINATION AS A CONTROL MEASURE: A STUDY OF EDO SOUTH SENATORIAL DISTRICT, NIGERIA (2019-2021)

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Abstract

The world woke up to a global epidemic disease known as coronavirus in December 2019. Coronavirus also known as Covid-19 has taken many lives and disrupted the political economy of states around the world. Unfortunately, people are still dying of the virus to date. Scientists quickly came up with vaccines to halt the deaths and re-ignite the global economy which nose-dived after the epidemic broke out in China. Despite the presence of vaccines, a lot of people are still sceptical about its efficacy and the motive of the vaccination. This study based on Qualitative research was embarked upon to find out about the high rate of scepticism about the vaccines by people of Edo South Senatorial District, Nigeria. Using thematic analysis; the findings revealed that mistrust of government, social media, vaccine mandate, religion and other multi-faceted factors are responsible for the scepticism. The majority of the residents are against vaccine mandates, they believe they should be given the free will and liberty to opt for or decline vaccination. Hence, it is suggested that the Government, NGOs and Christian leaders need to carry out more enlightenment with empirical facts and introduce incentives to convince the unvaccinated to join the vaccinated queue.

INTRODUCTION

The world was taken by surprise in 2019, when the deadly SARS-CoV-2 disease broke out in Wuhan, China. The disease spread from one country to another and due to the spread and the nature of its deadly effect, it became a pandemic. Following the rules established by the United Nations and the Food and Agriculture Organization (FAO), the new virus was named COVID-19 on the 11th day of February 2020 by the World Health Organization" (WHO 2021). The World Health Organization (WHO) declared COVID-19 also known as coronavirus a pandemic due to the spread and serious negative impact it had on human health around the world (WebMD 2022). Cold, serious illness and deaths are part of the effects of COVID-19. Some individuals do notice life-threatening symptoms, while others do not. Older persons and people with low immune





systems, diabetes, kidney disease, and heart or lung health conditions have a higher risk of death if they contract COVID-19 (U.N 2021).

"Living organism well-being is disrupted by disease. Disease affects human pathology, displaying symptoms that attract urgent medical attention" (Healio 2012 online).

The genetic structure of viruses determines their naming; diagnosis or test and production of vaccine. Names of medication or vaccine to repel the virus often differ like HIV (Human Immunodeficiency Virus) caused by AIDS (Acquired Immunodeficiency Syndrome). That is why people are often aware of the name of a disease than the virus responsible for the illness.

One of the major challenges to man's existence on earth, despite the advancement of science, has been Disease and looks set to continue to be for the foreseeable future (Hough 2004).

CONCEPTUAL DISCOURSE

Disease can be classified into two: Communicable diseases and Non-communicable diseases. A disease that can easily be contracted from one person to another is known as a communicable disease. They are mostly caused by fungi, pathogens and bacteria. Other examples are COVID-19, Ebola, Hepatitis A and B etc. However, coronavirus is more contagious than Ebola (Medical News Today 2022).

Non-communicable diseases cannot be transferred from one person to another. This includes heart disease, strokes, cancers, diabetes and others. COVID-19 disease is a contagious disease caused by SARS-COV-2. Most of the people who contract the virus, experience minor reactions from the disease and often get back on their feet at no distant time. While others get sick and require urgent attention. Infected persons with previous illnesses like diabetes, lung infections, and cancers, especially older ones might find it difficult to recover from the virus (WHO 2022).

On the 1st day of December 2019, a contemporary case of COVID-19 was declared; the virus was subsequently re-named SARS-Cov2. Most infectious diseases have been tracked to animals like bats, birds, pigs and others. The virus transformed over time to endanger mankind, by causing





illness and deaths (Hopkins Medicine 2021). The COVID-19 virus has mutated and evolved several times. "Different variants, from Delta variant (CDC 2021) to the mutated coronavirus named "Omicron variant" (WHO 2021).

GLOBAL CASUALTIES OF COVID-19 PANDEMIC FROM 2019-2021

Round the globe, millions of people have died as a result of COVID-19, and the United States has had the highest casualties of over 700,000 deaths (NYT 2021)

Countries with the most coronavirus deaths



Recorded deaths with Covid-19

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Since the production of vaccines, efforts have been made to ensure billions of people are vaccinated around the world. Vaccination rates have been poor in some countries for different reasons. The African continent has had a lower vaccination rate.



Coronavirus vaccines in Africa

Selected countries' vaccination rates

Country	Percentage that has received a vaccine
South Africa	0.49%
Seychelles	66.56%
Могоссо	12.82%
Ghana	2.71%
Senegal	2.39%
Zimbabwe	1.97%
Kenya	1.53%
Nigeria	0.57%
This shows the percentage of the population that has rec	eived at least one dose of a vaccine
Source: Africa CDC	BBC

FIRST REPORTED CASE OF COVID-19 IN NIGERIA

On the 27th day of February 2020, the Minister of Health, Dr. Ehanire confirmed the first Covid-19 case in Nigeria, an Italian citizen in Lagos tested positive for the virus (Federal Ministry of Health 2021).

As at 22nd day of November, 2021, CDC has confirmed total number of COVID-19 cases to 213,625, out of this case, 206,778 recovered from the virus and 2,974 deaths in Nigeria (CDC, Nigeria, 2021). See below the chart of covid-19 cases in Nigeria.





States Affected	No. of Cases (Lab Confirmed)	No. of Cases (on admission)	No. Discharged	No. of Deaths		
Lagos	78,029	357	76,919	753		
FCT	23,462	249	22,989	224		
Rivers	12,855	57	12,644	154		
Kaduna	10,152	62	10,010	80		
Plateau	9,917	42	9,804	71		
Оуо	8,767	16	8,560	191		
Edo	6,599	1	6,318	280		
Ogun	5,375	1	5,294	80		
Ondo	4,580	7	4,475	98		
Kano	4,416	48	4,247	121		
Akwa Ibom	4,348	228	4,076	44		
Delta	4,145	1,479	2,556	110		
Kwara	3,999	235	3,700	64		
Osun	3,027	35	2,906	86		
Enugu	2,788	12	2,747	29		
Gombe	2,725	27	2,640	58		





States Affected	No. of Cases (Lab Confirmed)	No. of Cases (on admission)	No. Discharged	No. of Deaths		
Nasarawa	2,517	133	2,345	39		
Anambra	2,405	0	2,386	19		
Katsina	2,318	71	2,210	37		
Imo	2,173	176	1,956	41		
Ebonyi	2,062	26	2,004	32		
Abia	2,030	9	1,990	31		
Benue	1,863	383	1,455	25		
Bauchi	1,785	59	1,703	23		
Ekiti	1,778	11	1,739	28		
Borno	1,356	12	1,306	38		
Taraba	1,269	15	1,222	32		
Bayelsa	1,247	11	1,208	28		
Adamawa	1,157	27	1,098	32		
Niger	1,059	41	998	20		
Sokoto	810	3	779	28		
Cross River	662	4	633	25		





States Affected	No. of Cases (Lab Confirmed)	No. of Cases (on admission)	No. Discharged	No. of Deaths
Jigawa	611	4	590	17
Yobe	502	3	490	9
Kebbi	470	0	454	16
Zamfara	362	29	324	9
Kogi	5	0	3	2

(Source: Nigeria Centre for Disease Control 2021)

INDEX CASE OF COVID-19 IN EDO STATE

The former Speaker of Edo State House of Assembly, Frank Okiye was the index case of COVID-19 in Edo State after his return from the United Kingdom (Premium Times 2020). In April, 2020, due to the rise of COVID-19 infections, Governor Godwin Obaseki had to introduce dusk to dawn curfew to restrict movement and combat the virus (Vanguard 2020).

The increase in death rates as a result of COVID-19 complications compelled the Edo State Government to bar unvaccinated people from public places (Guardian, Nigeria 2021). The announcement was met with mixed reactions from the public, Civil Society Organizations and the Christian Association of Nigeria (CAN). Subsequently, a restraining order was granted by a Federal High Court against the Edo State Government restraining the Governor from banning people from public places (Punch Nigeria 2021).

In March 2021, Nigeria received her first COVID-19 vaccine and also got another batch of four million vaccines from the United States (UNICEF 2021) including grants from the World Bank





for vaccine acquisition and financing (Vanguard 2021). Vaccines have been distributed to the States in Nigeria for onward vaccination of residents in their domain and despite the efforts, large numbers of people are still not willing to be vaccinated. In September 2021, the Edo State Government confirmed the receipt of an additional 40,000 doses of the vaccines to curb the spread of the virus (Punch Nigeria 2021).

Moronkola, Iyanda and Omokhabi's (2020) study was on the attitude, apathy and perception of Ibadan residents, they focus on why residents are not willing to use face masks, hand sanitizers and social distancing to protect themselves from COVID-19; Ngozika, Obi-Ani, Anikwenze and Isiani (2020) focus on misinformation about COVID-19 on social media;

Obikeze and Igboeli's (2021) research was on how mass media can be used to limit the spread of COVID-19 in Awka, Anambra State.

Most researchers are concerned more with preventive measures for COVID-19 and less about why most people in developing societies are less intrigued about getting vaccinated. Unfortunately, there are still other factors like mistrust of the government and public fear of adverse reactions from the vaccination yet to be verified empirically. This research is to fill such gaps to enable decisions and policymakers. Seek and put in measures and resources to enlighten and increase the vaccination rate in developing countries.

At inception, information out there was that COVID-19 was mostly affecting the adults and the elderly. Presently, younger people are being infected with the disease. Notwithstanding, the low death rate in Africa, compared to other continents, the pandemic has affected lives and economies of States in Africa.

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STATEMENT OF THE PROBLEM

COVID-19 presents a huge challenge to public health, social life and daily activities of man. Food insecurity has increased and humanitarian crises are unprecedented. Economic activities have been



halted and a lot of small, medium and big enterprises have collapsed. Over 3.3 million mortalities have been recorded (WHO 2020). Vaccination is one of the means to curb or stop the spread of infectious diseases from one person to another.

With the collaboration of public-private partnerships and huge investment from the United States of America (USA), under the administration of former President Trump, Operation Warp Speed was launched to fast-track the production of vaccines. The efforts and resources paid off with the positive signs of the vaccine produced by Pfizer and other biotech companies against covid-19 virus (U.S GAO 2021). The vaccine(s) were subsequently approved, by the U.S. Food and Drug Administration (FDA) and World Health Organization (WHO) for global vaccination and distribution (WHO 2021).

Despite the presence of vaccines, a lot of people have refused to be vaccinated, they were sceptical about the efficacy of the vaccine and misinformation from social media (BBC 2021). This has hampered vaccination around the world most especially in developing countries in Africa with a low rate of vaccination.

This research examined the public scepticism of COVID-19 in the Edo South Senatorial District and how to improve the vaccination rate in the district. Edo State recorded over 280 deaths and 6,599 cases of coronavirus as of 22nd November 2021 (Nigeria CDC 2021). The people of Edo South Senatorial District are aware of the vaccines and ongoing vaccination in different parts of the cities. Despite the ongoing exercise, large numbers of the residents have not or refuse to turn up for COVID-19 vaccination.

RESEARCH QUESTIONS:

The core research questions enunciated for this paper are:-

1. How can government health/safety measures curtail COVID-19 disease in Edo South Senatorial District?

2. How can the government douse the public scepticism about COVID-19 vaccination in Edo South?

3. How can the challenges confronting COVID-19 disease control be reduced in Edo South? This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License





OBJECTIVES OF THE STUDY:

1. To determine what effort the government has made towards the control of COVID-19 disease in Edo South.

2. To account for public scepticism of the government's COVID-19 vaccination proposal in Edo South.

3. To explore ways of reducing the challenges confronting COVID-19 disease control in Edo South.

JUSTIFICATION AND SCOPE OF THE STUDY:

This study was to determine why people of Edo South Senatorial District were sceptical about the COVID-19 vaccination and to identify measures the government can introduce to increase the vaccination rate and reduce deaths as a result of the epidemic. The scope of the study is from the outbreak of COVID-19, which is from 2019 to 2021.

METHODS AND MATERIALS

This paper adopted a qualitative survey to ascertain the reason for the public scepticism of COVID-19 vaccination in Edo South Senatorial District. In-depth semi-structured interview was used to extract questions from respondents.

STUDY POPULATION

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Edo South Senatorial District in Edo State covers seven local governments which include Oredo, Ovia South West, Ovia North East, Egor, Orhionmwon, Ikpoba-Okha and Uhunmwonde Local Government areas. However, the study populations are residents of Oredo Local Government Area and Ovia North East Local Government Area of Edo State.

SAMPLE SIZE AND SAMPLING TECHNIQUE:

The Research adopted the Convenience sampling method and thirty (30) respondents (fifteen respondents from each Local Government) comprising Oredo Local Government Area and Ovia North East Local Government Area, Edo State. The Local Governments were chosen due to the population and homogeneity of the senatorial district.





INSTRUMENT OF DATA COLLECTION:

Thirty (30) respondents were interviewed using the semi-structured interview technique. The respondents are residents of Oredo Local Government and Ovia North East Local Government Areas of Edo State, Nigeria. See below respondent's profile:

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TABLE 1:**BIOGRAPHY OF RESPONDENTS**

DATA ANALYSIS: The data were analyzed using thematic analysis. According to Braun and Clarke (2006) approach, "thematic analysis is the process of identifying themes or patterns within qualitative data". Thematic analysis is relevant when trying to get the public opinion, assessment or experiences about a particular issue or phenomenon.



The steps for Thematic analysis are as follows:

- (1) **Familiarization of Data**: It involves data reading and transcribing.
- (2) **Code Generation**: Ascribe codes to salient points in your data.
- (3) **Theme search**: Generating themes from the codes assigned.

(4) **Reviewing Themes**: Ensure your themes, and codes align and are relevant to your research question.

(5) **Report**: Compile, compare and make a formal report of the themes generated from data including your quotes and argument relevant to your research.

BIOGRAPHY OF RESPONDENTS

Thirty (30) people were interviewed - Nine (9) of the respondents (30%) were between the ages of 18-35yrs, fifteen (15) respondents which are (50%) were between ages 36-45yrs, four (4) of the respondents (13%) between the ages of 50-65yrs and two (2) respondents were 65yrs and above. Twenty (29) of the respondents (97%) were Christians, while one (1) of the respondents (3%) was a Muslim. On sex, twenty-two (22) of the respondents (73%) were Males and eight (8) of the respondents (27%) were females. Level of education, one (3%) had primary six, three (3) of the respondents (10%) had technical education, sixteen of the respondents (53%) had bachelor's degrees and ten (10) respondents (33%) had postgraduate degrees. Marital Status – Nineteen (19) of the respondents (3%) are married, ten (10) of the respondents (3%) is a student, nine (9) of the respondents (30%) are public sector employees, eight (8) of the respondents (27%) work in the private sector and twelve (12) of the respondents are self-employed.

RESULTS AND DISCUSSIONS

The following themes emanated from the study:

- (i) Existence of Covid-19, vaccination and reaction from the vaccine
- (ii) Skepticism about COVID-19 vaccine





- (iii) Efforts/Ways Edo state Government can increase COVID-19 vaccination rate
- (iv) Measures to curtail COVID-19 in Edo South Senatorial District
- (v) Vaccine Mandate/Compulsory vaccination

Existence of COVID-19, Vaccination and Reaction from The Vaccine

Most of the respondents believe COVID-19 is real, and few of them claim it does not exist. Out of the thirty (30) respondents, 17 (seventeen) of the respondents (57%) have taken the vaccine. Nine (9) of the vaccinated respondents (30%) claimed they had a minor reaction after taking the vaccine, the reaction ranged from pain in the vaccinated spot and mild fever. One of the respondents (s) reiterated that: "*COVID-19 is not in Nigeria, what we call COVID-19 is acute malaria*". The majority of the respondents believed that COVID-19 existed despite the misinformation and disinformation in the public.

Scepticism about the Covid-19 Vaccine

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The majority of the respondents gave different distinct reasons why people are scared about the vaccine. Some respondents claimed the following:

"They do not trust the Government, doubt about the efficacy of the vaccine; fear of negative or adverse reaction from the vaccine, illiteracy, the introduction of booster shots, which is like a third dose, has heightened the scepticism"

"The vaccine was hurriedly produced, negative publicity from social media, churches and highly placed individuals"

"Vaccine was produced to reduce the population of Africans, misinformation from social media; few doubt the existence of COVID-19"

"Censorship of credible information that contradicts the efficacy of the vaccine". "That government is falsely labelling malaria patients as COVID-19 victims/patients to access grants from Federal government and foreign donors"



"Death of vaccinated people(s), and example of renowned American "Colin Powell" former United States Secretary of State, who also died recently from COVID-19 complications, despite being vaccinated "(USA Today 2021).

Respondent doubts the credibility of the vaccine and government policy to strictly enforce COVID-19 vaccination.

Ways The Edo State Government Can Increase Covid-19 Vaccination Rate

The majority of the respondents agreed that Edo State Government is doing its best to increase the rate of vaccination, while others disagree, that it can be done better. Some respondents applauded the shutdown of social-economic activities when the virus first broke out and the rollout of COVID-19 safety measures. However, the announcement that unvaccinated people cannot have access to public places; was met with mixed feelings.

The majority of the population do not agree residents or the people need to be forced to be vaccinated: *They suggested moral persuasion, with increased enlightenment about the virus and the vaccine*". *The provision of palliatives or incentives to cushion the growing cost of living will eventually increase the vaccination rate. The government prioritises hunger and other illnesses killing people more than COVID-19.* Respondents want the government to persuade or clarify the people about the benefits of vaccination.

Measures to Control the Spread of Covid-19 in the Edo South Senatorial District

The majority of the respondents strongly believe:

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"Basic hygiene like hand washing, use of sanitizers, Vaccination and strict compliance to COVID-19 safety measures will help curb the spread of the virus"

"Eating of food that can boost immunity, regular exercise, increase enlightenment about COVID-19 and the vaccine. Avoid people with a history of cough or upper respiratory tract infection".



The provision of free preventive materials like face masks and sanitizers will help control the spread of COVID-19.

Respondents want the government to enlighten the people about good and healthy hygiene, by washing their hands always and eating healthily.

Vaccine Mandate/Compulsory Vaccination

The majority of the respondents, twenty-two (22) of the respondents (73%) disagreed, about the vaccine mandate or making the vaccine compulsory.

Some of the respondents emphasized that: Forcing people to take the vaccine increases skepticism. A government that hid palliatives from the resident(s); is now forcing them to take the vaccine for free, which smacks sinister motive.

When respondents were asked, if they believed; that the vaccine would reduce the death rate as a result of COVID-19, the response was evenly split among the respondents. However, one of the respondents, a Medical Doctor, said that the vaccination will reduce the severity of the virus on vaccinated people"

While another respondent; also, a Medical Doctor, responded that:

"With his personal experience, vaccinated or unvaccinated, people with weak immune systems, especially the elderly and individuals with comorbidity (ie. previous illness associated to the liver, kidney or diabetes etc) chances of such persons surviving COVID-19, if infected, are very low". Respondents are against compulsory vaccination; they want to have the free will to take or ignore COVID-19 vaccination.

CONCLUSION:

This epidemic has impacted the lives of citizens around the world psychologically, politically, economically and culturally. Different countries are still grappling with the effects to date. Despite the impact and efforts to curb the pandemic, a high rate of scepticism about the vaccine and vaccination remains. Seeing or hearing that people who have taken the vaccine (1st and 2nd doses) are dying of COVID-19 is not encouraging. Such a scenario leaves a scar that will be hard to





remove or convince about the need to be vaccinated. On the other hand, vaccinated people, contracting the virus, leaves a lot of people in a dilemma, whether there is even a need to take the vaccine at all. This study reveals some of the reasons for the scepticism about the vaccine, efforts of the Edo State Government to increase the vaccination rate and ways to curb the spread of COVID-19 in Edo South Senatorial District.

Finally, respondents unanimously agree that vaccinated or unvaccinated, basic hygiene like constant hand washing, face masks, use of sanitisers and strict compliance with COVID-19 safety measures can reduce COVID-19 spread in Edo South Senatorial District.

RECOMMENDATION:

1) The government needs to improve on its credibility and do more about enlightenment campaigns, the people need to know more about COVID-19 and the vaccine. Vaccine mandate or compulsory vaccination will be resisted by the people.

2) The government should produce COVID-19 jingles in our local dialects, disseminate same through print/media,

3) The government should involve influencer(s) and religious leaders who can reach out to the people far and near about the need to be vaccinated.

4) The government can also seek alternative local medication that can be produced and tested in Edo State Senatorial district.

5) The introduction of incentives or palliatives like foodstuffs, beverages, tax breaks for business owners or government employees etc that present themselves for vaccination will also help.

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APPENDIX A

The following are the research questions that were asked from the respondents:

- 1. Do you believe COVID-19 is real?
- 2. Have you taken the COVID-19 Vaccine?

3. If respondent's answer is NO to question No. 2, the follow-up question will be- Why have you not taken the vaccine?

4. If respondent's answer is YES to question No. 2, the follow-up question will be- Did you get any physical reaction after taking the vaccine?

- 5. What do you think is responsible for public skepticism about COVID-19 vaccination ?
- 6. Do you think Edo State Government is doing enough to ensure residents are vaccinated?
- 7. If respondent's answer is NO to question No. 6, the follow-up question will be What ways can you suggest Government can use to increase the rate of COVID-19 vaccination?

8. Do you believe the vaccination will help reduce the death rate as a result of the COVID-19

9. Do you think, people need more enlightenment about the risks of not taking the COVID-19 vaccine ?

10. What ways can you suggest to control the spread of COVID-19 in the Edo South Senatorial District ?

11. Do you think COVID-19 vaccine should be made compulsory?

