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## **Evaluation of Government Communication Interventions for Public Trust and Acceptance of the COVID-19 Astrazeneca Vaccine in Ebonyi State, Nigeria**

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**ABSTRACT:** *This study investigated government communication intervention for public trust and acceptance of the AstraZeneca vaccine for Covid-19 treatment in Ebonyi State. The study was anchored on Agenda setting theory and health belief model. Survey research method was adopted using questionnaire as instrument for data collection. The study adopted Online Australia calculator to select a sample size of 385 from the population of 1,348,027. Four research objectives were raised and four corresponding research questions were posed to guide the study. Data collected were analyzed using tables and simple percentage. Findings reveal high level of awareness of the AstraZeneca vaccine in the state, but only few people accept to be vaccinated, most people are not willing to take the vaccine due to misinformation surrounding the vaccine, also fear of safety of the vaccine and lack of trust on the government by the people because of previous disappointments as it concerns the general welfare of the citizens. The study recommends more sincerity on the part of the government so as to gain citizens trust; as well as more education through workshops, seminars, and/or symposia on the dangers of vaccine hesitancy.*

**KEY WORDS:** communication intervention, COVID-19, AstraZeneca vaccine, public trust, vaccine hesitancy/acceptance

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## **INTRODUCTION**

Covid-19 is a disease caused by SARS Coronavirus 2 which started in Wuhan China in December 2019 and spread to rest of the world causing several cases of mobility and mortality. The world health organization (who), declared the disease a pandemic in March 2020, Also they stated that, the pandemic poses a serious threat to a global public health, socio-economic stability, food

security, trade and industry with the impact felt in high and low income countries alike. Since the first case was detected in Lagos state on the 27<sup>th</sup> February 2020, the number of cases in Nigeria has been on a steady rise though has remained lower than the rest of the World. Nigeria Centre for Disease Control (NCDC 2020). With over 1 billion people and a weak health system plagued by lack of health care infrastructure and shortage of health manpower, limited access to social protection and low health literacy, the public health measures implemented at the start of the pandemic may not be sufficient to stop further progress of the virus in Nigeria or end the pandemic (WHO, 2020)

The increasing number of fatalities have been due to the non-availability of any covid-19 vaccine and as a result, a covid-9 vaccine promising to be the most practical and feasible solution for Nigeria. According to Alexander (2017). Vaccine is vital to the prevention and control of infectious diseases outbreaks, they protect us from the time we are children into adulthood.

According to World Health Organization (WHO), there are vaccines available to protect against at least 20 diseases such as diphtheria tetanus, influenza, measles and now covid-19. Together these vaccines save the lives of up to 3 million people every year. To stop a pandemic like Covid-19 requires using all the tools that are available. Wearing masks and physical distancing helps reduce our chances of being exposed to the virus or spreading it to others but these measures seems not enough.

To arrest the increasing morbidity and mortality due to covid-19 researches have been conducted for the development of covid-19 vaccine and covid-19 vaccine are currently available in some countries WHO, (2020). COVAX, a pillar of the Access to covid-19 tools (ACT) was launched by the World Health Organization, the European Commission and France as a global response strategy to the covid-19 pandemic (see: <https://www.gavi.org>). COVAX was established as a global initiative to ensure both equitable and swift access to the covid-19 vaccine in 190 countries across the globe, irrespective of their developmental phase or level of income WHO, (2021). Arrangements have being concluded and rolling out of the Covid-19 vaccines has started in first quarter of 2021. For low-income countries that are not self-sufficient to purchase the Covid-19 vaccine, COVAX provides a lifeline and the only viable strategy to ensure a timely availability of Covid-19 vaccine for their populace as developed countries (WHO). Also COVAX bridges the inequality gap between the marginalized and other population group in many African countries by ensuring that the Covid-19 vaccine is available to all persons (Gavi: The vaccine Alliance). In spite of these potential benefits presented by covid-19 vaccine they have been reluctant of many to accept the proposed Covid-19 vaccine, thus limiting the effectiveness of the Covid-19 outbreak response. The Covid-19 outbreak response activities commenced in February 2020, prior to the index case of Covid-19 in Africa. The response activities thus far have included testing, border closure, and School closure, recommendations on physical distancing, use of face masks, hand hygiene in public places and public health campaign on existence of Covid-19. However till date many persons still deny the existence of Covid-19, while others perceive it as a strategy for political corruption despite the public health campaigns. (Ilesanmi and Afolabi, 2020).

Despite the misnomer, the existence of Covid-19 cannot be completely denied even among doubting individuals due to the large number of deaths that have been linked to Covid-19 in recent times. The denial of Covid-19 among many has influenced Covid-19 vaccine hesitancy (VH) following the knowledge of the availability of the Covid-19 vaccine in Nigeria. Aside the belief that Covid-19 vaccine is political in nature, the lack of trust in pharmaceutical industry for its non-mandatory administration, the Covid-19 vaccine has been identified as the mark of the beast among religious folks (The logos Academic blog 2020). These misconceptions could therefore hinder the promising successes which could be achieved through the prospective Covid-19 vaccines and the entire Covid-19 outbreak responses. To address the factors which could hinder the effectiveness of the outbreak response, Government are adopting strategies to address Covid-19 vaccine hesitancy (VH).

## RESEARCH QUESTIONS

1. What is the level of awareness of COVID-19 willingness to take the vaccines among residents of Ebonyi state, Nigeria?
2. How effective are government communication interventions for public trust and acceptance of Covid-19 vaccine in Ebonyi State Nigeria?
3. What are the major inhibitors to public trust and acceptance of AstraZeneca vaccine Ebonyi State, Nigeria?

## The Outbreak of Coronavirus

Coronavirus was first identified in 1937 by researchers. They isolated one that was responsible for a type of bronchitis in birds and had the potential to devastate poultry stock. In 1960's scientists found evidence of human corona virus in the noses of people with the common cold. Adam F; (2021).

The name coronavirus refers to the crown – like projections on the pathogen's surface. "Corona" in Latin means "halo" or "crown". There are many types of corona virus. Some cause mild illness, such as the common cold, others can cause severe acute respiratory syndrome (SARS) or middle East respiratory syndrome (MERS), which can be life threatening. Joseph Vinetz, (2021). Many corona viruses are present in animals but do not affect humans. Sometimes, however, a virus mutates in a way that allows it to infect humans, which scientists refer to as human corona virus (HCOVS) Adam (2021).

In later 2019, scientists identified an outbreak of a new corona virus in Wuhan China; which they refer to as severe acute respiratory syndrome corona virus 2 (SARS-COV-2) which causes corona virus disease 19 (covid-19). Feng He, Yu Deng and Weina L, (2020). Many researchers believe SARS – COV-2 first infected bats before spreading to other animals, including humans. Some of the first people with Covid-19 had links to a live animal and seafood market. Who/2019-ncov/Human-animal risk/2021-2.

The virus spread rapidly around the world, and the World Health Organization (WHO) declared it a pandemic in March 2020. The new corona virus has been responsible for millions of infections globally, and it has caused more than 2 million deaths. The mortality rate varies from country to country. WHO (2020) people with a higher risk of severe covid-19 symptoms include older adults and those with underlying medical condition such as high blood pressure, heart and lung problems, diabetes and cancer according to centre for disease control and prevention (CDC) 2020.

People may start to experience Covid-19 symptoms within 2 to 14 days after exposure to SARS – Cov-2. CDC, (2020). Symptoms of Covid-19 include the following fever, chills, cough, shortness of breath or difficulty in breathing, sore throat, headache, loss of taste or smell, nausea, vomiting, diarrhea etc. As the virus progress, severe complications can arise which can lead to multiple organ failure CDC, (2020).

According to WHO, corona virus infections are contagious, they spread easily between people. It is believe that the viruses transmit via fluids from the respiratory system. Transmission may happen when a person coughs or sneezes without covering their mouth, dispersing droplets containing the virus into the air. Also when a person has physical contact with someone who has the infection or touches a surface that contains the virus, then touches their nose eyes or mouth.

CDC and WHO stipulated the following guideline for prevention of corona virus disease. They encourage people to wear face covering in public, observe social distance, avoid touching the face, especially the mouth and nose. Always cough and sneeze into the elbow or tissue, and dispose it and also regularly and thoroughly washing of the hand.

### **The Discovery of AstraZeneca Vaccine**

In response to the SARS-COV 2 pandemic, the global efforts to develop multiple vaccines to protect against Covid-19 diseases have proceeded at an unprecedented pace. AstraZeneca Covid-19 vaccine manufactured by AstraZeneca and Covishield manufactured by Serum institute of India are CHAdoxl-s recombinant vaccine developed by AstraZeneca and the University of Oxford. Feng Hne al et (2020) Covid-19 vaccine AstraZeneca is a vaccine that can prevent people from becoming ill from covid-19. According to WHO, (2021) Covid-19 vaccine AstraZeneca does not contain any live SARS –COV 2 virus, and it cannot give anybody Covid-19. They said that it contain the genetic code for an important part of SARS-COV-2 virus called the spike protein. This spike protein has been inserted into a harmless common cold carrier virus (an adenovirus). The adenovirus carrier brings the spike protein into human cells so that they can read it and make copies of the spike protein. Then human immune system will learn to recognize and fight against the SARS-COV2 virus. Feng He at el (2020) also added that he adenovirus has been modified so that it cannot replicate itself once inside cells, which prevent it from causing infection. WHO stated that a combination of several clinical trials showed that Covid-19 vaccine AstraZeneca is safe and effective in preventing Covid-19 in people aged 18 years and above?In March 2021, Nigeria received 3.94 million dose of the Oxford AstraZeneca Covid-19 vaccine to stop the spread of the corona virus and save lives.

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### **The Problem of Vaccine Hesitancy**

Many experiences and rumors have challenged the success and effectiveness of vaccination programs in Africa, UNICEF (2001). In the same vein, Jeged AS (2007) pointed out that, the polio vaccine boycott in 2003-2004, prompted by distrust and fallacies resulted to a fivefold increase in polio incidence in Nigeria between 2002 and 2006; and increased polio outbreak in three non-African continents.

Due to the wrong perception of religious leaders, a polio vaccination program was rejected in Northern Nigeria Aanuolunap and Olayinka S I (2021) similarly, a mass deworming program was rejected in Ghana due to misconception among community members Febir L G and Asante K P (2013). In the United State, Canada, California and Europe, Vaccination reluctance led to an increased vulnerability of unimmunized children in large CDC (2015).

The rejection of vaccination programs in these instances thereby exposed more individuals to infections illness and also led to disease progression among ill individual. These arrays of evidence made Fine and Eames (2011) to suggest that vaccine hesitancy pose threat to individual, personal and global health, as it delays the attainment of herd immunity for specific illness. Covid-19 vaccine hesitancy could be considered as a cause effect model, and its causes could be examined through Covid-19 outbreak in Nigeria, laxity in the implementation of border closure. During this period Nigeria government ensured the exit of their relatives from Covid-19 high risk countries to Nigeria. Ilesanmi et al, (2020). Furthermore, little was done by Nigeria government towards the citizens during the lockdown. Due to these reasons, many Nigerians display a lack of confidence in the government following the reports of Covid-19 Nigeria and now the Covid-19 vaccine. Covid-19 vaccine hesitancy will pose substantial risks to both people who delay or refuse to be vaccinated and wider community. It will make communities unable to reach thresholds of coverage necessary for herd immunity Covid-19, thus unnecessarily perpetuating the pandemic and resulting in untold suffering and deaths.

### **Government Communication Interventions aimed at Mitigating Vaccine Hesitancy**

According to World Health Organization, equitable access to safe and effective vaccine is critical to ending Covid-19 pandemic. Following this the federal government of Nigeria on March 2021 received 3.9 million doses of the Oxford AstraZeneca vaccine from Covax to help stop the spread of Coronavirus disease.

National primary health care development agency (NPHCDA) is the body responsible for implementation of vaccination programme in Nigeria. NPHCDA in collaboration with WHO and UNICEF on arrival of Covid-19 vaccine held a joint press statement on arrival of the vaccine to explain the safety and efficacy of the vaccine to the public.

Nigeria had set an ambitious goal of vaccinating all eligible Nigeria within the next two years in order to ensure herd immunity. The goal is to introduce the vaccine in a phased and equitable manner based on advice of WHO, starting from health workers, front line workers, military and



paramilitary, petrol station workers and strategic leaders and the second phase will capture older adults aged 50 years and above and those with comorbidities between 18 and 49 of age. To facilitate the implementation process, the Technical Working Group (TWG) had come up with a strategy called TEACH approach for pre-registration and scheduling of the target population to avoid overcrowding at vaccination posts.

The TEACH approach entailed:

T: Traditional method of vaccinating target populations using desk review of available data sources, identifying the vaccination sites and rolling out

E: Electronic self- registration for health workers and the public; a link which provides an online form will be provided

A: Assisted electronic registration

C: Concomitant e-registration during walk in to fixed sites/health facilities

H: House-to-House registration using volunteers for additional push to rapidly increase the e-registration.

Also the Federal Government through NPHCDA had developed a training manual for the Covid-19 vaccine introduction. The executive director of NPHCDA Mr. Faisal Shuaib said that the manual outlined a comprehensive scheme and measures to identify and develop micro plans for the target population; the development of an effective, efficient and equitable vaccination delivery strategy, while ensuring vaccine security, management and accountability. The plan was to train healthcare workers, supervisors and monitors at all levels. They also organized two-day training for over 1,500 LGA health educators and Community Orientation Mobilization Officers (COMOs) of the National Orientation Agency. This was to enable them conduct community polling, track rumors and provided accurate information on COVID-19 vaccine to community members. For more effective sensitization. They work hand in hand with a wide range of stakeholders, which include the Association of Community Pharmacists of Nigeria (ACPN), the Soroptimist International, Nigeria group, and the Nigeria Association of Women Journalists (NAWOJ).

NPHCDA adopted the use of SMS and face to face interactions to get the people aware of AstraZeneca vaccine in Ebonyi State. They also making use of mass media and social media blog in letting the public known that AstraZeneca vaccine is safe and effective. To further encourage the public on this, the mass media publicize the government officials live while being vaccinated.

### **Review of Empirical Studies**

Aanuoluwapo et al 2020 conducted a study on Dealing with vaccine hesitancy in Africa: the prospective covid-19 vaccine contexts, they established that vaccine hesitancy is not new in Africa and therefore advice that multi-sectoral collaboration should be initiated and promoted to enhance the acceptance of Covid-19 vaccine.

In the same vein Paul L and Michael L (2020) conducted an online survey of adults ages 18 and older in the United States on acceptability of Covid-19 vaccine among adults in the United States:

How many people would get vaccinated? They discovered that 69% of participants were willing to get a Covid-19 vaccine if their health care provider would recommend vaccination.

Ekaeta A et al (2021) studied willingness for acceptance of a Covid-19 vaccine in Nigeria. A population based cross sectional study also discovered that 1 out of 2 persons would accept a Covid-19 vaccine when becomes available in the country. A household survey on the perception of Nigeria towards a Covid-19 vaccine, by Beti Baiye and Ibukuno (2020). They stated that 10 percent of their respondent do not believe that Covid-19 exists and so their perception towards the vaccine is influence by their belief about the disease itself, although two third of their respondents showed willingness to take the vaccine.

Walid A and Anan S (2021) in their study on Covid-19 vaccination acceptance and its associated factors among a Middle Eastern population. They adopted a cross sectional web based study and discovered that out of 1,144 participants in the study, 36.8 percent indicated not willing to take the vaccine while 26.4 percent are not sure if they will take the vaccine. The main reasons for the participants' vaccination hesitancy are concerns regarding the use of the vaccine and lack of trust in them.

Martin Wiredu et al (2021) carried a study on acceptability of Covid-19 vaccination among health care workers in Ghana. They conducted a self-administered online survey and their findings revealed that only 39.3% of health care workers intend to receive the Covid-19 vaccine. Concern about the safety of vaccines and the adverse side effects of the vaccines were identified as the main reasons why health care workers would decline uptake of Covid-19 vaccine in Ghana.

### **Theoretical Framework**

This study adopted two theories, Agenda setting theory and Health Belief Model. Agenda setting theory was propounded by Maxwell MC combs and Donald Shaw in 1972 and 1973. The Agenda setting describes a very powerful influence of the media; that is the ability of the media to tell the public what issues are regarded as important at a given time in a society. The justification for adopting the theory for this study is that all the communication intervention from the government for public acceptance of AstraZeneca vaccine has to pass through the media. The way and manner the media present the message determine the level of importance the public will place on the message.

The second theory applied to this study is health belief model which was propounded in 1950s by Hochbanum, Rosenstock and Kegels. This model assumes that people are afraid of disease and that health actions are motivated in relation to the degree of fear and expected fear reduction potential of action as long as that potential outweighs practical and psychological obstacles to taking action.

## METHODOLOGY

The study adopted a descriptive research design. Population of the study was adults in Ebonyi State, Nigeria. According to the National Bureau of Statistics, the projected population of the area was 2,880,400. A sample size 385 was determined using the Online Australia calculator. The sampling techniques involved the use of cluster, multi stage, systematic and simple randomization. First, Ebonyi state was clustered into three senatorial zones namely: Ebonyi North, Central and South. The simple random technique was used to select one Local Government Area from each of the zones. A total of 128 copies of the questionnaire were distributed at each zone. Instrument for data collection was structured questionnaire with five point Likert scale questions. This method further eliminate gap of misinterpretations and to enhance the validity and reliability of the study. Three research assistants were engaged in administering the questionnaire. Data generated were analysed using tables and simple percentages.

### Data Presentation and Analysis

A total of three hundred and Eighty-five (385) copies of questionnaire were distributed but only three hundred and seventy-two (372) copies were returned valid. The tables below indicated other valuable and detailed information.

**Table 1**

<b>Variables</b>	<b>Frequency (N=372)</b>	<b>Percentage (%)</b>
<b>Gender:</b>		
Male	176	47
Female	196	53
<b>Age</b>		
18 – 30	116	31
41-50	146	39
51-60	88	24
61 and above	22	6
<b>Marital status</b>		
Single	148	40
Married	195	52
Divorced	18	5
Widow/widow	11	3
<b>Educational qualification</b>		
FSLC	11	3
SSCE	38	10
NCE/OND	95	25.5
HND/BSC	136	36.5
Msc/ Phd	92	24.7



The data in table 1 above reveal that 47% percentage of the respondents were male and 53% were female which means that female dominated the study group. The result also show that the respondents who were in age bracket of 18 – 30 represented the 31% of the respondents, 41-50 years old represented 39% , 24% of the respondents falls between the age bracket of 51-60 and only 6% of the respondents were in age bracket of 60 years and above.

The same table 1 also shows that those who were married were 52% of the respondents; singles were 40% while 5% were divorced and 3% of the respondents were widows/widowers. Furthermore, on the educational qualification of the respondents, only 3% of the respondents were FSCL holders, 10% were SSCE holders, 25.5% of the respondents were degree holders and the bulk of the respondents were higher degree holders which constituted up 61% of the respondents.

**Table 2**

What is the level of awareness of the public on AstraZeneca vaccine and the level of their willingness to accept the vaccine?

Variables	SA	A	SD	D	IND
You are highly aware of Covid-19 vaccine	112	218	20	22	-
	30%	59%	5%	6%	-
You knew about the vaccine through Radio, Television, social media	75	250	22	28	-
	20%	67%	5.9%	7.5%	-
You have been vaccinated with AstraZeneca Vaccine	5	2	73	292	-
	1.3%	5%	19.6%	78.4%	-
You are willing to be vaccinated with AstraZeneca vaccine	7	12	68	285	-
	1.8%	3.2%	18.2%	76.6%	-

The result from table 2 above shows that, 30% of the respondents are highly aware of AstraZeneca vaccine while 59% are aware of the vaccine and only 11% of the respondents are not aware of the vaccine. From the result, we say that the majority of people in Ebonyi State are aware of the Covid-19 vaccine and they knew about it either through Radio, Television, social media or personal interactions.

The same table reveal also that only 2% of the respondents have been vaccinated with AstraZeneca vaccine, while the remaining 98% have not been vaccinated which means that the majority of people in Ebonyi State have not being given the covid-19 vaccine. Furthermore, the table 2 also shows that even though the majority of Ebonyians are yet to be given AstraZeneca vaccine, only 5% of the respondents are willing to be vaccinated while 95% of the respondents are not willing to accept the covid-19 vaccination.

**Table 3**

How do the public perceive the AstraZeneca vaccine in Ebonyi State?

Variables	SA	A	SD	D	IND
Covid-19 vaccine is safe and does Not have side effect	2 0.5%	5 1.3%	178 47.8%	137 36.8%	20 13.4%
AstraZeneca vaccine is effective against covid-19	2 0.2%	5 1.3%	178 47.8%	137 36.8%	50 13.4%
Covid-19 vaccine is the mark of the beast	188 50.5%	157 42.2%	12 3.2%	5 1.3%	10 26%
Side effect of AstraZeneca vaccine Are severe and life threatening	26%	54%	3.4%	2.9%	13.4%

**Table 3:**

The data from table 3 indicated that greater number of the respondents 47.8% strongly disagreed to safeness of covid-19. 36.8% disagreed, 13.4% remained indifference and only 2% agree to covid-19 vaccine to safe and does not have side effect.

Furthermore, the table also revealed 93% of the respondents fear the vaccine as being the mark of the beast. 3% of the respondents were indifference, while only 4% disagree to AstraZeneca vaccine as being mark of the beast. In the table, also the greater percentage of the respondents 80% feared that the vaccine side effects are severe and life threatening, while 6% disagree to that and 13% remained indifference.

**Table 4**

Has government communication intervention enhance public trust and acceptance of AstraZeneca vaccine in Ebonyi State?

Variables	SA	A	SD	D	IND
Government information on AstraZeneca Vaccine is open, fair and reliable to be trusted.	96 25.8%	78 20.9%	99 26.6%	87 23.3%	12 3.2%
Government has boasted public trust and Confidence in the vaccine through Communication.	71 19%	68 18.2%	112 30.1%	98 26.3%	23 6%
The institution responsible for AstraZeneca Vaccine in Ebonyi State can be trusted.	87 23.3%	83 22.3%	77 20.6%	57 15.3%	68 18.2%
Government has proven to be competent in managing the health need of the citizens.	23 6%	21 5.6%	194 52%	109 29.3%	25 6.7%

Data from table 4 reveal that government are communicating to boast trust and acceptance of AstraZeneca vaccine but only 46.7% of the respondents agree that government communication intervention for the Vaccine are fair, open and reliable to be trusted while 49.9% disagree and 3% remained indifference. Again, the table shows that only 37% of the respondents agree that their

confidence for the vaccine have been boasted through government communication intervention, while 56.4% of the respondents disagree and 6% remained inference.

Furthermore, from the same table, 11.6% of the respondents agree that government has proven to be competent in managing other health needs of the citizens and 81.3% disagree to that while 6.7% remained indifference.

**Table5**

What are the major inhibitors to public trust and acceptance of AstraZeneca vaccine in Ebonyi State?

Variables	SA	A	SD	D	IND
Ignorance of the availability of covid-19 Vaccine	5 1.3%	7 1.8%	199 53.4%	148 39.7%	13 3.4%
Misinformation towards the covid-19 Vaccine	189 50.8%	153 41%	14 3.7%	9 2.4%	7 1.8%
Fear of the vaccine being the mark of the Beast	182 48.9%	145 38.9%	10 2.6%	17 4.5%	18 4.8%
Government indifference towards other Needs and welfare of the citizens	122 32.7%	194 52.1%	31 8.3%	23 6%	2 0.5%

Data from table 5 shows that the only 3.1% of the respondents agree that ignorance of the availability of AstraZeneca vaccine in the state inhibits its acceptability while 93.1% disagree to that while 3.4% remained indifference.

In the same vein, 91.8% of the respondents agreed that misinformation is a major inhibitor to the vaccine while 6.1% disagreed to that and 1.8% remained indifference. Again from the same table, 87.6% of the respondents agreed that the fear of the vaccine as the mark of the beast inhibits their acceptance of the vaccine, while 7.1% disagree to that and 4.8% remained indifference. Furthermore, 84.8% agreed that government attitudes towards other needs of the citizens are major inhibitor to their acceptance of the vaccine while 14.3% disagree to that and 0.5% was indifference.

## DISCUSSION OF FINDINGS

The results deduced from the tables above suggests that the level of awareness of AstraZeneca vaccine in Ebonyi state is high but 98% of the respondents have not being vaccinated and are not willing to do so. This finding confirms the earlier study of Walid and Anan (2021) that most people are not willing to take the vaccine. Our findings further show that vaccine hesitancy in the area is as a result of the fear for safety of the vaccines and concerns that the vaccines might be the biblical mark of the beast, leading to the end of time. This finding is consistent with that of Wiredu at el, (2021) in Ghana, which show that the fear of adverse side effects of the vaccines was the main reason why healthcare workers would decline uptake of COVID-19 vaccine in Ghana. Also the result of the finding identified the major inhibitor to acceptance of AstraZeneca vaccine uptake in

Ebonyi state as the concern that the vaccine might be the mark of the beast, misinformation towards the vaccine and government indifference towards other needs of the citizens especially during the lockdown for the pandemic.

Furthermore, on the finding, the respondents attested that the government are making efforts to sensitize the public on the need to accept the AstraZeneca vaccine, yet their efforts are not yielding sufficient result because the public seems to have lost confidence on government messages due to their indifference disposition when it comes to the welfare of the citizens; thus, the public tend to doubt whatever information emanating from the government about COVID-19 and the vaccines.

## CONCLUDING REMARKS AND RECOMMENDATIONS

Evidences from the study show that vaccine is a veritable tool in fighting disease such as Covid-19, but misinformation towards the Covid-19 and AstraZeneca vaccine inhibit the acceptance of the vaccine. Again government indifference disposition towards the welfare and needs of the citizens contributed in creating doubts in the heart of the public which made them to perceive information concerning AstraZeneca vaccine as propaganda from the government. The study recommends more sincerity on the part of the government so as to gain citizens trust; as well as more education through workshops, seminars, and/or symposia on the dangers of vaccine hesitancy.

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