COMPLIANCE TO PREVENTIVE MEASURES OF COVID 19 PANDEMIC AND HEALTH IMPLICATIONS AMONG THE ELDERLY IN IKA NORTH EAST OF DELTA STATE, NIGERIA

BY

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DECLARATION

I **Aghulor Jovita Dooshima** with registration number: **Soc/M.Sc/18/031** hereby declare that this work titled "**Compliance to Preventive Measures of Covid 19 Pandemic and Health Implications among the Elderly in Ika North East of Delta State, Nigeria.**" is the product of my own research effort under the supervision of Professor R. P. Abia and has not been represented elsewhere for the award of a degree or certificate. All sources have been duly acknowledged.

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CERTIFICATION

This is to certify that this thesis titled "**Compliance to COVID 19 Preventive Measures and Health Implications among the Elderly in Ika North East Local Government Area of Delta State, Nigeria.**" and carried out by **Aghulor, Jovita Dooshima** with Registration Number **SOC/M.Sc/18/031,** has been examined and found worthy for the award of Master of Science (M.Sc.) Degree in Sociology (Medical).

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ABSTRACT

This study examined the preventive measures of covid-19 and health implications among the elderly in Ika North East Local Government area. To give this study a direction. three research questions and three objectives were formulated and later transformed into three hypotheses. In the investigation, related literature was thematically reviewed based on the main variables of the study. Two theories such as the health belief model and Symbolic interactionism theory of health were employed. The study adopted a correlational research design. Population of this study consisted of all elderly (male and female) people who were aged 50 years and above in Ika North East Local Government area of Delta state. Sampling techniques adopted for this study were the cluster and simple random sampling techniques with the questionnaire as instrument for data collection. A sample of three hundred and thirty three (393) respondents was selected via the cluster and simple random sampling methods and statistically determined with the aid of the used the Taro Yamen's sample size determination formular. The three null hypotheses were analyzed using Pearson's Product Moment Correlation (PPMC) as the major instrument for data analysis at a 0.05 level of significance. This was done with aid of the statistical package for social sciences (SPSS) version 20. The test results revealed that; there is a significant relationship between wearing of face masks, social distancing and regular hand washing, administration of Covid-19 vaccines and health implications among the elderly in Ika North East Local Government area. It was recommended that; consistent and well-coordinated preventive measures of COVID-19 disease in terms of wearing of face masks, social distancing and regular hand washing as well as administration of Covid-19 vaccines are very important for the maintenance of health and well-being of the elderly and the general public.

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CHAPTER ONE

INTRODUCTION

1.1 Background to the study

It is no longer news that corona virus (COVID-19) pandemic is a deadly disease that is claiming lives of humans all over the globe. The Center for Disease Control and Prevention (CDC) defines a pandemic as an epidemic that has spread to many countries and continents and has often affected more people. Epidemics are often caused by new viruses (viruses or bacteria) that spread rapidly. This pandemic is widely believed to have no known cure. The disastrous effects of COVID-19 pandemic have caused loss of lives of millions of people globally leaving no country or age group unaffected. Guan, Ni Hu and Liang (2020) highlighted that corona virus infection manifests itself in a mild pneumonia to very severe pneumonia with acute respiratory distress syndrome, septic shock and multi organ failure which sometime result in death. According to Mellissa (2020), Corona virus spread by air and transmitting its droplets of coughing, sneezing or Saliva on one hand, close contact with COVID-19 patient or touching the virus on the other hand. Illnesses or sicknesses associated with corona virus are mostly running nose, cough, fever, sore throat, headache, and feeling unwell. It kills human beings especially the elderly within a short time. According to Wei, Chiew. Yong, Toh, and Lee (2020), the old COVID-19 virus is highly contagious, especially in the respiratory tract produced when an infected person coughs, sneezes, or produces sputum. This aerosol or droplets can be injected into the lungs of nearby people. The tragic consequences of the COVID-19 epidemic have caused millions of people, especially the elderly, to lose their lives worldwide (Chiew, Yong, Toh, & Lee, 2020). There is no country that is free or age group unaffected as it ravages both the elites and the common man; whether a clergy or an atheist. The number of confirmed cases of corona virus is rapidly increasing

around the world, developing countries witnessing the increase after Asian and European regions. Global cases of corona virus have risen to the level of 121,144,444 which stand at 15.68 percent per 1000persons and 679,904 deaths more of which were the elderly population (WHO, 2020). This increase in the number of affected cases in the society particularly in Ika North East may not be unconnected with the elderly non-adherence to the preventive measures of COVID19 such as wearing of face masks, keeping social distancing and regular hand washing and administration of vaccines.

In Nigeria like other countries of the world, there were reported cases of covid-19 diseases in all the 36 states and Federal Capital Territory. The COVID-19 pandemic has posed a huge threat to health, social institutions and economy. This is evident as educational institutions of learning, hospitals, markets, and other public organizations were all shut down. Incidences of corona virus gradually increased, shifting from an imported case and elitist's pattern to community local transmission. After the first recorded case that has to do with an Italian citizen working in Nigeria, the Nigerian Center for Disease Control indicates daily cases between 250-500 alone in July 2020 and in March 2020 confirmed cases of corona virus was 161,409 with 2,027 deaths (NCDC,2020). Considering the continuous rise in confirmed cases of the COVID 19 worldwide, governments in various countries took a proactive action to limit the spread. At the initial time, quarantine, social distancing, use of face masks and sanitizers was introduced and in addition, vaccine, restriction of movement within and between states was introduced. Some societies experienced total lock down and others partial lockdown (Nyashamu, Pfende & Ekpenyong, 2020). In spite of these preventing measures the death rate of COVID-19 pandemic infections is still on the increase. It is based on this backdrop that this research is on the preventive measures of COVID-19 pandemic and health implications among the elderly in Ika North East Local Government Area of Delta State, Nigeria.

implications among the elderly in Ika North East Local Government Area of Delta State, Nigeria.

1.2 Statement of the problem

The constant escalation of corona virus (COVID-19) which has caused the deaths of over 670,000 people is a threat to humanity. This is very disturbing to researchers and concerned citizens both local and international as various reports stated the least number of recorded cases of corona virus deaths daily in Africa alone is 1764 (NCDC, 2020). Chiew, Yong, Toh, and Lee. (2020) observed that disastrous effects of the covid-19 pandemic have caused millions of people to lose their lives all around the world. It has left no country untouched and ravages both the elites and the common man; whether a clergy or an atheist. The Covid-19 disease or virus has been identified for having various symptoms such as difficulty in breathing, headache, fever, fatigue and so on, that poses health problems and even death to its victims particularly the elderly. However the occurrence and development of the illness largely depends on the interaction between the virus and the individual's immune system and viral load. The elderly are believed to have a low immune system due to their age and this makes them vulnerable to the virus infection than any other group (NCDC, 2019). More disturbing is the fact that the elderly in Ika seem not to obey the COVID-19 rules of avoiding large crowds and observing the preventive measures of keeping social distancing and regular hand washing, wearing of face masks and even taking the vaccines.

According to NCDC (2019), COVID-19 status report dated 3 June 2020 said 348 verified cases were reported within 24 hours in 19 states - Lagos (163), FCT (76), Ebonyi (23), Rivers (21), Delta (8), Nasarawa (8), Niger (8), Enugu (6), Bauchi (5), Edo (5), Ekiti (5), Gombe (5), Ondo (5),), Benue (4), Ogun (2), Anambra (1), Kogi (1), Osun (1) and Plateau

(1). No new country has recorded the verified COVID-19 case in the last 24 hours. The total number of regions including FCT that reported at least one confirmed case in Nigeria is still 36 (35 states + FCT). Ninety (90) cases were filed 24 hours ago in 10 (10) provinces - Kano (32), Lagos (20), Plateau (13), Katsina (9), Delta (4), FCT (3), Rivers (3), Ekiti (2), Gombe (2), Jigawa (2). The death of one (1) person was recorded 24 hours ago in the same province (1) - Gombe (NCDC, 2020). In addition, the weekly reports of the epidemic dated 15 - 21 March 2021 by NCDC (2021), in week 11, the number of new confirmed cases dropped to 1,080 from 2,122 reported in week 10. This was reported in 30 provinces and FCT. By week 11, the number of cases dropped had dropped to 2,500 from 7,343 in the 10th week. This was reported in 21 provinces and FCT. The death toll was reported last week in eight provinces and FCT. In total, since the outbreak of Week 9, 2020 there have been 2,030 deaths reported with a reported death rate (CFR) of 1.3%. By week 11, the number of international travellers entering Nigeria's international airport was 14,103 compared to 12,306 in the 10th week. In today's world many people, including the elderly, may be aware of a deadly disease called COVID-19. In Nigeria and Ika North East Local Government Area of Delta State especially the elderly seem to be taking the COVID-19 epidemic lightly as most of them are still moving freely and conducting their business without adhering to preventative measures as introduced by the government, to reduce the spread. More so, the introduction of COVID-19 vaccines to prevent the spread of the disease that was supposed to be a thing of joy to all and sundry in the society, many people seems not to be comfortable with it. Instead, a lot of them tend to consider it as an attempt by the developed nations to reduce the world population (NCDC, 2019). This prompted the researcher's question "Are people particularly the elderly still dying of COVID-19 with all the preventive measures introduced by NCDC to contain the spread? Could it be due to some news on social media (Watsapp, Facebook, Instagram Twiter etc.)

that COVID-19 is a man made disease or does not exist? If not what could be the cause of non adherence to the compliance to preventive measures of COVID-19 by the people of Ika? Answers to these pertinent questions motivated this study on compliance to preventive measures of COVID-19 pandemic and health implication among the elderly in Ika North East Local Government Area of Delta State, Nigeria.

1.3 Research questions

This study asked the following questions;

1. Does wearing of face masks significantly relate with health implications among the elderly?
2. Does social distancing and regular hand washing significantly relate with health implications among the elderly?
3. Does administration of COVID-19 vaccines significantly relate with health implications among the elderly?

1.4 Objectives of the study

The main objective of this study was to examine compliance to preventive measures of Covid-19 pandemic and health implications among the elderly in Ika North East local government area. The specific objectives included;

1) To examine whether there is a significant relationship between wearing of face masks and health implications among the elderly.
2) To find out whether there is a significant relationship between social distancing, regular hand washing relates with health implications among the elderly.

3) To examine whether there is a significant relationship between administration of covid-19 vaccines and health implications among the elderly.

1.5 Research hypotheses

The following null hypotheses were used for this study.

1. There is no significant relationship between wearing of face masks and health implications among the elderly.
2. There is no significant relationship between social distancing; regular hand washing and health implications among the elderly.
3. There is no significant relationship between administration of COVID-19 vaccines and health implications among the elderly.

1.6 Scope of the study

This study was restricted to the compliance to preventive measures of covid-19 and health implications among the elderly in Ika North East local government. It was delimited to respondents who were aged 50 years and beyond in the study area. This age set was selected because it consist the bulk of the vulnerable population to the COVID-19 pandemic disease. It was also delimited to independent sub-variables such as; wearing of face masks, social distancing and regular hand washing, administration of COVID-19 vaccines and dependent variable such as health implications among the elderly. This study was also delimited to a sample size of 393 respondents selected via the cluster and simple random sampling methods. The study was as well delimited to 2020/2021 academic year.

1.7 Significance of the study

This study would be of huge benefit to the government of Delta State as there has been no documented attempt on preventive measures of covid-19 pandemic and health implications among the elderly since its inception. This study therefore, intends to fill this gap as information generated from this study would form a baseline data for future reference and evaluation of the pandemic disease.

Findings from this study are of immense benefit to the elderly that constitutes the vulnerable group, medical sociologist's social workers, gerontologist and other disciplines in the health sector. It may inspire medical sociologist, social workers, and health institutions to improve on their research process by identifying the strengths and weaknesses of the elderly as it concerns their wellbeing. This may help in the improvement of their health education since it will make the elderly to know that prevention is better than cure. It may as well encourage the ministry of education and other stakeholders in ensuring that the government see the need to improve on the welfare of vulnerable group (the elderly) and place them on monthly allowances. The study is relevant to government, non-governmental organizations (NGOs) and policy makers as information gathered laid the foundation for policy formulation. It is as well significant to researchers since it will add to existing literature in the field of study. This study will also prompt other researches in the field of medical sociology by providing data for further comparative and theoretical formulations in other to resolve the challenges associated with adherence to the preventive measures of covid-19 pandemic.

1.8 Organization of the study

The major objective of this research was to examine the relationship between compliance to preventive measures of Covid-19 pandemic and health implications among the

elderly in Ika North East Local Government area of Delta state, Nigeria. Specifically, it was organized to understand the perception of the elderly on compliance to preventive measures of Covid-19 pandemic in Abi Local Government Area. The study was thematically organized based on the major variables of the study such as wearing of face masks, social distancing and regular hand washing, administration of Covid-19 vaccines, and health implications among the elderly in Ika North East Local Government area of Delta state, Nigeria

1.9 Operational definition of terms

The following concepts were defined operationally.

Elderly: Conventionally, "elderly" has been defined as a chronological age of 65 years old or older. In this study it refers to a mature human being who is 50years of age and above and susceptible to low immune system. It also refers to an aged individual or person who is believed to having weak immune system.

Pandemic: This refers to an epidemic occurring worldwide or over a very wide area crossing international boundaries and usually affecting large numbers of people.

Health: This refers to the overall wellbeing of the individual

Health Implication: It generally refers to a condition of an individual body and the extent to which it is free from illness or is able to resist illness. In this study it means the negative impacts or changes in health resulting from an influence or exposure.

Hand Washing: This is a preventive technique used to decrease the spread of germs including those resistant to antibiotics

Non-Pharmaceutical Measures: This refers to measures used to prevent and tackle a disease condition or health occurrence without involving medications.

Face mask: Is a cloth or any item covering around the nose and mouth that helps to contain secretive and prevent spread of airborne disease. it also refers to any item used in covering part of the face particularly the nose for the prevention of covid-19 virus.

Aerosol: An aerosol is a small container in which a liquid such as paint or deodorant is kept under pressure. When you press a button, the liquid is forced out as a fine spray or foam Aerosol as used in this study refers to very small liquid droplets that aid the spread of virus.

CHAPTER TWO

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.0 Review of related literature

This section was concerned with the review of related literature. This reviewed literature was structured based on the major variables of the study stated as follows;

2.1.1 Impact of COVID-19 on the elderly

The COVID-19 pandemic has left no age-group unharmed. However, its impact on the health of the elderly seems to be greater compared to other age groups. According to CCDC (2020), initial studies from china showed that the risk of seventy of covid-19 was higher among the elderly. However, the centre for Disease control, china analyzed all covid-19 cases reported through February 11, 2020 which included 72, 314 patient records, the results showed that seventy percent of covid-19 infection was higher among people aged 60 years and more. Hence the need to formulate recommendation was made by WHO and other health organizations presenting preventive measures if adhered to would help reduce the transmission of the disease and preserve the life span of the elderly as they constitute the most vulnerable of the general population. This is perceived due to the decreased immunity and perhaps co-existence of co-morbidities like diabetes, hypertension, chronic obstructive pulmonary diseases among others. (WHO, 2020). The disease has no immediate cure and vaccine, and according to the World Health Organization (WHO, 2020) it has become a global epidemic that causes illness and death. There are 1,603,428 cases confirmed, of which

356,440 recovers from 95,714 illnesses and deaths worldwide from April 9, 2020 (Worldometers, 2020). An Italian citizen on February 27, 2020, became a victim of COVID-19 in Nigeria. On April 9, 2020, 288 verified cases were recorded in the COVID-19 laboratory in Nigeria. In this case, 51 cases were dropped and 7 deaths (Disease Control, NCDC, 2020).

For fear that the spread of the bacterium, civil association arranging and management instrumentalities have launched campaigns to raise knowledge of public cleanliness and seclusion. Hotness tests are performed at airports and those recompensing from nations accompanying extreme COVID-19 certified cases are pressed to remove themselves. The NCDC in collaboration with the provincial governments also began tracking and tracing potential victims and contacting them. On March 18, 2020, the Lagos District administrators led all 50 health gatherings for four weeks and instructed all lower and middle level managers to go home (Ewodage, 2020). Accordingly, the multi-party government, on March 30, 2020, introduced a diversification of content actions by closing national borders and airports, schools, places of worship and other public places, cancelling public gatherings and setting up Combined Capital Domain, Lagos and Ogun locations. the first fourteen days is closed (Radio Nigeria, 2020). Covid-19 test labs were set up in Lagos, Abuja and Irrua in the state of Edo, and the provincial governments opened the separation centers and set a time for local assembly in their regions.

COVID-19, from the Corona virus family (some include SARS, H5N1, H1N1 and MERS), is a contagious respiratory infection transmitted through the eyes, nose,

and mouth, through coughing and sneezing, close contact with an infected person and contaminated areas. It has an incubation period of about fourteen days. Symptoms include cough, fever and shortness of breath, and are diagnosed by laboratory tests. Infection can lead to serious respiratory problems or death, especially in the elderly and people with chronic illnesses. Some people with the virus are carriers of the virus without symptoms and some may become ill and recover easily (Sauer, 2020). As there is currently no cure or vaccine for COVID-19; Treatment is limited to supportive measures aimed at relieving symptoms, drug use research and treatment. This can be a major risk factor for older adults who appear to be at greater risk for society due to COVID-19. Infection control information and appropriate safety measures should be taken to control the epidemic. While the scientific community continues to research potential vaccines or anti-retrovirals, it is expected that sufficient knowledge will motivate people to make decisions that can prevent and prevent the epidemic. Information such as regular hand washing with disinfectant, face mask, breathing habits, isolation and isolation are important in reducing the spread of disease (Leppin & Aro, 2009).

The international epidemic of COVID-19 has required certain ways to halt its spread. In the world, many countries have begun partor complete closure as part of measures to manage the epidemic. Authors such as Fuwape, Okpalaowuka, and Ogunjo (2020) have investigated the impact of land closures on air pollution in three of Nigeria's most populous and vibrant cities. They noted that compared with historical figures, NO2 levels had risen slightly by 0.3% and 12% in Lagos and Kaduna

respectively. However, the city of Port Harcourt dropped by 1.1% and 215.5% at NO2 and SO2 levels respectively. High O3 levels were observed during the closure. The result suggests that there are other sources of air pollution besides transport and industrial resources. The study indicated that COVID-19-induced oral contraceptives caused a decrease in NO2 levels in two study areas. These results highlight the potential for national policies to reduce the effect of air pollution on the health of citizens (https://guardian.ng/).

The unexpected arrival of a new corona virus has had an unprecedented impact worldwide. The issue escalates day by day as a result of the increasing rate of human-to-human transmission, resulting in severe respiratory infections and, most important, its uncontrolled slaughter. More than 7 million people are estimated to have been infected within six months, with almost 434,796 people dying and 4,272,909 recovering (Worldometer, 2020). Due to the shortage of easily available vaccine for the treatment of corona, the international community decided to close the door, launched by the Chinese government in Wuhan on January 23, 2020. This closure initiative is highly recommended worldwide. the World Health Organization (WHO), calling it "the unprecedented in the history of public health" (Crossley, 2020). As a result, there have been widespread declarations of closure in more than 100 countries, including Nigeria between April and June 2020. The steps to close COVID 19 became inevitable due to the expected or unexpected economic shock caused by the recession. emerging virus. Saddiqui (2020) also pointed out that the International Monetary Fund (IMF) had warned that the global economy was facing the worst recession since the

"Great Depression" of the 1930s, which could have seen a 6.5% decline in production by 2020. Gita Gopinath, IMF chief economist, said the crisis could cost US $ 9 trillion (£ 7.2trillion).

2.1.2 Wearing of face masks and health implications among the elderly

The COVID-19 worldwide pandemic has call for some drastic measures to curb its spread. In responds to the spread of covid-19, WHO (2020) states that to stop covid-19 from spreading is to develop a coordinated mechanism in health and other sectors of society to include transportation, travel, commerce, finance security. In addition, it explained that the most effective weapon the society has against the virus is the prevention of its spread. WHO (2020) stated that recent strategy to limiting the spread of the disease is the prevention. Accordingly, wearing of face masks, avoiding contact and frequent washing of hands and use of hand sanitizers is advice to curb the spread in the community. The European Centre for Disease Control (2020), and NCDC (2020), the use of face masks primarily serve as a means of control and it appears to be most relevant when the number of infected persons in the community is assumed to be high.

The China Center for Disease Control (2020), found that early studies from China showed that covid-19 severity was higher in the elderly. However, the China Centers for Disease Control and Prevention analyzes all cases of covid-19 reported on February 11, 2020, including 72, 314 patient records, with results showing that 72 percent of covid-19 cases were higher in people over the age of 60 and over. Hence the

need to formulate recommendation was made by WHO and other health organizations presenting wearing of face masks as one of the common preventive measures if adhered to would help reduce the transmission of the disease and preserve the life span of the elderly as since, they constitute the most vulnerable population. Knowledge of COVID 19 disease and necessary methods of prevention to take is needed to control the disease. As the scientific community continues to discover greater vaccines for the virus, it is expected that sufficient knowledge will encourage people to make decisions that can prevent and prevent the epidemic. Awareness of wearing a face mask, regular hand washing and the use of hand cleaners, breathing habits, social isolation and isolation are important in reducing the spread of infection (Leppin & Aro, 2009).

The COVID 19 pandemic has relegated the art economy of Calabar, where the impacts have been somewhat different from most of Nigeria (Ajibade, 2020). This was as a result of the introduction of lockdown to contain the pandemic. With the scarcity of N95 face masks earlier introduced in 2020, couples with the cost of importing them, the government of Cross River State not only enforced the use of masks, but also spearheaded the production of homemade masks with locally available fabrics. The Cross-River State government engaged hundreds of tailors to produce millions of masks that were shipped to other Nigerian states. Producing and enforcing the use of nose or face masks has had a most unintended consequence in the city of Calabar. Dozens of young creative people, whose livelihoods were "taken away" by the pandemic, are now making income from the same masks instituted to keep the virus out. The young creatives are using cotton and other African fabrics to produce stylish,

colourful and functional nose mask designs that are helping several communities. The N95 face mask sells for up to N3800 (about $9.5), which is very unaffordable by most Nigerians. In contrast, the homemade nose masks, depending on materials, sell for between N100 and N1000 (about $0.25 -$2.5), which is comfortable enough for all pocket sizes (Ajibade, 2020). It can be seen that producing and enforcing the use of nose or face masks at beginning of COVID 19 particularly during the lock down seem to play a significant role in not only reducing the risk of contracting the infection for those who wear it but also serves as a source of income for entrepreneurs.

Many studies on the COVID 19 epidemic have been tied to the public around the world. Badejo, Ogunseye and Olasunkanmi (2020) found that COVID 19 prevention measures such as closure, social isolation and facemask use were difficult for women in the community to adhere to. In Yuksel, Karadogon, Gurkan Akyil, Toreyin, Marim, Arikan, Eruboglu, Emiralioghi, Serifoghi, and Devil (2020), the old virus COVID 19 infects people of all ages. However, the largest group of three people most at risk of the disease are adults (people over the age of 70), people with serious and incurable diseases such as; diabetes, heart disease, chronic respiratory disease, cancer, high blood pressure, and chronic liver disease. The chances of survival following SARS cov-2 infection in people aged 60 and over are 95% if there is no medical condition, but this chance is greatly reduced if the patient has lower health conditions (Dan-Nwafor, Ochu, & Ihekweazu, 2020). The WHO (2020) has proposed a number of measures to help prevent the spread of the virus and to ensure universal

safety systems. These methods included the wearing of face masks, hand washing and the use of hand cleaners, social isolation and home stay (Kalu, 2020).

The 2019 novel corona virus (COVID-19) is a new virus that causes respiratory illness in people and can spread from person to person. Originating in the Hubei province of China, it spreads globally leading to about 80,000 infections and 3000 sufferers. In order to keep yourself safe from this outbreak, it is important to keep your face covered while in public places where there is a danger of pollutants traveling from one person to the other. As with almost every other thing these days, the internet is awash with different options. These are over ten (10) Best Protective Masks (BPM) for Coronavirus. Some of these BPM face masks are; the AVIGOR, the Beat Basic among others (https://www.wonderfulengineering.com). The M-shaped design AVIGOR Face Mask is comfortably fitted and allows easy breathing. It is designed in a manner that it can open when you exhale and close automatically when you Inhale to prevent dust and the disease as well. Another face mask is Beat Basic (BB) which is meant for a different purpose and rudimentary Corona virus protection in addition. This 'ski mask' is made of cotton and is durable and breathable enough to be worn in all 4 seasons. This also is accompanied with a fancy galaxy imprint (https://www.wonderfulengineering.com). Figure 2.1.1and 2.1.2 showed the picture of the recommended face mask for the prevention of Covid-19 pandemic.

Globally and sub-Saharan African societies in particular, people tend to treat the wearing of face mask as a preventive measure of Copvid-19 with impunity. Majority of

these people tend to avoid the wearing of face mask and others seem to hang it on their neck or jaw. Meanwhile there is a simple way of wearing the approved facemasks by the center for disease control globally (https://www.wonderfulengineering.com). Figure 2.1.3 showed the picture of the proper way of wearing face masks.

Figure 2.1.1: The AVIGOR facemask

Source: https://www.wonderfulengineering.com

Figure 2.1.2: The Beat Basic

Source: https://www.wonderfulengineering.com

Figure 2.1.3 Proper way of wearing face masks

Source: https://www.wonderfulengineering.com

2.1.3 Keeping social distancing, regular hand washing and health implications among the elderly

Manikandan (2020) the rapid spread of COVID-19 was due to pre-symptomatic and non-symptomatic cases. Many countries use public distribution as an important source of content. In Singapore, a modelling study by Koo and colleagues found that an integrated approach to physical isolation, solitary confinement, school closure, as well as absenteeism, was the most efficient way to reduce SARS-CoV-2 transmission. A report from the United States suggested that the intervention could provide communities with an important opportunity to reduce the spread of the COVID-19 epidemic. However, keeping public distances in public places (6 feet apart) is not enough in most cases. Due to the movement of people in daily life, keeping a distance of 6 meters in public places such as workplaces, restaurants, public transport and market places is difficult to keep up with distances. While hand washing can effectively reduce the transmission of SARS-CoV-2 through indirect contact, rubbing hands with alcohol-based antibiotics and antiseptics is also recommended for infected people, their loved ones, and the general public. This practice can help reduce the risk of COVID-19 transmission (Manikandan, 2020).

According to the Nigerian Center for Disease Control (CDC) (2020), the risk of serious illness from COVID-19 rises with age, with older adults being at higher risk. People in their 50s, for example, are more likely to be sick than those in their 40s. People in their 60s and 70s are also more prone to become ill than those in their 50s. COVID-19 poses the greatest risk of serious illness to anyone aged 85 and up. 8 out of

10 deaths due to COVID-19 in the US are 65 years of age and older (https://www.cdc.gov). Everyone, especially adults who are at high risk of the infection, are to take steps to prevent the disease. The CDC recommended measures to reduce the risk to the elderly. It is of great importance for those at risk of serious illness attributed to COVID-19, to be on guard to avoid COVID-19. Best way to protect and help reduce the spread of the virus that causes COVID-19 is to wear a mask, when talking to other people and limit body contact. Also, people are to stay 6 feet away, about 2 arms long, wash their hands regularly. A hand sanitizer containing at least 60% alcohol should be used, if soap and water are not readily available. Stop touching the eyes, nose, and mouth with unwashed hands.

As people were advised to take care of hygiene during the epidemic, health experts have repeatedly reminded them that the simple practice of washing hands with soap and clean water is one of the most effective ways to prevent the spread of germs. Africa, 2020). To influence behavior change, WHO developed and distributed 1000 Hand washing Notices to agencies and ministers, departments and agencies. These notices contain proper hand washing methods and emphasize that hand hygiene protects against Corona, Lassa fever, Cholera and many other diseases and between March and October, more than 50,250 people have been affected by government and humanitarian assistance. intervention. Human-to-human transmission of coronavirus 2 occurs mainly through droplets expelled from the respiratory system. Government actions, such as total closure (local closure), ban on public events and gatherings, school closures, and the promotion of isolation to avoid contact with infected or

asymptomatic carriers, are recommended measures to contain or reduce transmission. To complement these actions, individual precautionary measures are recommended, which include voluntary isolation, the use of masks and regular hand washing.

Symptoms associated with corona infection are worse in the elderly and in those with chronic illnesses, leading to high levels of hospitalization, intensive care unit (ICU), and death. In Brazil, as of early June, 86% of deaths from COVID-19 deaths occurred among people aged 50 and over. At the Brazilian Institute of Geography and Statistics (2020), estimates for the year 2020 indicate that a quarter of Brazilians are 50 years of age or older (54 million people, the equivalent of all Italians), and Brazil's population is -30 60 years or more. These figures provide a clue to the challenges facing society and the national health system, in the event that the epidemic continues to worsen or new waves occur after periods of limited stability.

2.1.4 Administration of COVID 19 vaccines and health implications among the elderly

World health organization has advised on several methods to help prevent spread of the virus and to save health systems across the world from the complete collapse. Some of these methods were hand washing use of hand sanitizer, administration of vaccine, wearing of face masks and staying at home (Kalu, 2020). These preventive measures of COVID-19 may have positive impact on the informed persons especially the most vulnerable in the society.

Corona virus infection is thought to be more severe in older people and those who have pre-existing chronic conditions, leading to greater rates of hospitalizations, ICU admissions, and death. In Brazil, 86 percent of COVID-19 deaths occurred in adults aged 50 and up to the beginning of June (Juliana, Fabiola, Sérgio, Peixoto & Macinko, 2020). People used a variety of information resources to learn about the COVID-19 pandemic, including social media platforms, coworkers, scientists, healthcare practitioners, and so on, because such information resources can influence people's acceptance or refusal of COVID 19 vaccines (Shaukat, Ali, & Razzark,2020). Much of the material regarding COVID 19 is disseminated via social media, which adults use less regularly. As a result, the older adult may be less exposed to COVID 19 information that could help frame their risk perception. Also, decreased social media use among the elderly may be related with less information, which could alter their perception of risk and vaccine uptake.

A study conducted in the United States on the adoption of the COVID 19 vaccine among college students in South Carolina found that the information resource was affected. Students relied heavily on scientists (83%), and health care providers (70%) (Qia et al, 2020). In addition, in South Korea and Malaysia, online integration against vaccines has been identified as an important vaccine barrier (Wang et al, 2020, Chang & Lee 2019). Low admission of coronavirus vaccines (Covid-19) to retirees may be influenced by the risk considered. However, older people are at greater risk of COVID 19, with many retired people in Southeast Asian countries having low mobility and spending more time at home with slower pace (Wang et al, 2020,). These behaviors

may lead to a lower risk of SARS-COV-2 infection and ultimately lead to lower acceptance of the vaccine.

The World Health Organization (WHO) declared SARS-CoV-2 a pandemic on March 11, 2020. As of March 23, 2020, at 13:25 EST, there were 362,019 confirmed cases of SARS-CoV-2 reported from - 168 different. countries, with 15,488 deaths and an estimated mortality rate (CFR) of 4.3%. The Centers for Disease Control and Prevention (CDC) reports that although people over the age of 65 make up 17% of the total population in the United States, accounting for 31% of COVID-19 cases, 45% hospitalized, are 53. % are very sick. A care unit, with 80% of deaths caused by this disease. This suggests that older people are more likely to receive COVID-19 and have significantly worse outcomes compared to the normal population. According to the Center for Disease Control, (CDC, 2020) Serious safety problems associated with COVID-19 are uncommon. After receiving the J & J / Janssen COVID-19 vaccine, there is a risk of a rare but serious adverse event - low platelets (thrombosis with thrombocytopenia syndrome, or TTS). Women under the age of 50 should be especially aware of their growing risk of this unusual event. There are other COVID-19 vaccines available for this invisible danger. This traumatic event is rare, with about 7 million women being vaccinated between the ages of 18 and 49. This traumatic event is very rare for women 50 years and older who have men of all ages (CDC, 2020).

COVID-19 poses a significant risk of serious illness as people grow older. As a result, the CDC advised people aged 65 and over to receive the COVID-19 vaccine. Obtaining the COVID-19 vaccine is an important step in preventing COVID-19-related

disease. The vaccine COVID-19 is believed to have been purchased by millions of people. From December 14, 2020, to May 24, 2021, more than 285 million doses of COVID-19 were given in the United States. COVID-19 is a safe and effective vaccine. In clinical trials, the vaccine COVID-19 was tested in tens of thousands of people. Vaccines meet FDA's strict scientific standards for safety, efficiency, and quality of production, required to support emergency use authorization (EUA). More than 285 million doses of the COVID-19 vaccine have been given in the United States from December 14, 2020, to May 24, 2021. The COVID-19 vaccine is safe and effective. The vaccine COVID-19 was tested in tens of thousands of participants in clinical trials. Vaccines meet the Food and Drug Administration's (FDA) strict scientific standards for the safety, efficacy, and quality of production required to support emergency use authorization (EUA) (CDC, 2020).

Many people, particularly the most vulnerable (adults), may not be able to afford the COVID-19 vaccine management. The COVID-19 vaccine is free, according to the CDC. Providers of COVID-19 vaccines are not allowed to charge you a policy or any administration costs, joint payments, or coinsurance. If the only service offered is a COVID-19 policy, refuse to vaccinate anyone who does not have health insurance, no insurance, or is offline; charge the recipient for office visits or other expenses if the only service supplied is a COVID-19 policy. To receive the COVID-19 vaccine, further services are necessary. Additional health-care services, on the other hand, can be offered at the same time and charged separately (CDC, 2019).

Soiza, Scicluna, and Thomson (2021) noted that several vaccines for the corona virus 2019 (COVID-19) are close to legalization. Their safety and efficiency in adults is crucial to their success. Although rural residents and the elderly may be among the first to be vaccinated, these groups of patients generally do not participate in clinical trials. Data from a few Phase II studies have given reason for optimism, with strong antibody responses and reassuring safety profiles but, apart from AstraZeneca policy, it employs a few older people. Overall, the small amount of data from the Phase II trials suggests a reduction in both immune response and moderate to severe adverse events in very older adults compared to younger participants. Many Phase III trials have made great strides in recruiting older people, and a brief review of the Pfizer and Moderna vaccine has led to the release of media outlets announcing high levels of performance. However, older people with chronic illness and risk factors were also significantly excluded and there were no published safety and efficacy data in this group (Soiza, Scicluna, & Thomson 2021).

In Metzger (2021), the risk of COVID-19 infection and serious illness increases with age. According to the Centers for Disease Control and Prevention, older adults are at greater risk. Now, older adults (70+ years old) in Utah can be vaccinated. In Utah, last year's data showed that 70 percent of the deaths associated with COVID-19 were people aged 65 years and older constituting over 1,500 deaths. Age is a strong risk factor for adverse effects on COVID-19 (Metzger, 2021). This is why it is so important for adults to get vaccinated as soon as possible. People in this age group with many

chronic conditions, who may be weak or living in a nursing home, need a lot of vaccination.

The worldwide administration of Covid-19 vaccines is highly dependent on the availability of similar vaccines and reception. According to the CDC and WHO (2020), Covid-19 vaccines have been made available in many countries to prevent or prevent the spread of the Covid-19 epidemic in society. These Covid-19 vaccines are Astrzeca vaccines and Moderna Covid 19 vaccines among others (https://www.shutterstock.com). Figures 2.1.4 and 2.1.5 show a picture of the Astrazeca and Moderna covid-19 vaccines.

The WHO Strategic Advisory Group of Experts (SAGE) has issued interim recommendations for the use of the modern vaccine Moderna COVID-19 (mRNA-1273) against COVID-19. As with all COVID-19 vaccines, high-risk health workers and the elderly should be prioritized for vaccination. As vaccines become available, additional important groups should be vaccinated, considering people who are equally affected by COVID-19 or who suffer from health inequalities (https://www.shutterstock.com).

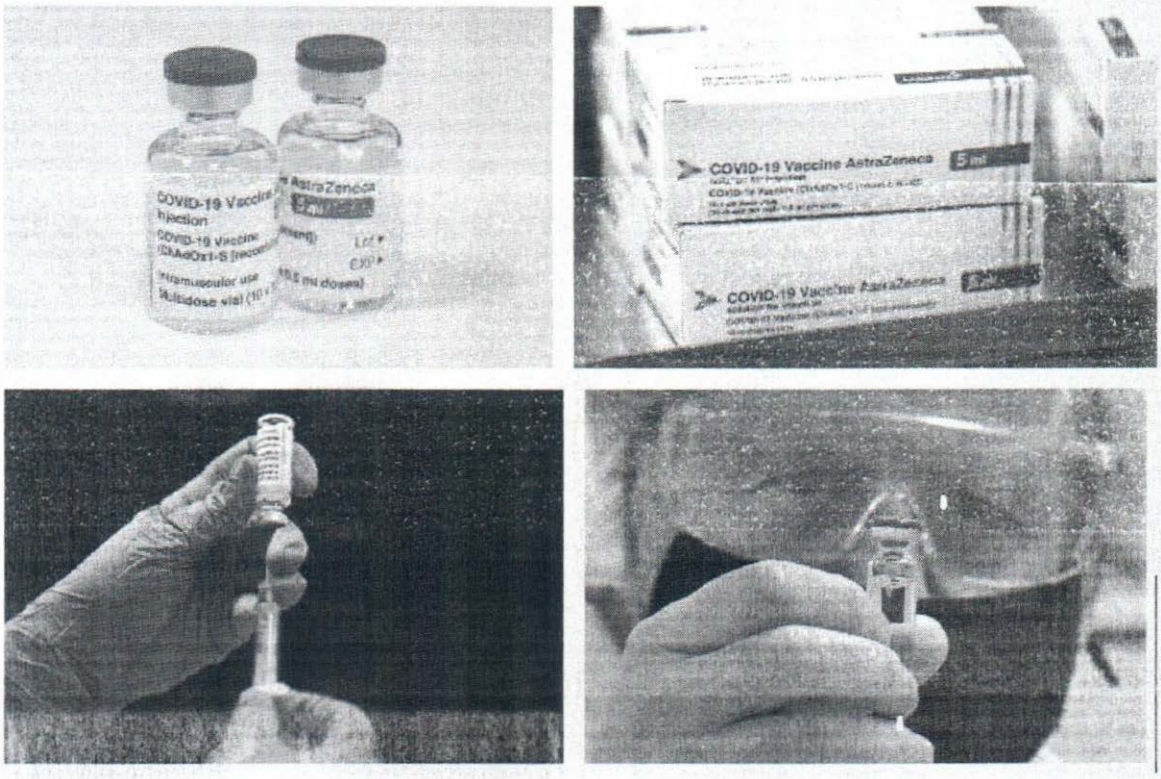
Cases of Myocarditis and Pericarditis in adolescents and adolescents were reported more frequently after receiving a second dose than after the first dose of two mRNA COVID-19 vaccines, Pfizer-BioNTech or Moderna. These reports are rare and the known and potential benefits of the COVID-19 vaccine outweigh the known and potential risks, including the potential risk of myocarditis or pericarditis. The WHO

has however identified a category of people to be vaccinated (https://www.shutterstock.com).

Who SHOULD NOT Vaccinate?

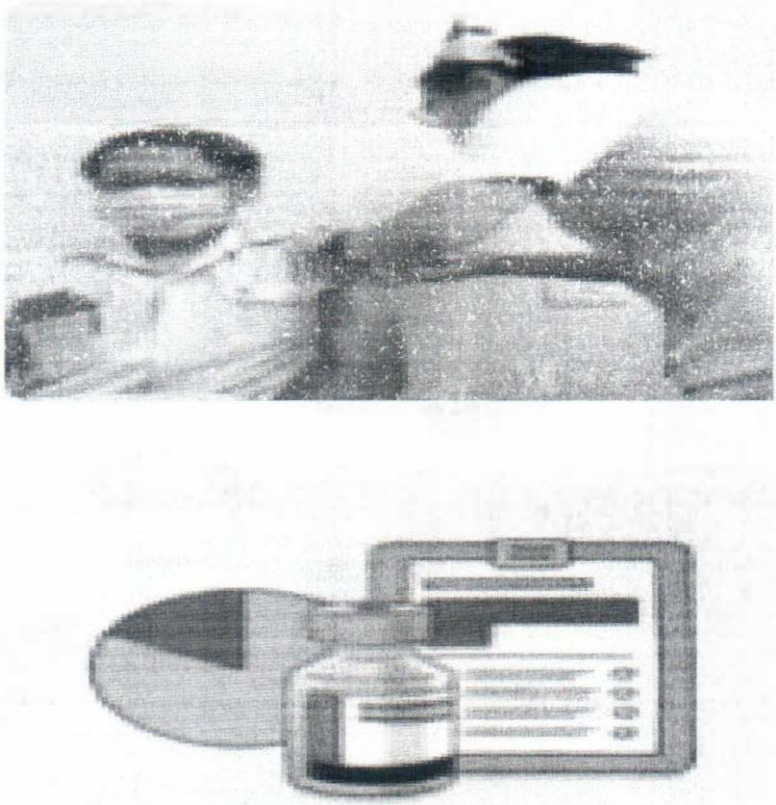
• If you have had a severe allergy (anaphylaxis) or an immediate allergy, or worse, to any component of mRNA COVID-19 (such as polyethylene glycol), you should not receive the mRNA COVID-19 vaccine.

• If you experience severe or rapid allergic reactions after receiving the first dose of mRNA COVID-19, you should not receive a second dose of other mRNA COVID-19 (Moderna or Pfizer-BioNTech). With all the efforts of the WHO and the CDC to prevent the spread of the Covid-19 epidemic and to ensure the health and well-being of citizens, people still find it difficult to accept effective work and management.



Figures 2.1.4: Astrazeca Covid-19 vaccines

Source: https://www.shutterstock.com



Figures 2.1.4: The Moderna COVID-19 (mRNA-1273) vaccine

Source: https://www.shutterstock.com

2.2. Theoretical framework

2.2.1 Health belief model

The health belief model is a social and psychological model linked to Irving Zola in 1973. The author assumes that researchers make at least three basic ideas about why a patient may appear in the consulting room or seek medical help. First, researchers speculate that patients are less likely to have blurred vision during most of their lives; second, when patients are out of surgery, it is the severity and frequency of symptoms that lead to a visit to the doctor (medical professionals); and third, when confronted with such symptoms, patients who do not seek help are irrational. On the contrary, the author states that most people have symptoms of something most of the time; that the frequency and / or severity of symptoms are not good predictors of going to the doctor; and that many people make the decision to seek (or delay in seeking) appropriate help, at least on the basis of their own beliefs and values. The author was also interested in what he called 'Life Triggers'. Life Triggers are things that push a person to seek medical help or care. These life triggers are five, namely; (i) interpersonal crises of a person (ii) social interference, (iii) presence of sanctions(iv) perceived threatening and (v) the nature or similarity of the sleekness.

The implication of this theory is that preventive measures of COVID-19 pandemic in Ika North East may depend on three cardinal assumptions; first, decision of the elderly to utilize preventive measures is rational. That is, utilization of preventive measures such as wearing of face masks, regular hand washing social distancing and administration of vaccine is based on individual interest, it is not

compulsory. Second, for the elderly to seek medical help or attention, the case or illness must be severe. Third, the elderly who seek medical help on the utilization of preventive measures of COVID-19 in health facilities when ill or sick are irrational. Based on Zola's health belief model, there is what he calls 'Life Triggers' that can push the elderly to utilize preventive measures of COVID-19 in Ika North east. These life triggers are the elderly's interpersonal crises, social interference, and presence of sanctions, perceived threatening and nature or similarity of the reproductive health challenges.

The health belief model was criticised for overstressing on the health and disease culture of the elderly (individual rationality and severity of COVID 19 infection or disease) without considering the world view of elderly's utilization of COVID 19 preventive measures in Ika North East Local Government Area Of Delta State. This is because the world view of a people determines the beliefs and the beliefs determine the therapeutic outcomes of the elderly in the study area.

2.2.2 Symbolic interactionism theory of health

Symbolic interactionism approach or theory is associated with eminent scholars as George Herbert Mead (1863-1931), Charles Horton Cooley (1864-1925) and Herbert Blummer (1960-1987). The symbolic interactionist perspective with regards to health and illness, maintained that health and illness are socially constructed. That is, health or illness is social constructs. For instance, sickness has no when it is private (undisclosed) but becomes sickness when it is made public and the society gives it a name.

Symbolic interactions researchers are investigating how people formulate meaning in the process of interaction, how they present and construct identity (identity) and how they define social conditions (Sheff, 1963). One of the great symbolic ideas of cooperation is that people do as they do because of how society defines situations. Constructivist theory emphasizes the development of collaborative relationships and knowledge building between the researcher and participants. The concept of symbolic collaboration believes that intentions only have meaning for human interactions in the social sphere. The explanations that people are connected to in things grow in co-operation and that those explanations are handled and amended by the compelling and ongoing process of the individual.

Basic assumptions of symbolic interactionism theory on health are;

i. Symbolic interactionists focus on the scientific meanings and causes of people attribute to health and illness
ii. Symbolic interactionists see health and illness as social constructions
iii. Symbolic interactionists emphasize on the relationship between patients and healthcare professionals.

The basic idea of symbolic interactionism as it relates to preventive measures of COVID-19 pandemic and health implications among the elderly is that, interactionists focus on the specific meanings and causes people attribute to the infection or disease. Based on this theory, COVID-19 pandemic infection is a social construct it only exists because the society gave it a name. More so, the preventive measures of COVID-19

pandemic such as wearing of face masks, social distancing, regular hand washing and vaccines are social construct hence the reluctance of the elderly to use them. This implies that COVID-19 pandemic as well as preventive measures exist because the society recognise and gives it a name. Moreover, corona virus vaccine can be accepted if the society attached meaning to it.

Based on this theory, COVID-19 infection and its preventive measures may be human creation hence the reluctance of the elderly to believe it existence and its preventive measures as recommended by the World Health Organization. The taken for grantedness of the COVID-19 infection may be the cause of its spread and severity among the elderly in the study area.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Research Design

This study adopted a correlational design. It excludes interest variables. The correlation design aimed to determine the relationship between the two variables (measures to prevent Covid-19 pandemic and health implications) and how closely these variables are related. The correlation design ask few questions to a large number of people since it is rarely possible to question everyone worried with a certain social problem, a sample is, therefore, used. The correlation design was employed to assess relationship between preventive measures of Covid-19 pandemic and health implications amongst the elderly in Ika North East Local Government area of Delta State. Correlation design enables the researcher to get individuals opinion through the use of questionnaire with a sample of respondents in the population. A key feature of the correlation design was the lack of control. The researcher was interested in looking at what was going on in the sample samples without the effort to deceive himself.

3.2 Study Area

The study area was the Local Government of Ika North East of Delta State, Nigeria. The people of Ika are people found in Ika South and Ika North East Delta State Local Government. Ika North East Local Governent Area is blessed with both human and natural resources with over seventy (70) villages and nine (9) towns. The nine major towns are; Owan, Mbiri,Idumu-Esan,Igholo,Ute-Ogbute-

Eje,Otolokpo. Ute-Okpu, Umuneze, and Akumazi. Geographically, the people of Ika are located northwest of Delta State. They divided the territory east of Aniocha. south of Ukwuani, north of Ishan and west of Edo. Politically, the people of Ika are concentrated in two local government areas, Ika North East and Ika South, both established in 1991 in Delta state. Ika South and Ika North East local government areas occupy an area of 117.45 square kilometers (Delta State Government, 1999). The population of Ika North East Local Government Area of Delta State is 182,819 people with 91,431 males and 91388 females (Census, 2006). Ika is an Igboid-Oredo language. The people of Ika come from a variety of backgrounds depending on the village or region in question. The people of Ika trace their ancestry to the far east of Southern Nigeria.

Most Ika are Christians. Some Ika people also practice their traditional Olokun / Epentu worship. The people of Ika called Jesus Chukwu and God said Osalobua. Ika (Delta and Edo region) prides itself on being the home of the finest African palm wine. crude oil, mineral resources, arable land, marble, pure African water, rice rice, brush, industrial factories in their province, abundance of various sawmill trees , rail access and much more including cool weather compared to Jos, plain. The people of Ika, most of whom are farmers and very wealthy, are involved in the palm kernel business by extracting red oil or other means such as tapping wine and garri exports. The people of Ika are well-known to academics, business professionals, and civil servants. The people of Ika are the most educated people in Delta and Edo State. Most of the indigenous peoples of Ika are found in all countries overseas. Figure 1 shows a map of the Ika North East Local Government Area of Delta State, Nigeria.

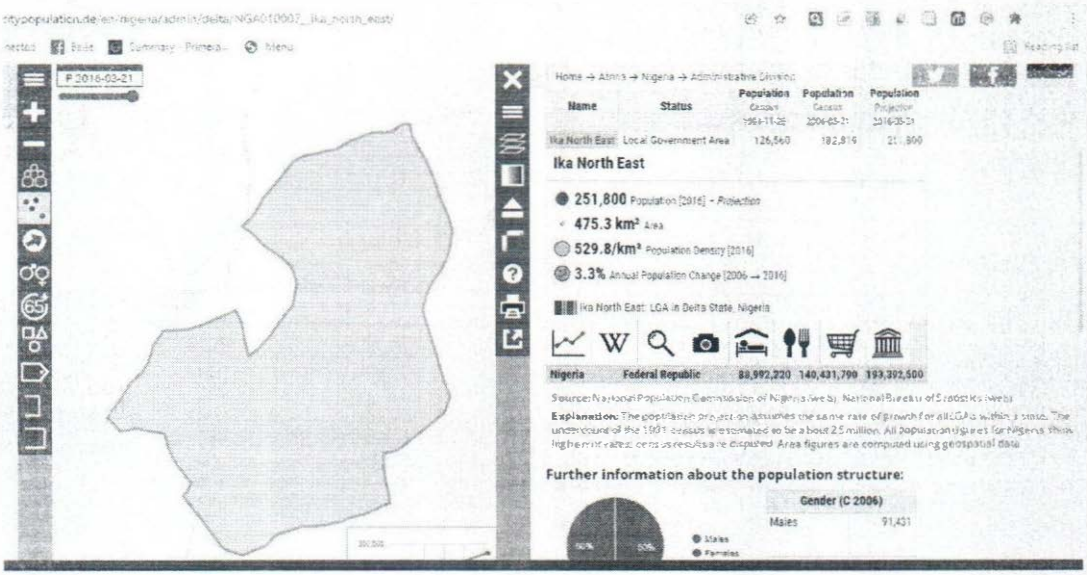


Fig. 1 Map of Ika North East Local Government Area of Delta State, Nigeria

Source: https://www.citypopulation.de

3.3 Population of the study

The population of this study was made up of all male and female adults in the Ika North East Local Government Area of Delta State, Nigeria. Total population of the elderly people in Ika North East is 21,647(Census, 2006).

3.4 Sampling techniques

The sampling techniques used in this study were a combination of cluster and simple random sampling methods. Cluster sampling method was utilized to arrange the various villages in clusters for easy randomization. The simple random sampling technique was used in the selection of villages and respondents into the sample of study.

3.5 Sample size

Sample size for this study was 393 respondents. In order to select the sample of study, the researcher first of all grouped the villages in Ika into nine (9) clusters. Secondly, the researcher used the simple random sampling method to select villages that were included in the sample. In doing this, the researcher wrote names of the various villages in pieces of papers and put in a container shakes it well and then ask someone to pick the papers one after the order until the desired number is gotten. A total of Ten (10) villages were randomly selected into the sample. These villages were; Akpoma, Nogbe-Akpu, Achara, Okete, Ogbe, Iite-Alohen, Idumu-Ile, Obi,Akumazi, Ase, Owa Oyibu and Agban respectively. This was done to avoid biases. Information that was elicited from respondents in these villages was considered as that of the whole population in Ika North East Local Government Area.

To determine the sample size for the study, the researcher used the Taro Yamen's sample size determination formular. The formular is stated thus:

$$n = \frac{N}{1 + N(e)^2}$$

Where n = sample size
N= Total population
1= constant
e = 0.05 i.e. confidence level

Therefore: $n = \frac{21,647}{1+21,647\ (0.05)^2}$

$$n = \frac{21,647}{1+21,647 \times 0.0025}$$

$$n = \frac{21,647}{1+ 54, 12}$$

$$n = \frac{21,647}{55.12}$$

n = 393 (sample)

3.6 Sources of data

The researcher utilized primary and secondary sources of data in this investigation. The primary sources of data consisted of first-hand information elicited from the respondents in the course of field work. The questionnaire makes up the primary source of data for this study. While secondary sources were library research materials including electronic library (E-library research and literature reviews).

3.7 Instrument for data collection

The main tool used in the data collection was the questionnaire. The questionnaire was "Preventive Measures of COVID 19 Pandemic and Health Implications among the elderly Questionnaire" (PMCPAHIAEDQ), made up of 26 items. It was designed by the researcher with the help and approval of research supervisor. This method of data collection was adopted for the investigation because its responses can be easily quantified and analyzed than materials generated by other research methods. The questionnaire also has the advantage of being cheaper and faster. The questionnaire contained three sections; section 'A', 'B' and section 'C'. Section 'A' was designed to elicit the demographic information of respondents. The questionnaire contained six (6) items in section (A), fifteen (15) items in section (B), and (5) items in section 'C. The items in section 'B' were designed to elicit data on Preventive Measures of COVID 19 Pandemic and section 'C' Health Implications among the Elderly. A 4-point Likert scale version of the strongly Agreed, Agreed, strongly Disagreed and Disagreed to be used in the questionnaire.

3.8. Validity of instrument

To ensure the validity of research instrument "preventive measures of COVID 19 pandemic and health implications among the elderly questionnaire" (PMCPAHIAEDQ), valid draft copies were submitted to the thesis supervisor. The face validity of the research tool was made by the research supervisor who ensured that everything used, measuring what was supposed to measure.

Researcher's supervisor scrutinized the instrument, eliminated ambiguous items as well as replaced incorrect ones.

3.9 Reliability of the instrument

The instrument was trial tested to ensure that it is reliable for data collection. Cronbach Alpha reliability method was used in this study. Fifty (50) copies of questionnaire were distributed to respondents outside the study area. This was done to ensure that every item used measured what it is supposed to measure consistently. From the test result, the obtained r-values range from 0.69 to 0.76, which showed that the instruments were consistent in measuring what they purported to measure. Based on Kerlinger and Lee (2000) Cronbach alpha consistency estimate 0.50 and beyond was a pass mark for most effective instrument. Therefore, preventive measures of Covid-19 pandemic and health implications among the elderly questionnaire'' (PMCPAHIAEDQ), were deemed appropriate for use in achieving the purpose of this study. The reliability estimates are presented in Table 1.

TABLE 1

Cronbach alpha consistency estimation of preventive measures of COVID 19 pandemic and health implications among the elderly questionnaire (N= 50)

Variables	No. of Items	$\bar{X}$	SD	R
Wearing of face masks	5	19.28	2.59	.73
Keeping social distancing and regular hand washing	5	19.22	2.59	.69
Administration of COVID 19 vaccines	5	18.76	3.35	.76
Health implications among the elderly	5	17.92	2.49	.71

Source: Field work 2021

3.10 Method of data coding

A scoring schedule for coding all information gotten from the respondents was design. Essence of this was for data collected. The responses were collated, coded and assigned numerical values using the scale that ranges from 1-5 designed by the researcher. The coding was done from the structured questionnaire. For example, the variables sex and age in section 'A' of the questionnaire contained 2 and 3 items each and the range at which there were scored was from 1- 2 and 1-3 respectively. The responses for the sub-variables in section 'B' and 'C' of the questionnaire contained 4 items each and the range was from 1-4 stated thus; 4 for strongly agreed, 3 for agreed, 2 strongly disagreed and 1 for disagreed respectively. The coding schedule was presented on table 3.2.

TABLE 3.2

Coding plan for the study variables

S/N	Sub-variables	No. of items	Range of scores/Code
1.	Sex	2	1-2
2.	Age	3	1-3
3.	Marital status	5	1-5
4.	Educational attainment	3	1-3
5.	Occupation	4	1-4
6	Religion	3	1-3
7.	Wearing of face masks	7-11	1-4
8.	Social distancing and regular hand washing	12-16	1-4
9.	Administration of Covid-19 vaccines	17-21	1-4
10.	Health implications among the elderly	22-26	1-4

Source: researcher's fieldwork, 2021

3.11 Method of data analysis

To analyze the data, research hypotheses were stated first; variables of the hypotheses were also identified followed by the statistical procedure that was employed in the analysis. The collected data were collated, coded and analyzed with the use of the Statistics Package for Social Sciences (SPSS). Statistical techniques adopted for the study was; simple percentage (%) and Pearson's product moment correlation coefficient (r). The simple percentage was used to analyze the demographic data and presented in frequency distribution tables, while Pearson's product moment correlation analyses was used to test the hypotheses at a significance level of 0.05 and presented in charts.

1. There is no significant relationship between wearing of nose masks and health implications among the elderly

Independent variable: Wearing of face masks

Dependent variable: Health implications among the elderly

Test statistics: Pearson's Product Moment Correlation

Justification: To test if there is any association between wearing of nose masks and health implications among the elderly

2. There is no significant relationship between keeping social distancing. regular hand washing and health implications among the elderly

Independent variable: keeping social distancing and regular hand washing

Dependent variable: Health implications among the elderly

Test statistics: Pearson's Product Moment Correlation

Justification: To test if there is any association between keeping social distancing. regular hand washing and health implications among the elderly

3. There is no significant relationship between administration of COVID 19 vaccines and lack of human capital development

Independent variable: Administration of Covid-19 vaccines

Dependent variable: Health implications among the elderly

Test statistics: Pearson's Product Moment Correlation

Justification: To test if there is any association between administration of Covid-19 vaccines and health implications among the elderly

3.12 Limitations of the study

This study was limited in various ways ranging from the financial involvement amidst the declining economy and the Covid-19 pandemic. The 'End SARs' protest increased the difficulty in going to the study area due to the transportation cost and security situation in the state and nation in general. The study was supposed to cover a period of three (4) to nine (9) months but later took over two academic sessions before its conclusion. Though, despite these limitations the research was actualized.

3.13 Ethical consideration

In order to ascertain anonymity as well as confidentiality of the research respondents and ensure a better outcome, ethical consideration was made in this study. To achieve this, the researcher obtained a 'Letter of introduction' from the Department of Sociology University of Calabar and Delta State Ministry of Health. The letters introduced the researcher and states the objective of the study.

The respondents were assured that the study was strictly for academic purpose and clearly states the level of anonymity for responses to the questionnaire. With these binding letters, all the respondents filled the questionnaire without fear or favour and were at liberty. Thus, all data collected for this study had the consent of the respondents and were devoid of any form manipulation. A copy of the certificate of ethical approval is in appendix two (II) of this study.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS, AND DISCUSSION OF FINDINGS

4.1 Data presentation

In this chapter, data collected from the administered questionnaire were presented and analyzed with the use of tables. Also, appropriate statistical interpretation based on the results was carried out. The statistical analysis of the data collected and the results were based on the hypotheses earlier formulated to guide the researcher on the study. In the tables, simple percentages were used for the demographic data and Pearson's Product Moment Correlation (PPMC) was used for test of hypotheses presented in graphs. The questionnaire was designed in two sectional heading: demographic data and substantive information on preventive measures of COVID-19 pandemic and health implications among the elderly in Ika North East of Delta State, Nigeria. The entire 393 administered questionnaire were properly filled and returned to the researcher for analysis and discussions of findings.

TABLE 2

Presentation of demographic data (Q 1-6)

Variable	Category	No. of respondents	Percentage (%)
Sex	Male	180	45.80
	Female	213	54.20
Total		**393**	**100**
Age	50-60 years	183	46.56
	61-70 years	107	27.23
	71 and above	103	26.21
Total	years	**393**	**100**
Marital status	Single	53	13.49
	Married	176	44.78
	Separated	107	27.23
	Divorce	2	0.51
	Widowed	55	13.99
Total		**393**	**100**
Educational attainment	Primary	91	23.16
	Secondary	115	29.26
	Tertiary	187	47.58
Total		**393**	**100**
Occupation	Farming	28	7.12
	Business	186	47.33
	Civil Servant	179	45.55
Total		**393**	**100**
Religion	Christianity	315	80.15
	Islam	27	6.87
	African Traditional Religion (ATR)	51	12.98
Total		**393**	**100**

Source: Researcher's fieldwork 2021

The analysis in table 2 was on the demographic data of respondents. Item 1 was on the sex of respondents; it showed that out of the 393-population sampled, 180(45.80 percent) respondents were males while 213(54.20 percent) respondents were females making a total of 100 percent. Item 2 showed the age of respondents, it revealed that out of the 393 population sampled, 183 (46.56 percent) respondents were between the ages of 50-60 years while 107(27.23 percent) respondents were between the ages of 61-70 years and 103(26.21 percent) respondents were aged 71 and above years of the population sampled making a total of 100 percent. Item 3 was on marital status of respondents. it showed that out of the 393 population sampled, 53(13.49 percent) respondents were single. 176(44.78 percent) respondents were married, 107(27.23 percent) respondents were separated while 2(0.51 percent) respondents were divorce and 55(13.99 percent) respondents were widowed making it a total of 100 percent.

Item 4 was on educational attainment of respondents, it revealed that out of the 393-population sampled, 91(23.16 percent) respondents had primary education while 115(29.26 percent) respondents had secondary education and 187(47.58percent) respondents had tertiary education making it a total of 100 percent. Item 5 was on occupation of respondents. It showed that out of the 393-population sampled. 28(7.12 percent) respondents were engaged farming, 186(47.33percent) respondents were engaged in business representing and 179(45.55percent) respondents were civil servants making it a total of 100 percent. Item 6 was on the religion of respondents. It showed that out of the 393-population sampled. 315(80.15percent) respondents were Christians, and 27 (6.87 percent) respondents were Muslims while 51 (12.98 percent) respondents were worshipers of the African traditional religion making it a total of 100percent.

TABLE 3

Respondents' perception on wearing of face masks (Q 7-11)

S/N0.	Statement	Variables	Respondents	Percent (%)
	Your are aware of the disease called Corona virus (COVID-19)	SA	287	73.03
		A	61	15.52
		SD	41	10.43
		D	4	1.02
	Total		393	100
	Wearing of face masks is compulsory	SA	110	27.99
		A	95	24.17
		SD	123	31.30
		D	65	16.54
	Total		393	100
	You have been wearing face masks	SA	90	22.90
		A	9	2.29
		SD	32	8.14
		D	262	66.67
	Total		393	100
	You believe that COVID-19 does not exist	SA	116	29.52
		A	169	43.00
		SD	98	24.94
	Total	D	10	2.54
			393	100
	Someone in your community has suffered from COVID-19 infection	SA	26	6.62
		A	207	52.67
		SD	110	27.99
		D	50	12.72
	Total		393	100

Source: Researcher's fieldwork 2021

The analysis in table 3 was on respondent's perception of wearing of face masks. Item 7 showed that out of the 393 administered questionnaires 287(73.03 percent) respondents strongly agreed that they were aware of the disease called Corona virus (Covid-19). 61(15.52percent) respondents agreed, while 41(10.43 percent) respondents strongly disagreed and 4(1.02 percent) respondents disagree making a total of 100 percent of the population sampled. Item 8 showed that 110(27.99 percent) respondents strongly agreed that wearing of face masks is compulsory, 95(24.17percent) respondents agreed while 123(31.30 percent) respondents strongly disagreed and 65(16.54 percent) respondents disagreed making it a total of 100 percent of the population sampled.

Item 9 showed that 90(22.90percent) respondents strongly agreed that they have been wearing face masks; 9(2.29percent) respondents agreed, while 32(8.14 percent) respondents strongly disagreed and 262(66.67percent) respondents disagreed making it a total of 100 percent. Item 10 showed that 116(29.52percent) respondents strongly agreed that there believed COVID-19 does not exist in th8eir place, 169(43.00 percent) respondents agreed while 98(24.94 percent) respondents strongly disagreed and 10(2.54 percent) respondents disagreed making a total of 100 percent of the population sampled. Item 11 showed that 26(6.62percent) respondents strongly agreed that someone in their community has suffered from COVID-19 infection, 207(52.67percent) respondents agreed, while 110(27.99 percent) respondents strongly disagreed, and 50(12.72percent) respondents disagreed making it a total of 100 percent of the population sampled.

TABLE 4

Respondents' perception on social distancing and regular hand washing(Q12-16)

S/N0.	Statement	Variables	Respondents	Percent (%)
	People in your community still attend social and cultural activities and sit closely with one another	SA	284	72.26
		A	41	10.43
		SD	60	15.27
		D	8	2.04
	Total		393	100
	People in your community do not observe social distancing	SA	110	27.99
		A	95	24.17
		SD	124	31.55
		D	64	16.28
	Total		393	100
	Many people including the elderly do not wash their hands regularly	SA	90	22.90
		A	263	66.92
		SD	30	76.33
		D	10	2.54
	Total		393	100
	People still embrace each other and shake hands with friends and relatives	SA	117	29.77
		A	168	42.75
		SD	98	24.94
		D	10	2.54
			393	100
	COVID-19 disease is a white man sickness	SA	27	6.87
		A	203	51.65
		SD	91	23.16
		D	72	18.32
	Total		393	100

Source: Researcher's fieldwork 2021

The analysis in table 4 below was on respondent's perception on social distancing and regular hand washing. Item 12 showed that out of the 393 administered questionnaire 284(72.26 percent), respondents strongly agreed that people in their communities still attend social and cultural activities and sit closely with one another, 41(10.43percent) respondents agreed while 60(15.27 percent) respondents strongly disagreed and 8(2.04 percent) respondents disagreed making it a total of 100 percent of the population sampled. Item 13 showed that 110(27.99 percent) respondents strongly agreed that people in their communities do not observe social distancing, 95(24.17 percent) respondents agreed while 124(31.55 percent) respondents strongly disagreed, 64(16.28 percent) respondents disagreed making it a total of 100 percent of the population sampled. Item 14 showed that 90(22.90percent) respondents strongly agreed that many people including the elderly do not wash their hands regularly, 263(66.92 percent) respondents agreed while 30(76.33 percent) respondents strongly disagreed and 10(2.54 percent) respondents disagreed making it a total of 100 percent of the population sampled. Item 15 showed that 117(29.77 percent) respondents strongly agreed that people still embrace each other and shake hands with friends and relatives, 168(42.75percent) respondents agreed while 98(24.94 percent) respondents strongly disagreed, 10(2.54 percent) respondents disagreed making it a total of 100 percent of the population sampled. Item 16 showed that 27(6.87percent) respondents strongly agreed that COVID 19 disease is a white is a white man sickness, 203(51.65 percent) respondents agreed while 91(23.16percent) respondents strongly disagreed, and 72(18.32 percent) respondents disagreed making it a total of 100 percent of the population sampled.

TABLE 5

Respondents' perception on administration of COVID-19 vaccines (Q17-21)

S/N0.	Statement	Variables	Respondents	Percent (%)
	The elderly in your community are taking COVID-19 vaccines	SA	37	9.41
		A	5	1.27
		SD	290	73.79
		D	61	15.52
	Total		393	100
	People are afraid of taking COVID-19 vaccines because some people said it will kill them	SA	112	28.50
		A	92	23.41
		SD	124	31.55
		D	65	16.54
	Total		393	100
	People are not taking COVID vaccines because they do not know where to get the vaccines	SA	90	22.90
		A	263	66.92
		SD	30	76.34
		D	8	2.04
	Total		393	100
	COVID 19 vaccines is only for the rich people in the township	SA	116	29.52
		A	173	44.02
		SD	98	24.94
	Total	D	6	1.52
			393	100
	None of the elderly people have filled the COVID-19 vaccine form or take the vaccine due to the low perceived risk	SA	36	9.16
		A	207	52.67
		SD	100	25.45
		D	50	12.72
			393	100
	Total			

Source: Fieldwork 2021

The analysis in table 5 was on respondent's perception of administration of COVID-19 vaccines. Item 17 showed that 37(9.41percent) respondents strongly agreed that the elderly in their communities are taking COVID-19 vaccines. 5(1.27 percent) respondents agreed, while 290(73.79 percent) respondents strongly disagreed and 61(15.52 percent) respondents disagreed making it a total of 100 percent of the population sampled. Item 18 showed that 112(28.50percent) respondents strongly agreed that people are afraid of taking COVID-19 vaccines because some people said it will kill them, 92(23.41percent) respondents agreed while 124(31.55percent) respondents strongly disagreed and 65(16.54 percent) respondents disagreed making it a total of 100 percent of the population sampled.

Item 19 showed that 90(22.90percent) respondents strongly agreed that people are not taking COVID-19 vaccines because they do not know where to get the vaccines, 263(66.92percent) respondents agreed, while 30(76.34 percent) respondents strongly disagreed and 8(2.04 percent) respondents disagreed making it total of the population sampled. Item 20 showed that 116(29.52percent) respondents strongly agreed that COVID-19 vaccines is only for the rich people in the township, 173(44.02percent) respondents agreed, while 98(24.94 percent) respondents strongly disagreed and 6(1.52percent) respondents disagreed making it total of the population sampled. Item 21showed that 36(9.16percent) respondents strongly agreed that none of the elderly people have filled the COVID-19 vaccine form or take the vaccine due to the low perceived risk; 207 respondents agreed, while 100(25.45

percent) respondents strongly disagreed and 50(12.72 percent) respondents disagreed making it a total of the population sampled.

TABLE 6

Respondents' perception on health implications of COVID-19 among the elderly (Q22-26)

S/N0.	Statement	Variables	Respondents	Percent (%)
	COVID-19 have killed the elderly more than the younger people	SA	285	72.51
		A	60	15.27
		SD	42	10.69
		D	6	1.53
	Total		393	100
	The elderly with severe respiratory illnesses are the most affected by COVID-19	SA	110	27.99
		A	94	23.92
		SD	124	31.55
		D	65	16.54
	Total		393	100
	Elderly people treat COVID-19 related sickness with traditional medicine and anointing oil from church	SA	90	22.90
		A	262	66.67
		SD	30	7.63
		D	11	2.80
	Total		393	100
	Nobody has contracted COVID-19 infection in your community	SA	116	29.52
		A	97	24.68
		SD	170	43.26
	Total	D	10	2.54
			393	100
	The elderly in your place die of other infections not COVID-19	SA	23	5.85
		A	207	52.67
		SD	110	27.99
		D	53	13.49
	Total		393	100

Source: Researcher's fieldwork 2021

Analysis in table 6 was on respondents' perception on health implications of

Analysis in table 6 was on respondents' perception on health implications of COVID-19 among the elderly. Item 22 showed that 285(72.51 percent) respondents strongly agreed that COVID-19 have killed the elderly more than the younger people. 60(15.27percent) respondents agreed. while 42(10.69 percent respondents strongly disagreed 6(1.53 percent respondents disagreed making it a total of 100 percent of the population sampled. Item 23 showed that 110(27.5 percent) respondents strongly agreed that the elderly with severe respiratory illnesses are the most affected by COVID-19. 94(23.92 percent) respondents agreed while 124(31.55 percent) respondents strongly disagreed. 65 respondents disagreed representing 16.54 percent, making it a total of 100 percent of the population sampled. Item 24 showed that 90(22.90 percent) respondents strongly agreed that elderly people treat COVID-19 related sickness with traditional medicine and anointing oil from church. 262(66.67 percent) respondents agreed, while 30(7.63percent) respondents strongly disagreed and. 11(2.80 percent) respondents disagreed making it a total of 100 percent. Item 25 showed that 116(29.52 percent) respondents strongly agreed that nobody has contracted COVID-19 infection in their communities; 97(24.68 percent) respondents agreed. while 170(43.26 percent) respondents strongly disagreed and, 10(2.54 percent) respondents disagreed making it a total of 100 percent of the population sampled. Item 26 showed that 23(5.85 percent) respondents strongly agreed that the elderly in their place die of other infections not COVID-19, 207(52.67 percent) respondents agreed while 110(27.99 percent) respondents strongly disagreed. 53(13.49percent) respondents disagreed making it a total of 100 percent of the population sampled.

4.2 Data analysis /Test of hypotheses

Result of the data collected was presented based on each hypothesis as shown below:

Hypothesis one

The null (H_0) hypothesis states that there is no significant relationship between wearing of face masks and health implications among the elderly.

Pearson's product moment correlation coefficient(r) was used for data analysis. Result of analysis was presented in Cylinder chart figure 1 and the mean scores from the Pearson's product moment correlation coefficient(r) variables in tables 7.

Decision Rule

Pearson's product moment correlation decision rule states that "if calculated r- value is greater than or equal to critical (table) r-value from a sample size n, at 0.05 alpha (α) level of significance", reject null-hypothesis (H_0) and accept alternate hypothesis (H_1).

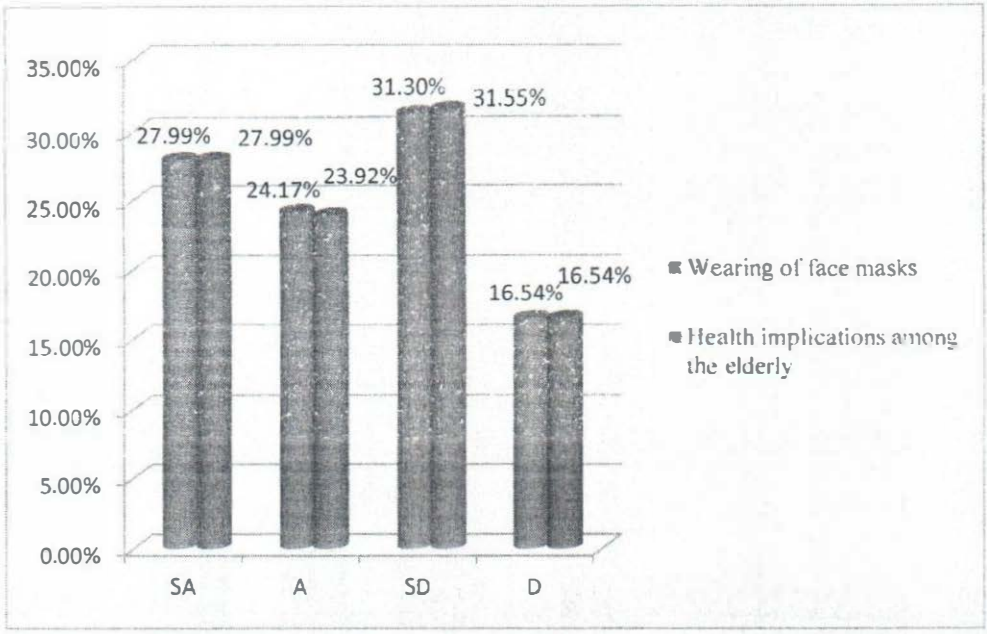


Figure 1: Clustered Cylinder chart showing percentage score of respondents on wearing of face masks and health implications among the elderly in Ika.

TABLE 7

Summary of Pearson's product moment correlation coefficient (r) calculation of relationship between the mean scores of wearing of face masks and health implications among the elderly

Variables	N	Mean	SD	r-value	Sig.
Wearing of face masks	393	2.3639	1.06062		
				.999**	05
Health implications among the elderly	393	2.3664	1.06094		

Significant at *P< .05; Critical r-value = 0.195 d.f = 391

Source: Researchers field work 2021

Results:

Result of analysis in figure 1 and table 7 showed the percentage score of respondent's responses to wearing of face masks and health implications among the elderly, and the test result from the Pearson's product moment correlation coefficient (r). The test result showed that a huge number of respondents (27.99 percent and 24.17percent) strongly agreed that wearing of face masks is compulsory and the calculated r-value 0.999** is greater than critical r-value 0.195 at 0.05 levels of significance with 391 degrees of freedom. This guarantees the rejection of the (H_0) null hypothesis as seen in the decision rule and acceptance of the alternative hypothesis which states that there is a significant relationship between wearing of face masks and health implications among the elderly. The implication further showed that cases of COVID-19 infection continue to increase as long as non-adherence to the preventive measure of wearing of face masks particularly among the vulnerable is sustained.

Hypothesis two

The null (H_0) hypothesis states that there is no significant relationship between social distancing; regular hand washing and health implications among the elderly.

Pearson's product moment correlation coefficient(r) was for data analysis. Result of analysis was presented in Cone chart figure.2 and the mean scores from the Pearson's product moment correlation coefficient(r) variables in tables 8

Decision Rule

Pearson's product moment correlation decision rule states that "if calculated r-value is greater than or equal to critical (table) r-value from a sample size n, at 0.05 alpha (α) level of significance", reject null-hypothesis (H_0) and accept alternate hypothesis (H_1).

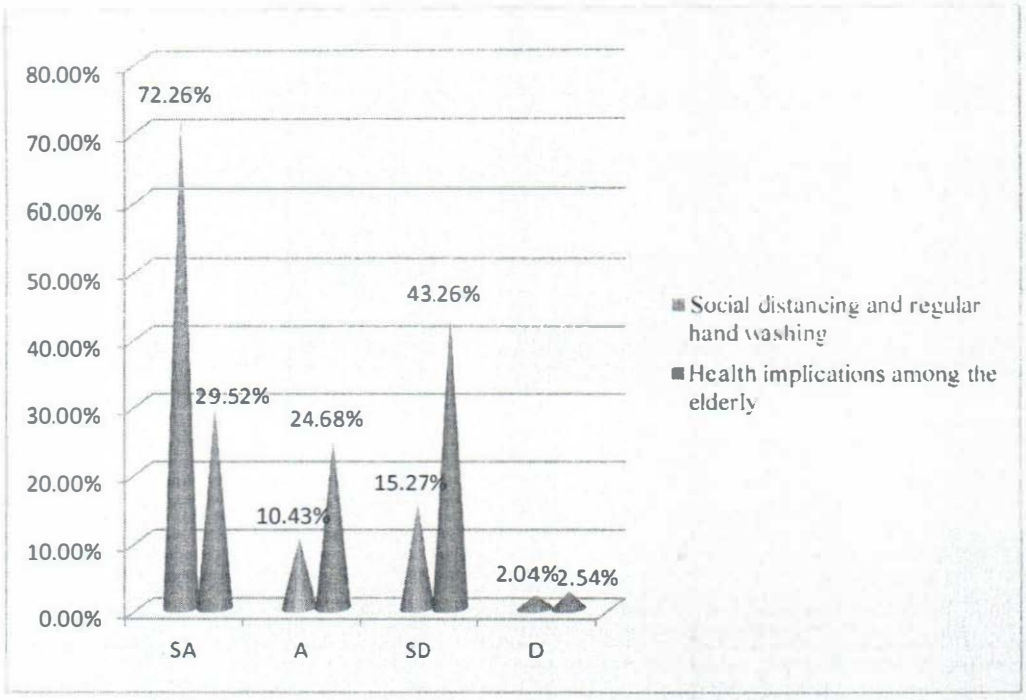


Figure 2: Cone chart showing the percentage score of respondents on social distancing, regular hand washing and health implications among the elderly

TABLE 8

Summary of Pearson's product moment correlation coefficient (r) calculation of relationship between the mean scores of between social distancing, regular hand washing and health implications among the elderly

Variables	N	Mean	SD	r-value	Sig.
Social distancing; regular hand washing	393	1.4707	0 .82362		
				0.618**	05
Health implications among the elderly	393	2.1883	0.89224		

Significant at *P< .05; Critical r-value = 0.195 df = 391

Source: Researchers field work 2021

Results:

Result of analysis in figure 2 and table 8 showed the percentage score of respondent's responses to social distancing, regular hand washing and health implications among the elderly, and the test result from the Pearson's product moment correlation coefficient (r). The test result shows that a greater number of respondents (72.26 percent and 10.43percent) strongly agreed that people in their communities still attend social and cultural activities and sit closely with one another and the calculated r-value 0.618^{**} is greater than critical r-value 0.195 at 0.05 levels of significance with 391 degrees of freedom. This guarantees the rejection of the (H_0) null hypothesis as seen in the decision rule and acceptance of the alternative hypothesis which states that there is a significant relationship between social distancing, regular hand washing and health implications among the elderly. The implication further showed that cases of COVID-19 infection continue to increase so long as non-adherence to the preventive measure of social distancing; regular hand washing among the elders is sustained.

Hypothesis three

The null (H_0) hypothesis states that there is no significant relationship between administration of COVID-19 vaccines and health implications among the elderly.

Pearson's product moment correlation coefficient(r) was for data analysis. Result of analysis was presented in Pyramid chart figure 3 and the mean scores from the Pearson's product moment correlation coefficient(r) variables in tables 9.

Decision Rule

Pearson's product moment correlation decision rule states that "if calculated r-value is greater than or equal to critical (table) r-value from a sample size n, at 0.05 alpha (α) level of significance", reject null-hypothesis (H_0) and accept alternate hypothesis (H_1).

Results:

Result of analysis in figure 3 and table 9 showed the respondent's responses to administration of COVID-19 vaccines and health implications among the elderly, and the test result from the Pearson's product moment correlation coefficient (r). The test result shows that a huge number of respondents (73.79 percent and 15.52 percent) strongly disagreed that the elderly in their communities are taking COVID-19 vaccines and the calculated r-value 0.747^{**} is greater than critical r-value 0.195 at 0.05 levels of significance with 391 degrees of freedom. This guarantees the rejection of the (H_0) null hypothesis as seen in the decision rule and acceptance of the alternative hypothesis which states that there is a significant relationship between administration of COVID-19 vaccines and health implications among the elderly. The implication further showed that cases of COVID-19 infection continue to increase so long as non-adherence to the preventive measure of taking of COVID-19 vaccines among the elders is sustained.

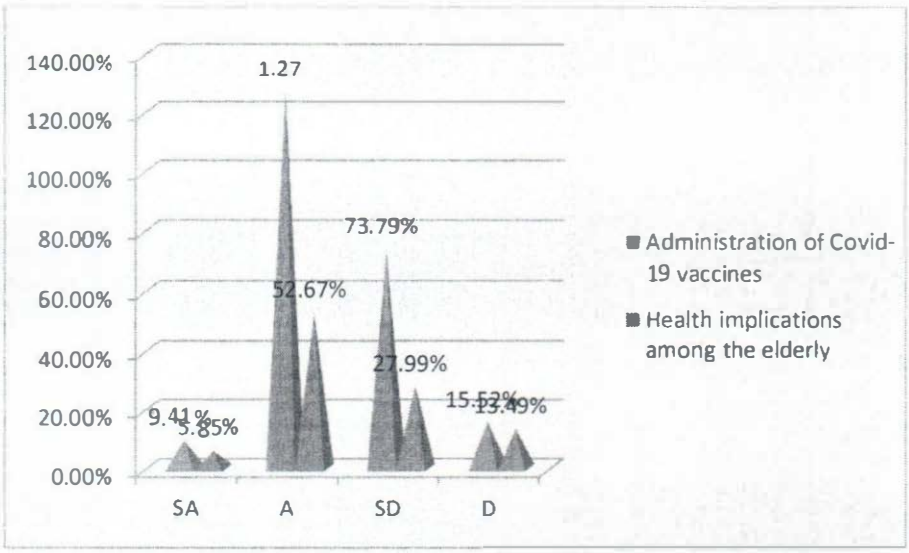


Figure 3: Pyramid chart showing the percentage score of respondents on administration of COVID-19 vaccines and health implications among the elderly.

TABLE 9

Summary of Pearson's product moment correlation coefficient (r) calculation of relationship between the mean scores between administration of Covid-19 vaccines and health implications among the elderly

Variables	N	Mean	SD	r-value	Sig.
Administration of Covid-19 vaccines	393	2.9542	0.73744		
				0.747**	05
Health implications among the elderly	393	2.4606	0.79802		

Significant at *P< .05; Critical r-value = 0.195 df = 391

Source: Researchers field work 2021

4.3 Discussion of findings

4.3.1 Wearing of face masks and health implications among the elderly

Result of the first hypothesis revealed that a significant relationship existed between wearing of face masks and health implications among the elderly. This means that wearing of face masks can reduce the impact of Covid-19 pandemic and enhance good health among the elderly in Ika North East Local government area of Delta state. From the 393 administered questionnaires, 27.99 percent and 24.17percent which represented a large number of respondents strongly agreed that wearing of face masks is necessary for the prevention of Covid 19 among the elderly. The finding tallies with the observations of the European Centre for Disease Control (2020), and Nigeria Centre for Disease Control (2020) which stated that the use of face masks primarily serve as a means of control and it appears to be most relevant when the number of infected persons in the community is assumed to be high. By implication, if all the inhabitants and particularly the aged in Ika North East could obey the NCDC rules of wearing of face masks as a preventive measure to Covid-19 pandemic there will be no recorded case or problem of susceptibility to the disease in the study area.

It was gathered that although the elderly in Ika North East were aware of the existence Covid-19 pandemic in the world, a significant number of them believed that Covid-19 does not exist in their place. This is evident in their slim differences on the percentage of respondent's responses to wearing of face masks as shown on the clustered Cylinder chart figure 1. This as well may be the reason most of the aged and other people in the study area do not wear face masks even

as it is made compulsory by the government. Since the elderly are said to be among the vulnerable group to the Covid-19 pandemic according to the WHO (2020) and Nigeria Centre for Disease Control (NCDC, 2020), yet they seem not to believe it existence in their communities, it therefore means that in the near future the death rate will be uncountable particularly now that the country is about to experience the third wave of the Covid-19 disease. There was no opposing finding to the finding of this study based on the literature reviewed in this work. Hence, the need for proper and urgent action to make the residents especially the elderly of Ika North East to adhere to the preventive measure of Covid-19 by wearing of face masks because ''prevention' they say; is better than cure''.

4.3.2 Social distancing; regular hand washing and health implications among the elderly

Result of the second hypothesis showed that a significant relationship existed between social distancing; regular hand washing and health implications among the elderly. This implies that keeping of social distancing; regular hand washing can prevent the elderly from being infected by Covid-19 and guaranteeing their health or well being in Ika north east local government area of Delta state. From the 393 administered questionnaires, 72.26 percent and 10.43percent which represented a greater number of respondents strongly agreed that people in their communities still attend social and cultural activities and sit closely with one another. This they do according to the informants without obeying the NCDC rules of social distancing and regular hand washing. These findings are in line with those of Manikandan's (2020) and WHO's (2020) which, due to the movement of people in daily life, keep a distance of 6 meters in public

places such as workplaces, restaurants, public transport and market places are difficult to keep up with. to move away. While hand washing can effectively reduce SARS-CoV-2 transmission through indirect contact, rubbing hands with alcohol-based antibiotics and antiseptics is also recommended for infected people, close associates, and the general public. This practice can help reduce the risk of COVID-19 transmission (Manikandan, 2020). As people with the knowledge to monitor physical distance and good hygiene practices during the epidemic, health experts have consistently reminded that the simple practice of washing hands with soap and clean water is one of the most effective ways to prevent the spread of germs and germs (WHO). Africa, 2020). In this study, the implication is that deliberate keeping of social distancing and frequent hand washing can prevent the vulnerable group from contracting Covid-19 disease and thereby enhance health and well being of the people. Nevertheless, it was also revealed that Covid-19 pandemic is a 'White Man' disease hence their difficulty in adherence to the preventive measures. There was no contrary finding to the finding of this study based on the literature reviewed in this work.

4.3.3 Administration of COVID-19 vaccines and health implications among the elderly.

Result of the third hypothesis also revealed that a significant relationship existed between administration of COVID-19 vaccines and health implications among the elderly. This also implies that administration of COVID-19 vaccines can prevent the elderly from contracting Covid-19 disease in Ika north east local government area of Delta state. From the 393 administered questionnaires, 73.79

percent and 15.52 percent which represented high percentage of respondents strongly disagreed that the elderly in their communities are taking COVID-19 vaccines. It was also gathered that none of the elderly people have filled the COVID -19 vaccine form or taken the vaccine because of the low perceived risks. This is in line with Wang et al, (2020) findings which stated that the elderly are more vulnerable to COVID 19, majority of the retired population in Southeast Asian countries have low mobility and spend more time at home with less travel. This behaviour may lead them to having low perceived risk of being infected with SARS-COV-2 and eventually may lead to low acceptance of the vaccine. The implication for this study is that if the Covid-19 vaccines were made available and free to Ika north east, the inhabitants will accept to be vaccinated in order to enhance their health. It was also revealed that COVID 19 vaccine is only for the rich people in the township. There was no opposing finding to the finding of this study based on the literature reviewed in this work

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary of the study

This study examined the preventive measures of covid-19 and health implications among the elderly in Ika North East Local Government area. To give this study a direction, three research questions and three objectives were formulated and later transformed into three hypotheses. In the investigation, related literature was thematically reviewed based on the main variables of the study. Two theories such as the health belief model and Symbolic interactionism theory of health were employed to help explain the case study. The correlational research design was adopted for this study. It was adopted because it does not involve manipulating the variable of interest. The population of this study included all older people (men and women) Ika North East Local Government in the Delta region. The data collection sources for this study were the primary and secondary domains. The sampling techniques used in this study were the cluster and simple random random sampling methods with a questionnaire as a data collection tool. A sample of three hundred and thirty three (393) respondents was determined with the Taro Yamene's sample size determination formula. .The three null hypotheses were analyzed using Pearson's Product Moment Correlation (PPMC) as the major instrument for data analysis at a 0.05 level of significance. This was done with the aid of the statistical package for social sciences (SPSS) version 20.

The test results revealed that; there is a significant relationship between wearing of face masks, social distancing and regular hand washing, administration of Covid-19 vaccines and health implications among the elderly in Ika North East Local Government area. The study was concluded with recommendations and suggestions for further study.

5.2 Conclusion

Considering research results, conclusion was drawn that; consistent and well-coordinated preventive measures of Covid-19 disease in terms of wearing of face masks, social distancing and regular hand washing as well as administration of Covid-19 vaccines are very important for the maintenance of health and well-being of the elderly and the general public in the study area. From the study, it was noted that the inhabitants of the study area especially the vulnerable group were taking the preventive measures of COVID 19 pandemic for granted as many of them believed that the disease does not exist in their social; environment. Based on the findings, to mitigate the spread of this COVID 19 disease as well as reduce the effect on the vulnerable group (elderly) in the society particularly in Ika North East local government area requires effective and efficient implementation of the preventive measures of COVID 19 disease. This made it necessary for recommendations which if strictly adhered to the issue of COVID 19 pandemic will be a thing of the past.

5.3 Recommendations

Based on the findings, the following recommendations were made:

1. There should be proper orientation of the elderly in Ika North East Local Government area on the compulsory use of face masks. This will go along

way of reducing the impact of Covid-19 pandemic on the elderly which constituted the vulnerable group and society at large

2. The government should form a Covid-19 task force that will be saddled with the responsibility to monitor and arrests defaulters of the law of keeping social distancing and regular hand washing among inhabitants especially the elderly in the study area. This, to a greater extent will help to curb the spread of Covid-19 disease and enhance health and wellbeing of the elderly in Ika north east local government area.
3. The elderly should be encouraged to take the Covid-19 vaccines. This will go a long way in increasing their immune system as well as reducing the effect of covid1-19 virus. In addition, the government should embark on public enlightenment campaign at grassroots level to encourage the people especially the vulnerable group (elderly) in Ika North East Local Government area on the efficacy and importance of covid-19 vaccines and shun all manner of fake news concerning Covid-19 vaccines that is capable of discouraging the elders from accepting the vaccines. This will also help in the prevention of Covid-19 disease and ensure good health among the elderly and society at large.

5.4 Suggestions for further study

Considering limitations of this study, these suggestions were made for additional research:

1. The use of qualitative research methods to provide in-depth data on actual reasons for the difficulty and ineffectiveness on the preventive measures of Covid-19 disease in the study area.

conducted in different local government areas

2. The same research should be conducted in different local government areas of Delta state.
3. Statewide investigation should be conducted on the preventive measures of Covid -19 and health implications among the elderly but focusing on other indicators such as lockdown, and self- isolation.

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APPENDIX I

QUESTIONNAIRE

Department of Sociology
University of Calabar
Cross River State

Dear respondents,

I am a post graduate student of the above institution, carrying out a study on preventive measures of COVID-19 pandemic and Health Implications among the Elderly in Ika North East of Delta State, Nigeria.

Please you are requested to respond to all the items that follow. Your response will be greatly appreciated and treated with confidentiality.

Thank you in anticipation for co-operation.

Yours Faithfully

AGHULOR, JOVITA DOOSHIMA

Section A

Demographic data

Please respond as appropriate to you.

1. Sex: Male [ ] Female [ ]
2. Age: 50-60 [ ]61-70 [ ] 71 and above '[ ]
3. Marital Status: Single [ ]Married [ ]Separated [ ] Divorce [ ] Windowed [ ]
4. Educational Attainment: Primary [ ] Secondary [ ]Tertiary [ ]
5. Occupation: Farming [ ] Business [ ] Civil Servant [ ] Student [ ]
6. Religion: Christianity [ ]Islam [ ] African Traditional Religion (ART) [ ]

Section B

Substantive information on preventive measures of COVID 19 pandemic

Instruction: Please tick [ ] or respond to the option that best expresses your view.

Each question is followed by five options. For example;

Strongly Agree	=	SA
Agree	=	A
Strongly Disagree	=	SD
/7Disagree	=	D

Section B:

Section B1: Respondent's perception on wearing of face masks					
S/N	STATEMENTS	SA	A	SD	D
7.	You are aware of the existence of disease called Corona virus(Covid-19) in the world				
8.	Wearing of face masks is compulsory				
9	You have been wearing face masks				
10	You believe that COVID-19 does not exist your place				
11	Someone in your community has suffered from COVID 19 infection				
Section B_2: Respondent's perception on social distancing and regular hand washing					
12	People in your community still attend social and cultural events and sit closely with one another				
13	People in your community do not observe social distancing				
14.	Many people including the elderly do not wash their hands regularly				
15.	People still embrace each other and shake hands with friends and relatives				
16.	COVID 19 disease is a white man sickness				
Section B_3 Respondent's perception on administration of Covid 19 vaccines					
17	The elderly in your community are taking COVID-19 vaccines				
18.	People are afraid of taking COVID-19 vaccines because some people said it will kill them				
19.	People are not taking COVID-19 vaccines because they do not know where to get the vaccines				
20.	COVID 19 vaccines is only for the rich people in the township				
21.	None of the elderly people have filled the COVID -19 vaccine form or taken the vaccine because of the low perceived risks				
	SECTION C: Health implications of COVID				

	19 among the elderly				
22	COVID-19 have killed the elderly more than the younger people				
23	People with severe respiratory illnesses are the most affected by COVID-19				
24	People treat COVID-19 related sickness with traditional medicine and anointing oil from church				
25	Nobody have contracted COVID-19 infection in your community				
26	The elderly in your place die of other infections not COVID-19				

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11th October, 2021

To whom it may concern,

LETTER OF INTRODUCTION:

AGHULOR, JOVITA DOOSHIMA - SOC/M.Sc./18/031

I hereby introduce to you **Aghulor, Jovita Dooshima** who is an M.Sc. student in the Department of Sociology, University of Calabar, Calabar with Registration Number **SOC/M.Sc./18/031.** She is carrying out a research on the topic **"Preventive Measures of Covid-19 Disease and The Health Implications Amongst The Elderly in Ika North East Local Government Area of Delta State - Nigeria".**

Please, you are by this letter requested to kindly assist her gather data for her research work.

Every information gathered by the said **Aghulor, Jovita Dooshima** will be treated as confidential and strictly for academic purposes.

Thanks in anticipation.

DR. AGBA A. OGABOH
Ag. Head, Department of Sociology