Research paper

The impact of religion, gender and location on the practice of covid – 19 preventive measures among residents in Bayelsa State

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The COVID -19 pandemic has become a major public health challenge globally with unprecedented measures being adopted to control the rapid spread of the epidemic. The impact of Religion, Gender and Location on the Practice of COVID – 19 Preventive Measures are very critical to the effectiveness, adherence and success of the control measures adopted of this pandemic in a country. Hence this study investigated the impact of religion, gender and location on COVID -19 preventive measures among residents in Bayelsa State, Nigeria. A descriptive cross- sectional survey design was adopted for this study. The population for the study comprised of 1,500 residents, aged 20 years and above in Bayelsa State. The research instrument was a self -structure questionnaire. Multu- stage stratified random sampling technique was used; Proportionate stratified random sampling technique was used to get the 10% of respondents representing each stratum. Descriptive statistics of item mean and criterion mean was used to make comparison to either accept or reject item at 2.5. Analysis of the data included inferential statistics of one-way ANOVA and t- test (using the statistical package for social sciences – SPSS). Results: the study found out that there is statistically significant difference in the awareness of the practice of COVID -19 preventive measures in Bayelsa State, based on impact of religion; there is no statistically significant difference on the awareness of the practice of COVID -19 preventive measures in Bayelsa State, based on impact of gender and there is also no statistically significant difference on the awareness of the practice of COVID -19 preventive measures in Bayelsa State, based on impact of location.

Key Words: **Covid-19, Pandemic, Location, Gender, Religion**

INTRODUCTION

The COVID – 19 pandemic, also known as the coronavirus, is one of the huge general wellbeing crisis for the planet. Since its first recognition, over 90.2 and 1.9 million people were infected and reported dead, respectively, which is caused by the transmission of severe acute respiratory syndrome coronavirus 2 (SARS –COVID -2), first identified in December 2019 in Wuhan, China. The pathogen of this disease was confirmed as a novel corona virus by molecular methods and was initially named as 2019 novel corona virus (2019- CoV); however, on January 30, 2020, the WHO declared the COVID-19 outbreak as the sixth public health emergency of international concern. Therefore this out-break was declared a public health emergency of International concern in January 2020 and a pandemic in March 2020. Its rapid global spread across over 215 countries and territories has become one of the largest pandemics in recent times with several devastating significant public health challenges (WHO 2020).

Although it is not easily available for low-income countries, after many trials vaccination is initiated by some industrialized nations. However, still now there is no effective treatment for the infection. Henceforth, adherence with COVID-19 preventive and control measures are the only option to stop its spread and minimize its disastrous impact, especially, in developing nations like Nigeria.

Many churches, synagogues, mosques, and temples have offered worship through live stream amidst the pandemic. (Parke & Caleb, 2020).Adherents of many religions have gathered together to pray for an end to the COVID-19 pandemic, for those affected by it, as well as for wisdom from physicians and scientists to combat the disease.(Sheva & Arutz, 2020)

A healthy system of life, i.e. food, exercise and prevention, is one of the means of the healthy immunity. The religion urges us to adopt such a system. Allah commands us to eat what is good and avoid what is bad. Allah says: (Al- Bukhari, 2020)

Pandemics and outbreaks have differential impacts on women and men. From risk of exposure and biological susceptibility to infection to the social and economic implications, individuals' experiences are likely to vary according to their biological and gender characteristics and their interaction with other social determinants. Because of this, global and national strategic plans for COVID-19 preparedness and response must be grounded in strong gender analysis and must ensure meaningful participation of affected groups, including women and girls, in decision-making and implementation (WHO, 2020).

Women make up 70% of the global health workforce and are highly represented on the front lines. Consequently; they are at high risk of frequent exposure to patients with high viral loads of COVID-19 infection. Recent data show that, of the total healthcare workers infected with COVID-19 in Spain and Italy, 72% and 66% respectively were women (COVID-19: emerging gender data, 2020).

The disease had plagued the world with about 7.8 million confirmed cases and over 430,000 deaths as of June 13th, 2020. As of 28 October 2020, more than 44.3 million cases have been confirmed with more than 1.17 million deaths attributed to COVID-19, (Kate,2020).

Unprecedented measures have been adopted to control the rapid spread of the ongoing COVID -19 epidemic Nigeria. The impact of religion, gender and the location of the people concerning this new disease is critical to understanding the epidemiological dynamics of the disease. This could play a major role in the way they accept measures put in place to curb its spread and their willingness to the effectiveness, compliance and success of infection prevention and control (IPC)measures adopted in the states and Nigeria at large.(Haischer, Beilfuss, Hart, Opielinski, Wrucke, Zirgaitis, Uhrich, Hunter, 2020).

As a worldwide pandemic, Bayelsa state was not an exception from the deadly COVID-19. As at 27 October 2020; the number of COVID-19 confirmed cases as revealed by the NCDC data were:403, Active: 1, Recovered: 381 and Deaths: 21. From the foregoing, among the 36 states, the highest death rate per state; Bayelsa State assumes 14th position, which is on the average.

Coronavirus disease 2019 (COVID-19) is an emerging respiratory infections and is known to cause illness ranging from the common cold to severe acute respiratory syndrome, such as dry cough, breathing difficulties (dyspnea).fever, fatigue, and malaise. So far the disease is characterized by high morbidity and mortality rates alongside other diseases. The mode of transmission is through droplet infection from person to person, and there have been no recorded cases of transfusion – transmitted coronavirus. Also there is no data to suggest that mosquitoes or ticks spread the virus that causes COVID -19 (Rine, Margaret, Danladi, Dauda & Patricia (2020).

According to the above authors, prior to the WHO pronouncement of COVID -19, as a global pandemic, many Nigerians regarded the disease as a distant white man's infirmity that could never spread to their abode. Without recourse to expert advice and recommendations, Nigerians and their government downplayed the emergence of COVID -19 in their territory there by hesitating the adoption of initial preventive means which would have saved costs while protecting the citizenry from undue exposure to the virus. But with the confirmation of the index COVID -19 cases in Lagos, Nigeria on February 20, 2020, other parts of the country including most State continued their normal routines and social activities without observing the sketchy preventive measures initially outlined by Nigeria Center for Diseases Control (NCDC). Most Nigerians opined that COVID- 19 is a 'big man disease'' (ie disease of the highly influential persons). As the number of COVID -19 cases gradually increased among the Nigerian population, especially the metropolitan cities including Abuja, the Federal Capital Territory (FCT), probable fear amidst misinformation regarding COVID -19 characterized the state of the inhabitants of the affected regions.

Furthermore, the prevailing presence of urban slums, dense population, inadequate access to potable water, fragile healthcare system, sharing of sanitation facilities with a high degree of social mixing among the inhabitants of Nigeria, will make the implementation of hygiene and other public health measures necessary for the curbing of the coronavirus impossible (Winter, Dzombo, & Barchi, 2019). Also, the spread of misinformation and tales regarding the COVID -19 and promotion of unscientific traditional treatment within Nigeria further jeopardized the implementation of preventive measure , (Joannidis, 2020),which is also applicable to Bayelsa state.

With the infection prevention and control (IPC) strategies adopted by the NCDC and Nigerian government to curtail COVID -19, the adherence of the citizenry could depend largely on the impact of religion, gender and location towards practicing the COVID – 19 preventive measures.

Area of Study

Bayelsa State is one of the 36 states of Nigeria. It occupies the extreme south of the country and is approximately mid-way between the eastern and western boundaries of the country with the Republic of Cameroon and Benin respectively. The state is bounded in the north by Delta State, east by Rivers State and the west and south by the Gulf of Guinea. Bayelsa State is a picturesque (visually charming or having pleasing or interesting qualities) tropical rain forest, with an area of about 21,110 square kilometres. More than three quarters of this area is covered by water, with a moderately low land stretching from Ekeremor to Nembe. The network of many creeks and rivers in the south, all flow into the Atlantic Ocean via the major rivers such as San Bartholomew, Brass, Nun, Sangana among others. The people of Bayelsa State were originally traditionalists. Nevertheless, the concept and acceptance of God as the creator had never been in doubt in any of the sub-religions. This is why every Izon dialect has a specific name for God. The major occupation of Bayelsans (Izon-man) is farming, fishing, canoe- carving and collection of palm products (Yanga, 2006).

Bayelsa State is made up of three senatorial districts, comprising of eight Local Government Areas as follows (1) Central Senatorial District, (Yenagoa, Kolokuma/Opokuma and Southern Ijaw Local Government Areas,), (2) East Senatorial District; (Ogbia, Nembe and Brass LGAs,) and (3) West Senatorial District; (Ekeremor and Sagbama LGAs). Its capital is at Yenagoa, (Corporate Nigeria, 2007). It has a population of around 2 million people, (National Population Commission, 2006).

Statement of Problem

Living a healthy life is very paramount to every individual, hence the religion, gender and location could make an impact towards the practice of preventive measures against any disease condition, and can serves as the key to attaining good health. COVID -19 had caused so many deaths in the whole world and Bayelsa State is not an exception. Could this high mortality rate be due to the impact of religion, gender and location of the individuals, not being able to practice the COVID -19 guidelines or preventive measures? The battle of COVID -19 is still continuing in Nigeria, Bayelsa state inclusive. To achieve huge success, people's adherence to these COVID -19 control measures are very important, which is largely affected by their religion, gender and location. There is however a paucity of studies on this area in Bayelsa State. Hence the need for the present study which is the Impact of religion, gender and location on the practice of Covid -19 Preventive Measures Among Residents in Bayelsa State.

Aim of the Study

The aim of this study is to investigate the impact of religion, gender and location on the practice of Covid -19 Preventive Measures Among Residents in Bayelsa State:

Objectives of the Study

In specific terms, the study determined:

1. The impact of religion on the practice of COVID -19 preventive measures among residents in Bayelsa State.
2. The impact of gender on the practice of COVID -19 preventive measures among re among residents in Bayelsa State.
3. The impact of location on the practice of COVID -19 preventive measures among residents in Bayelsa State.
4. The level of practice of Covid-19 preventive measures among residents in Bayelsa State.

The following Research Questions Guided the Study.

1. What is the impact of religion on the practice of COVID -19 preventive measures among residents in Bayelsa State?
 2. What is the impact of gender on the practice of COVID -19 preventive measures among residents in Bayelsa State?
3. What is the impact of location on the practice of COVID -19 preventive measures among residents in Bayelsa State?
4. What is the level of practice of Covid-19 preventive measures among residents in Bayelsa State?

Hypotheses:

1. There is no significant difference on the awareness of the practice of COVID -19 preventive measures among residents in Bayelsa State, based on impact of religion
2. There is no significant difference on the awareness of the practice of COVID -19 preventive measures among residents in Bayelsa State, based on impact of gender.
3. There is no significant difference on the awareness of the practice of COVID -19 preventive measures among residents in Bayelsa State, based on impact of location.

Delimitation of the Study:

This study was delimited to residents of Bayelsa State in Nigeria.

Significance of the study:

1. The results of this study may motivate residents of Bayelsa State to practice the COVID- 19 preventive measures regularly and thereby reducing the rate of spread of the disease in Bayelsa State.
2. Findings from the study may serve as a baseline data for the Bayelsa State government and non-governmental organizations, to encourage and create awareness programmes/campaigns about the importance of abiding to the COVID -19 preventive measures, so as to reduce the morbidity and mortality rates of the pandemic disease.
3. The mortality rate of COVID -19 can be reasonably reduced by being devoid of religious fanaticism, gender differences and the location the individual lives, towards the practice of COVID -19 preventive measures.
4. These findings will be of particular interest to public health agencies, health care providers, policy makers, and other stakeholders involved in efforts to lower the disease burden of the COVID-19 pandemic in Bayelsa State.

Review of Related Literature

Conceptual Framework

Independent Variable

Dependent Variable

Demographic Data

Impact of:

- Religion

- Gender

- Location

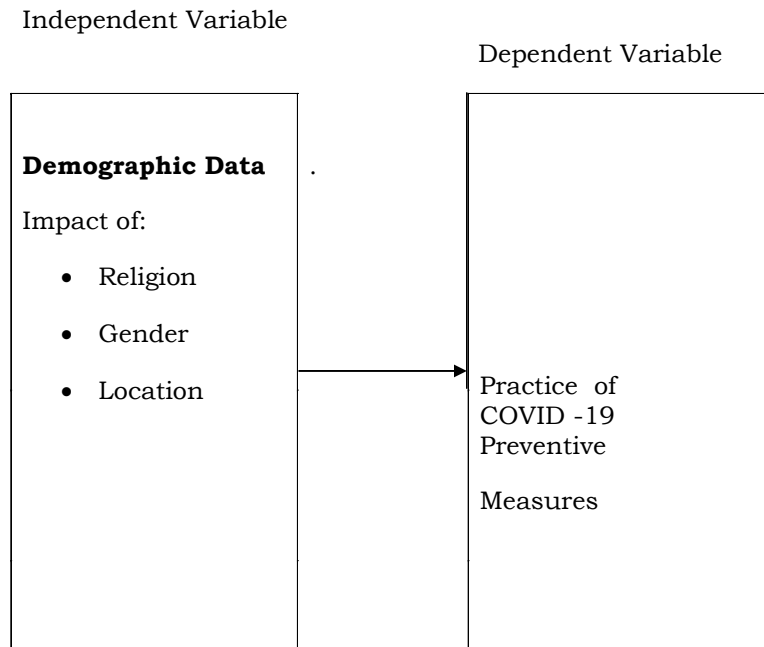Practice of
COVID -19
Preventive

Measures

Figure 1. Conceptual Framework Impact of Religion, Gender
and Location on COVID -19 Preventive Measures
Source: Ikemike. D.O

According to Ikemike (2020).The above conceptual framework postulates that: an individual's religion, gender and location can determine the practice of an intended action that may as well determine either a positive or negative outcome.

According to Goetz and Lecompte (1984 in Smyth, 2002), conceptual framework becomes the heart of any study as the research gains momentum. It increasingly scaffolds, strengthens and keeps research on track by:

- Providing clear links from the literature to the researcher goals and questions.
- In forming the research design.
- Providing reference points for discussion of literature, methodology and analysis of data.
- Contributing to the trustworthiness of the study.

Concept and History of COVID -19

Although it is still unknown exactly where the COVID -19 out-break first started. This new coronavirus appeared in Wuhan, China, in late December 2019 after health officials noticed an increase in pneumonia cases with no known cause. These cases have since been linked to several early infected people who had visited Huanan Seafood Wholesale Market, located in Wuhan,, Hubei, China,(Sun, He, Wang, Lai, Ji and Zhai, 2020).

According to Adhanom, Tredos, and Jr, Berkeley (11 February 2020). The World Health Organization named the disease '' COVID -19,''the year in which the outbreak of the disease was first identified in 2019. The virus that caused the outbreak is known as severe acute respiratory syndrome coronavirus 2 (SARS –CoV-2), a newly discovered virus, that is closely related to **bat coronaviruses.** Within a few months, SARS – CoV-2 has spread to hundreds of countries around the world after being transmitted through person to person contact, (Periman 2020) pangolin coronavirus (cyranoskkiand Zhang, Wu et al, 2020).

According to Clarly (April 29, 2020). The term 'coronavirus' refers to a group of viruses known to affect birds and animals, including humans, COVID-19, which first appeared in China in December 2019, is a type of coronavirus. Coronaviruses are named for the spiky projections on their surfaces. These resemble the points on a crown. Corona means 'Crown' in Latin.

According to the above author, there are hundreds of coronaviruses, but only seven are known to affect people.

Four human coronaviruses only cause mild cold or flu-like symptoms. Three other coronaviruses pose more serious risks. All the seven types of human coronaviruses cause upper respiratory infections. Symptoms resemble those of the common cold or flu and may include nasal congestion, sore throat, dry cough, headache and fever.

According to the Centre for Disease Control (CDC) (2020). Coronavirus occasionally cause complications in the lower respiratory tract, such as pneumonia. These complications are more common among infants, older adults and people with other illnesses or weakened immune system. The seven coronaviruses that affect humans can be categorized into two groups: Common Human Coronaviruses. There are four common human coronaviruses: (1) 229E, (2) NL63, (3) OC43 and (4) HKUI.

According to the above author; common human coronavirus usually causes mild to moderate symptoms. Most people around the world will develop at least one of these viral infections over their lifetime. Those who contract these viruses are able to recover on their own most of the time. Three additional human coronaviruses originated as animal infections. Overtime, these viruses evolved and were eventually transmitted to humans. These coronaviruses pose more serious risks to human health. They are described below:

SARS – CoV

SARS –CoV. Causes severe Acute Respiratory Syndrome (SARS). According to the World Health Organization (WHO) (2002). The first human cases appeared in southern China. SARS –CoV. May have originated in bats and were transmitted to other animals before infecting humans. During the 2002 -2003 epidemic; 8,000 people in 26 countries around the world contracted SARS. There were 774 reported deaths. The outbreak was contained in the mid-2003 with the implementation of infection control practices such as isolation and quarantine. Since then, a handful of cases have occurred due to laboratory accidents. However, if the virus re- emerges, it could pose a significant threat to the public.

MERS – CoV

MERS –CoV. Causes Middle East Respiratory Syndrome (MERS). According to World Health Organization (WHO). It emerges in September 2012 in Saudi Arabia, although initial cases were later traced back to Jordan. Humans contract MERS –CoV through contact with camels that have contracted the infection. The virus is also transmitted by coming into very close contact with a person who has the infection. Since 2012, 27 countries have reported more than 2, 400 MERS cases. To date, the majority of cases have occurred in Saudi Arabia.

In 2015, an outbreak in South Korea led to 186 cases and 36 deaths. According to the Centre for Disease Control (CDC) (2020).This outbreak originated with a traveller returning from the Middle East. Also according to the European Centre for Disease Prevention and Control (ECDPC), there were more than 200 cases of MERS –CoV reported in 2019.

Coronaviruses are Zoonotic viruses. That means, commonly affect animals such as; birds, bats, camels, and pigs. In rare cases, coronaviruses 'jump' species, which means they are transmitted from an animal with the infection to a human through direct or indirect contact. Scientists call this event a 'zoonotic spillover'. When this happens, the resulting corona virus poses a threat to human populations, as is the case with SARS – CoV -2.

From the foregoing; how do you protect yourself from this coronavirus?

The Centre for Disease Control (CDC) (2020).Recommends that all persons should wear cloth face mask in public places where it is difficult to maintain a 6 feet distance from others. This will help slow the spread of the virus from people without symptoms or people who do not know they have contracted the virus. Cloth face mask should be worn while continuing to practice physical distancing. The following basic protective measures can help to protect one from contracting the virus:

1. Stay home: According to the CDC, the best way to protect one's self from the virus is to avoid being exposed to it. That means staying home to avoid coming into contact with people who have the virus.
2. Wash your hands thoroughly with soap and water for at least 20 seconds, especially if you have been in a public area.
3. Use an alcohol –based hand sanitizer, when it is not possible to wash your hands.
4. Avoid touching your face, because the virus can survive on surfaces that you touch with your hands. If your hands come into contact with your mouth, nose, and eyes, the virus might enter your body. However, it is not thought to be the main way that the virus spreads.
5. Practice social distancing. If you need to leave your house, maintain your distance from anyone who might have

the virus, especially if the virus is being transmitted in your community. The CDC recommends that staying at least 6 feet (1.83 meters) away from others.

6.Seek regular updates: The situation is evolving rapidly. It is important to follow instructions from public health officials.

Empirical Studies related Impact of Religion, Gender and Location on Practice of COVID-19 Preventive Measures

Jasmine, T. etal, (2021)carried out an empirical study on Gender differences in health protective behaviors during the COVID-19 pandemic in Taiwan. The results revealed that; Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection produces more severe symptoms and a higher mortality in men than in women. The role of biological sex in the immune response to SARS-CoV-2 is believed to explain this sex disparity. However, the contribution of gender factors that influence health protective behaviors and therefore health outcomes remains poorly explored.

According to Sheva and Arutz; A Pew Research report from March 2020 reported a change in respondents' religious habits due to the pandemic. More than half of respondents said that they have "prayed for an end to the spread of coronavirus," "attended services in person less often "and" watched religious services online or on TV instead of in person. Time magazine reported that drive-in church services have achieved a great level of attendance in the COVID-19 outbreak. As to whether the crisis had an effect on long-term personal religious life, 19% of Americans said that their faith has strengthened and only 3% said that it got worse.

In a survey conducted in late May–early June 2020 by the American Enterprise Institute, 60% of Americans said they feared that they or someone in their household might get COVID-19. Responses differed demographically, however; 69% of Black Protestants and 42% of White Evangelicals worried about infection. When it came to weighing the public health risks of returning to normal economic activity, a majority of Black Protestants (84%) and Hispanic Catholics (70%) said they would prioritize public health, while a majority of White Evangelicals (65%) and White Mainline Protestants and White Catholics (52%) prioritized the economy.(Camara, Delamou, Diro, Béavogui, El Ayadi, Sidibé, et al., 2017).

The Protection Motivation Theory (PMT)

The Protection Motivation Theory was proposed in 1975 by Rogers and reformulated in 1987 by Rippetoe and Roger. It is one of the theoretical frameworks that have been commonly applied to help understand individual responses to fear appeals. Protection motivation theory proposes that people protect themselves based on two factors: threat appraisal and coping appraisal. Threat appraisal assesses the severity of the situation and examines how serious the situation is, while coping appraisal is how one responds to the situation. Threat appraisal consists of the perceived severity of a threatening event and the perceived probability of the occurrence, or vulnerability. While coping appraisal consists of perceived response efficacy, or an individual's expectation that carrying out the recommend action will remove the threat, and perceived self-efficacy, or the belief in one's ability to execute the recommended courses of action successfully.

This theoretical frame work was applied, because when an individual's life is threatened by an infectious and deadly disease such as Covid-19, for fear of death, the person will respond to the situation at stake, by abiding to the preventive measures, not minding the religious background, gender and location, in order to stay alive.

METHODOLOGY

A descriptive cross - sectional survey design was adopted for this study. The population for the study comprised of 1,500 residents, aged 20 years and above in Bayelsa State. Multi- stage stratified random sampling technique was used; Proportionate stratified random sampling technique was used to get the 10% (150) of respondents representing each stratum. The statistical tools used for analysis of the data include; inferential statistics of one-way ANOVA and t- test (using the statistical package for social sciences – SPSS).

The research instrument is a 12 item self -structure questionnaire known as Impact of Religion, Gender and Location toward Practice of COVID-19 Preventive Measures; Questionnaire (IRGLTPOCPMQ). It consists of section A and B. Section A contains the demographic data, while Section B comprises of; A four point modified likert- type of scale that was used to generate data for the Religion, Gender and Location, with responses of; Strongly Agree (4),

Agree (3), Disagree (2) and Strongly Disagree (1) for positive questions. Likewise Strongly Agree (1), Agree (2), Disagree (3) and Strongly Disagree (4) responses for negative questions. While Frequency will be used to generate data for practice of COVID-19 preventive measures, with responses of Always (4), Sometimes (3) occasionally (2) and Rarely (1).

In order to ensure the face and content validity of the instrument, the questionnaire was presented to few experts in the field, and whose expert opinions, comments, criticisms and observations were used in preparing the final draft of the questionnaire. To ascertain the reliability of the instrument, test re-test method was used. The questionnaire was administered to twenty (20) persons, outside the study area. The same questionnaire was re-administered after two weeks' interval on same respondents. The two sets of data were then correlated using Pearson Product moment correlation to obtain a correlation coefficient. A correlation co-efficient of 0.76 was considered reliable for the study.

One hundred and fifty (150) copies of questionnaire administered to the respondents with the aid of eight trained research assistants being used to ensure proper distribution of questionnaire to the respondents on their various locations (towns) within the eight local government areas of Bayelsa State, for purposes of proper distribution and retrieval of questionnaire, which took about two weeks to round up all the selected towns. The return rate of the instrument was calculated or established, and the percentage return rate was considered for the study.

The completed copy of questionnaire was collated, coded and analyzed using the Statistical Package for Social Sciences (SPSS) batch version 25. Descriptive statistics of mean was used to answer the research questions. The criterion mean of 2.50 was used in taking decision for research questions. The criterion mean was calculated as follows:

$$\frac{4+3+2+1}{4} = \frac{10}{4} = 2.5$$

For the research questions on Impact of Religion, Gender, Location and Practices towards COVID -19 Preventive measures, an item mean or grand mean that equal to or greater than the criterion mean of 2.50 was adjudged as consistent practice" according to the variable in question, but any item mean or ground mean that was less than 2.50 was considered as inconsistent practice'' Inferential statistics of, one-way ANOVA for (hypothesis 1) and t-test was used to test hypotheses 2 and 3,at 0.5 alpha level using the statistical package for social sciences {SPSS}.

RESULTS

Research Question One

What is the impact of religion on the practice of COVID -19 preventive measures in among residents Bayelsa State?

Table 1. impact of religion on the practice of COVID -19 preventive measures in Bayelsa State

S/NO	Responses	Mean (x)	Criterion mean (x)	Decision
1.	Having faith in prayer alone can prevent you from contracting COVID-19	2.45	2.50	Rejected
2.	That COVID -19 is caused by evil spirits	2.05	2.50	Rejected
3.	I cannot be affected by COVID-19, because I am covered by the blood of Jesus	2.70	2.50	Accepted
	Grand Mean	2.40	2.50	Rejected

Table 1 presents the responses on the impact of religion on the practice of Covid-19 preventive measures among residents in Bayelsa State. With a mean of 2.45, the item 'having faith in prayer alone can prevent you from contracting Covid-19' is rejected. A mean of 2.05 on the item 'that Covid-19 is caused by evil spirits' is also rejected. The item 'I cannot be affected by Covid-19, because I am covered by the blood of Jesus' is accepted with an item mean of 2.70. 2.40 grand mean which is less than the criterion mean of 2.50 indicates that religion has less impact on the practice of COVID -19 preventive measures in Bayelsa State.

Research Question Two

What is the impact of gender on the practice of COVID -19 preventive measures among residents in Bayelsa State?

Table 2. impact of gender on the practice of COVID -19 preventive measures among residents in Bayelsa State

S/NO	Responses	Mean (x)	Criterion mean (x)	Decision
4.	Females are indoors most times than males hence, are less susceptible to Covid-19 infection and need no other preventive measures,	2.21	2.50	Rejected
5.	The immunity of males are stronger than those of the females, so can hardly be infected by the corona virus, hence does not require any preventive measure against the virus.	2.31	2.50	Rejected
	Grand Mean	2.26	2.5	Rejected

Table 2 presents the impact of gender on the practice of COVID -19 preventive measures among residents in Bayelsa State. Item 4 is rejected with an item mean of 2.21 < 2.50. Also item 5 is rejected with an item mean of 2.31 < 2.50. This indicates that gender does not have any bias in the practice of Covid-19 preventive protocols as well as contracting the disease. This awareness is demonstrated by the respondents in Bayelsa State.

Research Question Three

What is the impact of location on the practice of COVID -19 preventive measures among residents in Bayelsa State?

Table 3. impact of location on the practice of COVID -19 preventive measures among residents in Bayelsa State

S/NO	Responses	Mean (x)	Criterion mean (x)	Decision
6.	People living in urban cities are more prone to contracting the corona virus because of the congested population size	2.98	2.50	Accepted
7.	Living in rural areas and not obeying the precautionary measures can make someone contact the corona virus more easily.	2.83	2.50	Accepted
8.	Difference in the location of an individual, is not a barrier to contracting the corona virus.	2.81	2.50	Accepted
	Grand Mean	2.83	2.50	Accepted

Table 3 presents the impact of location on the practice of COVID -19 preventive measures among residents in Bayelsa State. Items 6, 7, and 8 are all accepted with item means of 2.98, 2.85 and 2.81 > 2.50. also a grand mean of 2.83 > 2.50. the respondents both the Urban and rural respondents have awareness of the Covid-19 preventive practice in the Bayelsa State.

Research Question Four

What is the level of practice of Covid-19 preventive measures among residents in Bayelsa State?

Table 4. The level of practice of Covid-19 preventive measures among residents in Bayelsa State

S/NO	Responses	Mean (x)	Criterion mean (x)	Decision
9.	In recent days, have you gone to any crowed place?	2.63	2.50	Accepted
10.	In recent days, have you worn a mask when leaving home?	2.48	2.50	Accepted
11.	In recent days, do you maintain social distance of at least 6 feet (1,83 meters) away from others in crowded places?	2.50	2.50	Accepted
12.	In recent days, do you use hand sanitizer with at least 60 percent alcohol content, when it is not possible to wash your hands thoroughly with soap and water for at least 20 seconds?	2.65	2.50	Accepted
	Grand Mean	2.57	2.50	Accepted

Table 4 presents the level of practice of Covid-19 preventive measures among residents in Bayelsa State. Items 9, 10, 11 and 12 are all accepted with items as 2.63, 2.48, 2.50 and 2.65. the grand mean also is accepted 2.57 > 2.50. from table 4 it shows that there is a reasonable level of practice of Covid-19 preventive measures even as the awareness is massive.

Hypotheses

Hypothesis One

There is no significant difference on the awareness of the practice of COVID -19 preventive measures among residents in Bayelsa State, based on impact of religion.

Table 5. One-way ANOVA on the awareness of the practice of COVID -19 preventive measures among residents in Bayelsa State, based on impact of religion.

Scores

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	398.217	2	199.108	41.058	.000
Within Groups	712.877	147	4.850		
Total	1111.093	149			

Table 4 presents the One-way ANOVA on the awareness of the practice of COVID -19 preventive measures among residents in Bayelsa State, based on impact of religion. The between groups sum of squares is 398.217, degree of freedom, 2 and mean square is 199.108. The within groups sum of square is 712.877, degree of freedom, 147 and mean sum of square is 4.850. Total sum of square and degree of freedom are 1111.093 and 149. The F-value of the ANOVA is 41.058 at P=0.000. Since P (0.000) < 0.05 alpha level, we reject the null hypothesis. That is, there is significant difference on the awareness of the practice of COVID -19 preventive measures in Bayelsa State, based on impact of religion.

Table 5. Multiple Comparisons of the awareness of the practice of COVID -19 preventive measures among residents in Bayelsa State, based on impact of religion.

Dependent Variable: Scores

Scheffe

(I) Religion	(J) Religion	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	Upper Bound
Christianity	Islam	5.07273*	.58922	.000	3.6156	6.5298
	Others	2.03106*	.49613	.000	.8042	3.2580
Islam	Christianity	-5.07273*	.58922	.000	-6.5298	-3.6156
	Others	-3.04167*	.71074	.000	-4.7993	-1.2841
Others	Christianity	-2.03106*	.49613	.000	-3.2580	-.8042
	Islam	3.04167*	.71074	.000	1.2841	4.7993

*. The mean difference is significant at the 0.05 level.

Table 5 presents the Multiple Comparisons of the awareness of the practice of COVID -19 preventive measures among residents in Bayelsa State, based on impact of religion. Comparison between Christianity and Islam P= (0.000) < 0.05 alpha level (Significant); between Christianity and other and between Islam and other also significant with P = 0.000 < 0.05 alpha level.

Hypothesis Two

There is no significant difference on the awareness of the practice of COVID -19 preventive measures among residents in Bayelsa State, based on impact of gender.

Table 6. Independent Samples Test on the awareness of the practice of COVID -19 preventive measures among residents in Bayelsa State, based on impact of gender

	Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Equal variances assumed	2.505	.116	-1.868	148	.064	-.44763	.23966	-.92123	.02596
Equal variances not assumed			-1.847	135.174	.067	-.44763	.24240	-.92702	.03176

Table 6 presents the Independent Samples t-test on the awareness of the practice of COVID -19 preventive measures among residents in Bayelsa State, based on impact of gender. Considering the test of equality of means; t-value = -1.868 at degree of freedom 148, P value (0.064) > 0.05 alpha level for the Equal variance assume. Since P (0.064) is greater than 0.05 alpha level, the null hypothesis is upheld. That is, there is no significant difference on the awareness of the practice of COVID -19 preventive measures in Bayelsa State, based on impact of gender.

Hypothesis Three

There is no significant difference on the awareness of the practice of COVID -19 preventive measures in among residents Bayelsa State, based on impact of location.

Table 7. Independent Samples Test on the awareness of the practice of COVID -19 preventive measures among residents in Bayelsa State, based on impact of location

| | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | 95% Confidence Interval of the Difference | |
	F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Equal variances assumed	.016	.901	.439	148	.661	.13036	.29672	-.45599	.71671
Equal variances not assumed			.444	147.968	.658	.13036	.29378	-.45019	.71091

Table 6 presents the Independent Samples t-test on the awareness of the practice of COVID -19 preventive measures among residents in Bayelsa State, based on impact of location. Considering the test of equality of means; t-value = 0.439 at degree of freedom 148, P value (0.661) > 0.05 alpha level for the Equal variance assume. Since P (0.661) is greater than 0.05 alpha level, the null hypothesis is upheld. That is, there is no significant difference on the awareness of the practice of COVID -19 preventive measures among residents in Bayelsa State, based on impact of location.

Summary of Findings

1. Religion has less impact on the practice of COVID -19 preventive measures in Bayelsa State.
2. Followers of Jesus Christ (Christians) believes that the blood of Jesus will prevent them from contracting Covid-19.
3. Gender does not have any bias in the practice of Covid-19 preventive protocols as well as contracting the disease.
4. Both the Urban and rural respondents have awareness of the Covid-19 preventive practice in the Bayelsa State.
5. There is a reasonable level of practice of Covid-19 preventive measures even as the awareness is massive.
6. There is significant difference on the awareness of the practice of COVID -19 preventive measures among residents in Bayelsa State, based on impact of religion.
7. Scheffe's multiple comparison went further to show that there is significant difference between Christianity and Islam and other religions, as well as there is significant difference between Islam and other religions.
8. There is no significant difference on the awareness of the practice of COVID -19 preventive measures among residents in Bayelsa State, based on impact of gender.
9. There is no significant difference on the awareness of the practice of COVID -19 preventive measures among residents in Bayelsa State, based on impact of location.

Discussion of Findings

The awareness of the practice of COVID -19 preventive measures among residents in Bayelsa State, based on impact of religion

The finding in hypothesis one reveals that there is significant difference on the awareness of the practice of COVID -19 preventive measures **among residents** in Bayelsa State, based on impact of religion. The Scheffe's multiple comparisons went further to show that there is significant difference between Christianity and Islam and other religions in the awareness of the practice of Covid-19 preventive measures, as well there is significant difference between Islam and other religions. Descriptive analysis of research question one reveals that religion has less impact on the practice of COVID -19 preventive measures in Bayelsa State, meanwhile, Followers of Jesus Christ (Christians) believes that the blood of Jesus will prevent them from contracting Covid-19.
Religion shapes the way of life of her believers. Also religious leaders have tremendous influence in the way their followers do things and/or respond to eventualities such as the Covid-19 pandemic. The Covid-19 pandemic is a global health emergency which has thrown many governments into confusion thereby calling every group, public,

private entities as well as religious groups and sects, socio-cultural and sporting organizations to set standards to curbing the pandemic. In Nigeria and Bayelsa where this study is carried out, religious groups have adhered strictly to the laid down protocols for prevention by government to deal with the Covid-19 pandemic. Such are social distancing: religious centers observe the two meters' space between sits to avoid physical contacts as well as downsizing the numbers of church attenders per service. Wearing of face masks and shields are routines in church gatherings, as well as avoiding handshakes and physical contact.

However, fanaticism can always be found in any religious setting, therefore, some amount of glitches is experienced in the practice of the Covid-19 preventive protocols. The believe that one cannot be affected by COVID-19, because one is covered by the blood of Jesus as positively responded by Christians in item three of the questionnaire makes them relax most times to observe the preventive protocols, particularly refusing to embrace the restrictions put forward to prevent the spread of the disease.

The awareness of the practice of COVID -19 preventive measures among residents in Bayelsa State, based on impact of gender

Findings in hypothesis two reveals that there is no significant difference on the awareness of the practice of COVID -19 preventive measures **among residents** in Bayelsa State, based on impact of gender. Also, gender does not have any bias in the practice of Covid-19 preventive protocols as well as contracting the disease. The reports available as regards the Covid-19 casualties does not discriminate against male or female. Both genders have experienced casualties. There is no study that has shown that male or females contract the disease most, maybe because of the body physiology and anatomy. In this study it was discovered that there was no statistically significant difference in the level of awareness in the practice of Covid-19 preventive protocols. In Nigeria, the restrictive measures were put forward for all to adhere, particularly the lockdown handed down to all increased the awareness level the disease does not discriminate between genders.

The awareness of the practice of COVID -19 preventive measures among residents in Bayelsa State, based on impact of location

Findings in hypothesis three reveals that there is no significant difference on the awareness of the practice of COVID -19 preventive measures **among residents** in Bayelsa State, based on impact of location. Also, research question three reveals that Both the Urban and rural respondents have awareness of the Covid-19 preventive practices in the Bayelsa State. Even though the responses did not show any statistical significance on the awareness of the presence of Covid-19 and its protocols, there is still this general belief that People living in urban cities are more prone to contracting the corona virus because of the congested population size as well as having regular contact with foreigners daily travel in and out of the urban areas. There is also this school of thought in rural areas that the Covid-19 is ''a lie'' made up by the government to steal money. Others see it as a disease for the elite and that by virtue of what they eat and herbs, no harm can be done on them by the Covid-19. There is one thing to be aware of a disease like the Covid-19 and another thing to believe that it is as destructive as presented by WHO and various governments. The rural dwellers in this study are aware of the pandemic but the body language of respondents as reported by the research assistants who went to the field presents something different. The idea is that Covid-19 is a chronic malaria that can be dealt with some herbs. One thing that was established is that both urban and rural dwellers are aware of the Covid-19 pandemic.

CONCLUSION

The aim of this study was to investigate the impact of religion, gender and location on the practice of Covid-19 Preventive Measures among residents in Bayelsa State. the study found out that there is statistically significant difference on the awareness of the practice of COVID -19 preventive measures among residents in Bayelsa State, based on impact of religion; there is no statistically significant difference on the awareness of the practice of COVID -19 preventive measures among residents in Bayelsa State, based on impact of gender and that there is also no statistically significant difference on the awareness of the practice of COVID -19 preventive measures among residents in Bayelsa State, based on impact of location.

RECOMMENDATIONS

Because of this, global and national strategic plans for COVID-19 preparedness and response must be grounded in strong gender analysis and must ensure meaningful participation of affected groups, including women and girls, in decision-making and implementation. Hence the Bayelsa State Government should incorporate and focus on gender into their COVID-19 responses, in order to ensure that public health policies and measures to curb the epidemic take account of gender as a very important factor.

1. Religious organizations should also endeavor to abide by the COVID-19 guidelines despite the fact that prayers can conquer all. Reason being that God can only help those who help themselves in all aspects of life.
2. Location is no barrier to contracting any contagious disease , like COVID-19 and so whether the individual is living in an urban or rural setting, should apply the COVID -19 Preventive measures to stay safe from the disease.

REFERENCES

1. Adhanom, Tredos, .,(11 February 2020) WHO Director – General's Remarks at the media briefing on 2019 – n CoV. World Health Organization. *Retrieved 10 November 2020.*
2. Al-Bukhari (Aprai 4, 2020). What is the role of religion when dealing with Coronavirus (Covid 19). The European for Fatwa and Research. Retrieved from https://www.e-cfr.org/on the 27 September, 2021.
3. Burke, Daniel (14 March 2020). "What churches, mosques and temples are doing to fight the spread of coronavirus". CNN. *Archived from the original on 14 March 2020. Retrieved 27th September, 2020.*
4. Camara BS, Delamou A, Diro E, Béavogui AH, El Ayadi AM, Sidibé S et al. (2017). Effect of the 2014/2015 Ebola outbreak on reproductive health services in a rural district of Guinea: an ecological study. *Trans R Soc Trop Med Hyg. 2017;111(1):22−9 (https://academic.oup.com/trstmh/article/111/1/22/307 4506, accessed 12th October, 2021).*
5. Carly, V., (31 March 2020). What is Coronavirus. Headline. *Retrieved on 13 November 2020 from htps://www.healthline. com/ health coronavirus-types-what-types-is-healh/coronavirus –types-what-types-is covid-19.*
6. Centre for Disease and Control (CDC) (2020). Novel coronavirus, Wuha, China. *Retrieved on the 16 November 2020 from https://www.cdc.gov/coronavirus/2019-nCoV/summary.html.*
7. COVID-19: emerging gender data and why it matters [website]. New York (NY): UN Women s(https://data.unwomen.org/resources/covid-19emerging-gender-data-and-why-it-matters, accessed 12th October, 2021
8. Cyranoski, D. (March 2020) 'Mytery deepens over animal source of coronavirus. *Nature. 579 (7797): 18-19. Bibcode: 2020 Natur. 579,,18C. Retrieved 10 November 2020.*
9. ''European Centre for Disease Prevention andControl'' (2020).*Retrieved 18   November 2020.*
10. Goetz, J.P., LeCompte, M.D., (1984 in Smyth, R.,2002). *Exploring the usefulness of a conceptual framework as aresearch toll: Aresearcher reflections. Issues inEducationalResearch, Vol 14.* University of New England.
11. Haischer M.H., Beilfuss R., Hart M.R., Opielinski L., Wrucke D., Zirgaitis G., Uhrich T.D., Hunter S.K. Who is wearing a mask? Gender-, age-, and location-related differences during the COVID-19 pandemic. *PLoS ONE. 2020;15:e0240785. doi: 10.1371/journal.pone.0240785. [PMC free article] [PubMed]*
12. Ikemike, D.O., (2020). *Conceptual framework on knowledge, attitudes, and practices towards COVID -19 preventive measures* in Bayelsa Satate.
13. Jasmine T., Yilin Y., Kelvin S., & Frank M. (April 20, 2021). Gender Differeces in Health Protective Behavoiurs During the Covid -19 Pandemic in Taiwan: AN empirical study
14. Joannidis, J. P.A., (2020).Coronavirus disease 2019, The harms of exaggerated information and non-evidence based measures. European Journal of Clinical Investigation 50 (4) 03223.
15. Jr Berkeley, L. (11 February 2020).'' World Health Organization names the new coronavirus: COVID -19'' *CNBC Retrieved 10 November 2020.*
16. Kate, K., (6 May 2020). 'New Coronavirus spread swiftly around world from late 209, study finds'' *Reuters Retrieved on 9 November 2020.*
17. National Population Commission, (2020). *Census figure*, Bayelsa, National Population Commission.
18. Nigeria Centre for Disease Control (17 October 2020). COVID – 19 Cases in Nigeria by states. *Retrieved 18 November 2020.*
19. Parke, Caleb (13 March 2020). "Churches cancel Sunday service, move online amid coronavirus outbreak"*. Fox News. Archived from the original on 15 March 2020. Retrieved 16 September2021.*
17. Periman, S., (February 2020). ''Another Decade, Another Coronavirus'' *The new England Journal of Medicine,*

382 (8): 760-762. Doi: 10.1056 /NEJME 2001126. Retrieved 10 November 2020.

18. Rine, C.R., Magaret, M.A., Dauda, A. S., & Patricia, E. E., (7 July 2020). Signs, symptoms and mode of transmission of COVID -19: An Epidemiological Survey in North- Central Nigeria. *Journal of Communiy*

19. Rogers R.W. A Protection Motivation Theory of Fear Appeals and Attitude Change.*J.Psychol.1975;91:9311doi: 10.1080/00223980.1975.9915803. [PubMed]*

20. Sheva, Arutz (15 February 2020)."Thousands to pray at Western Wall for end to COVID-19 epidemic". Israel National New*s. Archived from the original on 18 March 2020. Retrieved 16 September, 20201*

21. Sun, J., He, W., Wang,L., Lai, A., Ji, X., & Zhai, X., (2020). Epidemiology, Evolution, and Cross – Disciplinary Perspectives. *Trends in Molecular Medicine. 26 (5): 483 -495, doi: 10.1016/j.molmed.2020.02.008.PMC 7118693.*

22. Torales J., O'Higgins M., Castaldelli-Maia J.M., Ventriglio A. The outbreak of COVID-19 coronavirus and its impact on global mental health. Int. J. Soc. Psychiatry. 2020;66:317–320. doi: 10.1177/0020764020915212. [PubMed)

23. Winter, S., Dzombo, M. N., & Barchi, F., (2019). Exploring complex relationship between women's sanitation – practices and household diarrhea in the slums of Nairobi: Across –sectional study. BMC Infectious disease, 2019, 242. *Retrieved 13 Novem.*

24. World Health Organization (29 April, 2020).Taking sex and gender into account in emerging infectious disease programme: an analytical framework. Manila: World Health Organization Regional Office for the Western Pacific; 2011 *(https://iris.wpro.who.int/bitstream/handle/10665.1/79 77/9789290615323_eng.pdf, accessed 12th October, 2021from https://doi.org/10.1186/s12879-019- 3875-9.*

25. Wang, C., Horby, P.W., Hayden, F. G., & Gao, G.F (2020). Anovel coronavirus outbreak of global concern. The Lancet, 395 (10223), 470 -473. *Retrieved (2020).on 16 November from https://doi.org/10.1016/80140 -6736 920)30185-9*

26. Zhang Y., Ma Z.F. Impact of the COVID-19 Pandemic on Mental Health and Quality of Life among Local Residents in Liaoning Province, China*: A Cross-Sectional Study. Int. J. Environ. Res. Public Health. 2020;17:2381. doi: 10.3390/ijerph17072381. [PMC free article]*

27. Walker, Donald (17 March 2020). "Coronavirus – Suspension of Church Services". *The Scottish Episcopal Church. Retrieved 1 April 2020.*

28. World Health Organization (29 April, 2020). Taking sex and gender into account in emerging infectious disease programme: an analytical framework. Manila: World Health Organization Regional Office for the WesternPacific;2011*(https://iris.wpro.who.int/bitstream/handle/10665.1/79   77/9789290615323_eng.pdf, accessed 29 April 2020).*

29. Wong, G., Liv, Y., Zhou, B., Bi, Y., & Gao, G.F., (2015). MERS, SARS, and Ebola: The role of super – spreaders in infectious disease. *Cell Host & Mocrobes, 18 (4), 398 -401.Retrieved on 16 November 2020 from https:doi.org/10.1016/j.chom.2015.09.013.*

30. World Health Organization., (WHO)(2020). *Coronavirus disease (COVID -19) situation report – 126*. Retrieved 12 October, 2021.

31. Zhang, T., Wu, Q., Zhang, Z., (April 2020). '' Probable Pangolin origin of SARS – CoV-2. Associated with the COVID -19 outbreak. *Current Biology. 30 (7):1346 -1351.e2 doi:10.1016/j.cub 2020.03.022. Retrieved 10 October 2021*