COMPARATIVE ANALYSIS OF COVID-19 PREVENTION STRATEGIES AMONG DIFFERENT CHRISTIAN DENOMINATIONS IN PORT HARCOURT, RIVERS STATE, NIGERIA.

Abstract

The COVID-19 pandemic has necessitated various control measures to limit the spread of the virus. These measures have had a significant impact on society and have resulted in widespread disruptions. This comparative study focused on members of Christian denominations in Port Harcourt, Rivers State Nigeria, and examines their adherence to COVID-19 control measures. The study aimed to compare the adherence to COVID-19 control measures among members of different Christian denominations in Port Harcourt, Rivers State Nigeria. The study adopted a comparative cross-sectional study and employed quantitative methods. The population of this study is estimated at one hundred thousand and nine hundred (100,900) members of Christian denominations. The study adopted a multistage sampling technique which was determined based on Godden (2004), which recommended a formula where the study population is greater than fifty thousand respondents. While the sample size comprised 382 respondents. A pretested, semi-structured interviewer-administered questionnaire was used to collect data. The study used descriptive statistics of mean and standard deviation to answer research questions while analysis of covariance (ANOVA) was used to test the null hypotheses at 0.05 significant level using Statistical Package for Social Sciences (SPSS) version 25. Findings of the study revealed that there was a substantial difference in the mean rating among Catholics, Mainline Protestants, Evangelical and Pentecostal and Indigenous churches on the attitudes towards COVID-19 and its control measures among members of different Christian denominations in Port Harcourt, and the mean rating among Catholics, Mainline Protestants, Evangelical and Pentecostal and Indigenous churches on the determinants of COVID-19 vaccination uptake among members of different Christian denominations in Port Harcourt. In conclusion, there is a need for more education and awareness among Christian communities regarding the importance of adhering to COVID-19 control measures. This could include providing information on the risks of COVID-19, how the virus spreads, and the importance of measures such as wearing masks, social distancing, and hand hygiene. The study recommended amongst others that religious leaders from different Christian denominations in Port Harcourt should collaborate to ensure consistent and accurate dissemination of information on COVID-19 and its control measures to their members.

Keywords:COVID-19 Prevention, Comparative Analysis, Christian Denominations, Port Harcourt, Rivers State.

Introduction

From a biological perspective, severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is the source of coronavirus (COVID-19), a highly contagious and pathogenic viral illness (Muhammad et al., 2020). Some respiratory tract infections are linked to it. Coronaviruses are a type of single-stranded RNA virus that can cause respiratory, gastrointestinal, hepatic, and neurological illnesses in both humans and animals (Yang & Leibowitz, 2015). This extremely contagious disease manifests signs from 1 to 14 days in advance and includes dry cough, fever, anosmia (loss of smell), weakness, headache, bodily pains, vomiting, sore throat, and respiratory difficulties (Ahmed, 2020; Wang et al., 2020). After getting the virus, some infected people may not show any symptoms at all (Daniel & Oran, 2020; Lee et al., 2020). Of those who do show symptoms, the majority are mild or moderate (Bi et al., 2020; Chang et al., 2020), with 10% or so being severe (Bi et al., 2020; Chang et al., 2020).The cause of the virus is yet unknown but there were speculations that high exposure to kinds of seafood could be the cause until areas without a history of exposure to seafoodbegan to record high cases of the virus (Stoecklin, et. al, 2020).

However, there are pieces of evidence that bats and other wild animals are hosts for many coronavirus cases which SARS-CoV-2 is a family. Patients confirmed of COVID-19 infection mostly have respiratory signs and symptoms, cough mostly dry, fever, nausea, vomiting and diarrhoea (Tommaso, et al, 2020). To stop the virus from spreading, many nations implemented lockdowns. The World Health Organizationrecommends that people stay at home and wash their hands frequently and thoroughly with soap and water or alcohol-based hand rub. They should also maintain a minimum of one-meter social distance and refrain from touching their mouths, noses, or eyes as the virus can enter the body through these openings and cause illness. In

addition, the WHO urged individuals to maintain good respiratory hygiene, seek medical assistance when they cough, have trouble breathing, or have a fever, as well as to keep informed and heed medical professionals' advice (WHO, 2020). Many medical teams are currently under intense pressure to explore the essential characteristics, pathophysiology, and available treatments for the virus (Muhammad et al., 2020). These efforts are successful because a vaccine against the virus has been found, and the number of cases is declining.

It is an immutable truism that Nigerians are highly religious and spiritual. This is attested to by the fact that the country is nearly evenly divided between adherents of the world's two major religions – Christianity and Islam. While the remaining [estimated] 2 per cent belong largely to African Traditional Religion (ATR) and Animist. Given this preponderance, one may not be wrong to assume that the country will be peaceful and stable. As recorded histories of the world indicate religion and its tenets have been a binding force that unifies as well as creates nationalistic sentiments and civilizations demonstrated by Jerusalem, Rome, and Mecca, etc. suggesting that religious traditions and practices constitute veritable instruments of social cohesion, social control, behavioural modification and conflict resolution.

As predicted, the planet Health Organization (WHO) proclaimed the novel coronavirus (COVID-19) that is currently wreaking havoc on the planet to be a pandemic in early 2020. While some religious leaders in Nigeria denied the virus's existence, others told their receptive church that they were both covered by the unique blood of Jesus and carried a corrosive anointing, meaning they were immune to COVID-19. Due to his strong conspiracy theory linking the COVID-19 pandemic to the creation and introduction of 5G networks, the Office of Communication (OFCOM), the British broadcast regulator, was forced to sanction and prohibit certain churches from airing in British airspace in May 2020 as a result of this widely disseminated opposing

narrative (Ibrahima, 2020). Given this, religious leaders and their followers severally violated with recklesslyabandoned the preventive measures that were put in place to checkmate the spread of the virus by the Presidential Taskforce (PTF) COVID-19 especially, as regards wearing nose masks, face shields, constant washing of hands, use of hand sanitiser, practice of social and physical distancing, lockdown, staying at home, avoiding crowded places, restriction of social functions/activities, ban on religious gatherings/activities, etc. This made religion appear as a hindrance to the state's effort towards instituting these preventive and lockdown regulations and seem to have contributed to the spread and resurgence of the virus.

Given the appalling status of the health sector and the fact that Nigeria is the most populous Black nation in the world, the lockdown policy implemented by the government of that country drew criticism and evaluation from a wide range of perspectives. Some churches carried on with Sunday prayers during the early days when the government forbade social gatherings and announced a complete ban on interstate travel. In certain significant Nigerian cities, the churches had to be closed by the use of force by security personnel. Most others, on the other hand, followed government orders and used their clout to remind their congregation to adhere to COVID-19 guidelines.

In an attempt to adjust, a large number of churches shifted their operations online to continue offering their congregants hope in an increasingly uncertain world. Despite apparent opposition, religious institutions were instrumental in mitigating the virus's spread and helping communities during lockdown, which resulted in a situation that made it difficult for residents to access food and engage in productive endeavours. As a result, this study aims to examine the COVID-19 control measures implemented by Christian denominations to stop the virus's spread.

Statement of the Problem

The COVID-19 pandemic has an extremely significant impact on the functioning of societies, as well as many sectors of economic life. It is very difficult to forecast the directions and depth of necessary changes during the development of the pandemic. This is because different scenarios and the pace of development of COVID-19 are considered in different countries. Thus, public policies used in the fight against pandemics are also different in individual countries. Assessments of social, economic, and cultural effects of the pandemic were multidimensional, and thus, subject to significant uncertainty (Sułkowski 2020). The coronavirus pandemic developed very rapidly on a global scale. Understandably, it has a very significant impact on the whole social life, including religious life. Religious practices, which have, by their very nature, a community dimension in almost all religions, in Christian denominations as well, are also changing under the influence of the pandemic. Considering that at the early stages of the outbreak of the COVID-19 pandemic, the treatment or vaccine available against COVID-19 was still at an early stage, preventive measures appeared to be the only scientific evidence available to curtail the high spread and mortality associated with it. These measures include practices such as regular hand washing with soap and water and the use of alcohol-based hand sanitiser. Others are wearing face masks in public places, avoiding crowded places, and maintaining social distancing (Chu et al., 2020; WHO advice for the public). Some people resorted to prayers and fasting as a way of finding succour and God's intervention since they believed that the virus was more of a spiritual issue. The level of knowledge of disease condition is associated with attitude towards the disease, and these interact to substantially affect the practices and measures aimed at controlling it. More so, the availability of information, the source of information and demographic variables such as gender and educational level have a great effect on people's knowledge, behavioural response and compliance towards the necessary preventive measures

against a disease outbreak. Again, knowledge of the COVID-19 disease has been acquired through several channels, with different social media platforms and the internet dominating as the major sources of information on this novel disease. Studies have documented robust evidence that people who obtained their information through professional and scientific institutions or personnel have a positive attitude and higher confidence about the disease condition than those who obtained information from informal sources such as friends and relatives (Tandi et al., 2018).

Given that adequate knowledge and a positive attitude towards COVID-19 among religious leaders is essential in the effective control and prevention of disease outbreaks in the population of their congregation, the appropriate steps in this regard should entail a comparative assessment of their knowledge, attitude and preventive measures and practices toward the COVID-19 pandemic. To this end, this study aims to determine the COVID-19 control measures adopted by Christian denominations to combat the spread of the coronavirus in Port Harcourt Rivers State.

Justification of the Study

The current Coronavirus Disease (COVID-19) outbreak has affected over 200 countries including Nigeria. It is one of the largest respiratory disease outbreaks affecting several countries simultaneously and a novel strain of Coronavirus (SARS-CoV 2) has been identified as the causative agent. Sequel to the advice of the International Health Regulation Emergency Committee, the Director-General of WHO declared the COVID-19 outbreak a Public Health Emergency of International Concern (PHEIC) on 30 January 2020 and characterized it as a pandemic on 11 March 2020. Like many other sectors of life, religious and faith-based organizations suffered during the global Covid-19 public health crisis. Nigeria, in particular, is a highly religious country with diverse religious groups with high levels of religious participation

across various religious traditions. Belonging and participating in various religious activities is essentially important to many people across the country. Given the important role of religion in the lives of millions of people, it is important to examine how worshippers practice their faiths in the face of this global pandemic and the measures undertaken to curtail the COVID-19 pandemic among Christian denominations, thus generating knowledge on COVID-19 control measures adopted by Christian denominations to combat the spread of the coronavirus in Port Harcourt Rivers State is the thrust of this study.

Aim and Objectives of the Study

This study aimed to compare COVID-19 control measures adopted by members of Christian denominations in Port Harcourt Rivers State. Specifically, the study was guided by the following objectives:

1. To assess and compare the knowledge of COVID-19 and its control measures of members of Christian denominations in Port Harcourt

2. To assess and compare the attitude towards COVID-19 and its control measures of members of Christian denominations in Port Harcourt

3. To assess and compare the COVID-19 control measures of members of Christian denominations in Port Harcourt

Research Questions

The following research questions guided this study:

1. How do the knowledge of COVID-19 and its control measures vary among members of different Christian denominations in Port Harcourt?

2. What are the attitudes towards COVID-19 and its control measures among members of different Christian denominations in Port Harcourt, and how do these attitudes compare?

3. What COVID-19 control measures are practised by members of different Christian denominations in Port Harcourt, and how do these measures compare?

Hypotheses

The following null hypotheses were formulated and tested at a 0.05 level of significance:

H01: There is no significant difference in the mean rating among Catholics, Mainline Protestants, Evangelical and Pentecostal and Indigenous churches on how the knowledge of COVID-19 and its control measures vary among members of different Christian denominations in Port Harcourt

H02: There is no significant difference in the mean rating among Catholics, Mainline Protestants, Evangelical and Pentecostal and Indigenous churches on the attitudes towards COVID-19 and its control measures among members of different Christian denominations in Port Harcourt, and how these attitudes compare.

H03: There is no significant difference in the mean rating among Catholics, Mainline Protestants, Evangelical and Pentecostal and Indigenous churches on the COVID-19 control measures practised by members of different Christian denominations in Port Harcourt, and how these measures compare.

Methodology

This study adopted a comparative cross-sectional study and employed a quantitative method.This study was carried out in the Port Harcourt metropolis. The population of this study was given as one hundred thousand and nine hundred (100,900) members of Christian denominations obtained from the field study of this research based on the information provided by the administrative offices of the selected denominations.The sample size for this study was determined based on Godden (2004), which recommended a formula where the study population is greater than fifty thousand respondents. The sample size was 382. This study adopted a multistage sampling

technique in the sample selection. A pretested, semi-structured interviewer-administered questionnaire was used for data collection. The questionnaire was administered to respondents in Christian denominations in Port Harcourt to elicit information about COVID-19 control measures adopted by members of Christian denominations in Port Harcourt Rivers State. The data collection procedure for this study was done in phases. First, the researcher sought permission from pastors, clergy and administrators of the selected Christian denominations. Direct delivery and retrieval systems were used. However, out of the 383 copies of the questionnaire that were administered to the respondents, 370 (96.6%) copies were duly completed and returned and were then used for data analysis. Quantitative and qualitative methods of data analysis were adopted in this study. The study used descriptive statistics of frequency distribution tables, mean and standard deviation to answer research questions while analysis of covariance (ANOVA) was used to test the null hypotheses at a 0.05 significant level using Statistical Package for Social Sciences (SPSS) version 25.

Results

Research Question One: How does the knowledge of COVID-19 and its control measures vary among members of different Christian denominations in Port Harcourt?

Table 1: Mean rating and standard deviation of how the knowledge of COVID-19 and its control measures vary among members of different Christian denominations in Port Harcourt

S/N	Items	Catholics (n = 127)		Mainline Protestant (n = 164)		Evangelical, Pentecostal & Others (n = 92)	
		$\bar{x}$	SD	$\bar{x}$	SD	$\bar{x}$	SD
.1	I am aware of the symptoms of COVID-19.	2.73	0.48	2.76	0.43	2.74	0.44
.2	I know how COVID-19 spreads	2.91	0.64	2.84	0.59	2.71	0.53
.3	I understand the importance of wearing masks to prevent the spread of COVID-19.	3.17	0.98	2.86	0.60	2.95	0.98

.4	I am knowledgeable about the recommended social distancing guidelines	3.51	0.64	3.12	0.74	3.45	0.76
.5	I am aware of the correct handwashing techniques to prevent COVID-19	2.86	0.72	3.26	0.83	3.08	0.75
.6	I know the symptoms that require immediate medical attention for COVID-19.	3.31	1.02	3.32	0.76	3.15	0.80
.7	I understand the role of quarantine and isolation in controlling the spread of COVID-19.	3.26	0.81	3.07	0.85	3.37	0.93
.8	I am informed about the different COVID-19 vaccines available.	3.01	0.93	3.22	1.02	3.15	0.99
.9	I know where to get accurate information about COVID-19 and its control measures.	3.37	0.74	3.12	0.82	3.27	0.76
.10	I am aware of the potential side effects of COVID-19 vaccines.	3.19	0.94	3.10	0.79	3.14	1.00
	Grand Mean	**3.13**		**3.07**		**3.10**	

Criterion Mean = 2.5, Mean: 1.0-2.49 = Disagree, 2.5- 4.00 = Agree.

Table 1 shows how the knowledge of COVID-19 and its control measures vary among members of different Christian denominations in Port Harcourt. The majority of the respondents from the Catholic denomination agreed to items 1-10, with their mean score greater or equal to the criterion mean of 2.5.The majority of the respondents from the Mainline Protestants denomination agreed to items 1-10, with their mean score greater or equal to the criterion mean of 2.5. The majority of the respondents from Evangelical, Pentecostal & Other denominations agreed to items 1-10, with their mean score greater or equal to the criterion mean of 2.5.The grand mean of 3.13 for the Catholic denomination, 3.07 for the Mainline Protestants denomination, and 3.10 for the Evangelical, Pentecostal & Others denominations, shows that there is a slight difference among Christian denominations in Port Harcourt Rivers State concerning the knowledge of COVID-19 and its control measures vary among members of different Christian denominations in Port Harcourt.

Research Question Two: What are the attitudes towards COVID-19 and its control measures among members of different Christian denominations in Port Harcourt, and how do these attitudes compare?

Table 2: Mean rating and standard deviation of the attitudes towards COVID-19 and its control measures among members of different Christian denominations in Port Harcourt, and how do these attitudes compare

S/N	Items	Catholics (n = 127)		Mainline Protestant (n = 164)		Evangelical, Pentecostal & Others (n = 92)	
		$\bar{x}$	SD	$\bar{x}$	SD	$\bar{x}$	SD
.1	I believe that COVID-19 is a serious threat to public health.	3.37	0.96	3.31	0.74	3.12	1.03
.2	I support the use of face masks to prevent the spread of COVID-19.	3.34	0.81	3.23	0.83	3.43	0.86
.3	I think social distancing is an effective measure to control the spread of COVID-19.	2.65	1.00	3.15	0.97	2.41	1.09
.4	I am willing to adhere to quarantine and isolation guidelines if necessary.	2.97	1.11	3.12	0.95	2.93	1.09
.5	I believe that COVID-19 vaccination is important for public health.	3.22	0.84	3.05	0.93	3.26	0.82
.6	I trust the information provided by health authorities about COVID-19.	3.31	0.90	2.99	0.94	2.87	0.84
.7	I am comfortable receiving the COVID-19 vaccine.	3.12	0.70	3.08	0.86	3.17	0.75
.8	I support the enforcement of COVID-19 control measures by authorities	3.03	0.96	3.32	0.86	3.08	0.94
.9	I believe that adhering to COVID-19 control measures is important for the safety of my community.	2.98	0.85	3.15	0.80	3.05	0.64
.10	I feel that my religious beliefs align with the COVID-19 control measures recommended by health authorities.	3.17	0.84	3.08	0.91	2.99	0.62
	Grand Mean	**3.12**		**3.15**		**3.03**	

Criterion Mean = 2.5, Mean: 1.0-2.49 = Disagree, 2.5- 4.00 = Agree.

Table 2 shows how the attitudes towards COVID-19 and its control measures among members of different Christian denominations in Port Harcourt, and how these attitudes compare. The

majority of the respondents from the Catholic denomination agreed to items 11-20, with their mean score greater or equal to the criterion mean of 2.5.The majority of the respondents from the Mainline Protestants denomination agreed to items 11-20, with their mean score greater or equal to the criterion mean of 2.5. The majority of the respondents from Evangelical, Pentecostal and Other denominations agreed to items 11, 12, and 14-20, with their mean score greater or equal to the criterion mean of 2.5. On the other hand, the majority of the respondents disagreed with item 13, with their mean score less than the criterion mean of 2.5.The grand mean of 3.12 for the Catholic denomination, 3.15 for the Mainline Protestants denomination, and 3.03 for Evangelical, Pentecostal & Others denominations, shows that there is a substantial difference among Christian denominations in Port Harcourt Rivers State concerning the attitudes towards COVID-19 and its control measures among members of different Christian denominations in Port Harcourt, and how do these attitudes compare.

Research Question Three: What COVID-19 control measures are practised by members of different Christian denominations in Port Harcourt, and how do these measures compare?

Table 3: Mean rating and standard deviation of COVID-19 control measures practised by members of different Christian denominations in Port Harcourt, and how do these measures compare

S/N	Items	Catholics (n = 127)		Mainline Protestant (n = 164)		Evangelical, Pentecostal & Others (n = 92)	
		$\bar{x}$	SD	$\bar{x}$	SD	$\bar{x}$	SD
1	I regularly wear a face mask in public places.	3.38	0.93	3.02	0.99	3.38	0.84
.2	I practice social distancing in crowded areas.	3.31	0.97	3.26	0.94	3.23	0.97
.3	I wash my hands frequently with soap and water.	2.03	1.09	3.32	0.95	2.53	1.19
.4	I use hand sanitisers when soap and water are not available.	3.10	0.93	3.45	0.82	3.38	0.94

.5	I avoid large gatherings to reduce the risk of COVID-19 transmission.	3.00	0.99	2.97	1.12	2.95	1.11
.6	I follow the quarantine guidelines if I am exposed to someone with COVID-19.	3.27	0.98	3.35	0.92	3.38	0.94
.7	I seek medical advice if I experience COVID-19 symptoms.	3.15	1.03	2.97	1.12	2.95	1.11
.8	I get tested for COVID-19 if I suspect I have been infected.	2.92	0.77	2.82	1.01	2.87	1.03
.9	I have received the COVID-19 vaccine.	3.09	1.03	3.37	0.95	3.28	0.94
.10	I encourage others in my community to follow COVID-19 control measures.	3.13	0.95	3.03	1.10	2.83	1.15
	Grand Mean	**3.04**		**3.16**		**3.08**	

Criterion Mean = 2.5, Mean: 1.0-2.49 = Disagree, 2.5- 4.00 = Agree.

Table 3 shows the COVID-19 control measures practised by members of different Christian denominations in Port Harcourt, and how these measures compare. The majority of the respondents from the Catholic denomination agreed to items 21, 22, and 24-30, with their mean score greater or equal to the criterion mean of 2.5. On the other hand, the majority of the respondents disagreed with item 23, with their mean score less than the criterion mean of 2.5.The majority of the respondents from the Mainline Protestants denomination agreed to items 21-30, with their mean score greater or equal to the criterion mean of 2.5. The majority of the respondents from Evangelical, Pentecostal & Other denominations agreed to items 21-30, with their mean score greater or equal to the criterion mean of 2.5. The grand mean of 3.04 for the Catholic denomination, 3.16 for the Mainline Protestants denomination, and 3.08 for Evangelical, Pentecostal and Others denominations, shows that there is a slight difference among Christian denominations in Port Harcourt Rivers State concerning the COVID-19 control measures practised by members of different Christian denominations in Port Harcourt, and how do these measures compare.

Hypothesis One: There is no significant difference in the mean rating among Catholics, Mainline Protestants, Evangelical and Pentecostal and Indigenous churches on how the knowledge of COVID-19 and its control measures vary among members of different Christian denominations in Port Harcourt.

Table 4: Summary of ANOVA of difference in the mean rating among Catholics, Mainline Protestants, Evangelical and Pentecostal and Indigenous churches on how the knowledge of COVID-19 and its control measures vary among members of different Christian denominations in Port Harcourt

ANOVA					
Sources	**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
Between Groups	31.77	2	15.89	1.40	0.25
Within Groups	4298.64	380	11.31		
Total	4330.41	382			

Table 4 shows that there is no significant difference in the mean rating among Catholics, Mainline Protestants, Evangelical and Pentecostal and Indigenous churches on how the knowledge of COVID-19 and its control measures vary among members of different Christian denominations in Port Harcourt (F_2, 380 = 1.40, p = 0.25 > 0.05), hence null hypothesis one is retained at the 0.05 level of significance.

Hypothesis Two: There is no significant difference in the mean rating among Catholics, Mainline Protestants, Evangelical and Pentecostal and Indigenous churches on the attitudes towards COVID-19 and its control measures among members of different Christian denominations in Port Harcourt, and how these attitudes compare.

Table 5a: Summary of ANOVA on the difference in the mean rating among Catholics, Mainline Protestants, Evangelical and Pentecostal and Indigenous churches on the

attitudes towards COVID-19 and its control measures among members of different Christian denominations in Port Harcourt, and how these attitudes compare

ANOVA					
Sources	**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
Between Groups	77.89	2	38.94	4.85	0.01
Within Groups	3053.92	380	8.04		
Total	3131.80	382			

Table 5a shows that there is a significant difference in the mean rating among Catholics, Mainline Protestants, Evangelical and Pentecostal and Indigenous churches on the attitudes towards COVID-19 and its control measures among members of different Christian denominations in Port Harcourt, and how these attitudes compare (F_2, 380 = 4.85, p = 0.01 < 0.05). The null hypothesis two is rejected at the 0.05 level of significance.

Table 5b: Scheffe Post Hoc test of homogeneity of variance on the difference in the mean rating among Catholics, Mainline Protestants, Evangelical and Pentecostal and Indigenous churches on the attitudes towards COVID-19 and its control measures among members of different Christian denominations in Port Harcourt, and how these attitudes compare

Dependent Variable: Attitude towards COVID-19
Scheffe

(I) Christian Denomination	**(J) Christian Denomination**	**Mean Difference (I-J)**	**Std. Error**	**Sig.**	**95% Confidence Interval**	
					L. Bound	**U. Bound**
Catholic	Mainline Protestant	-0.31	0.34	0.65	-1.14	0.51
	Evangelical Pentecostalsand Others	0.83	0.39	0.10	-0.12	1.79
Mainline Protestant	Catholic	0.31	0.34	0.65	-0.51	1.14
	Evangelical Pentecostalsand Others	**1.14***	**0.37**	**0.01**	**0.24**	**2.05**

Evangelical Pentecostalsand Others	Catholic	-0.83	0.39	0.10	-1.79	0.12
	Mainline Protestant	**-1.14***	**0.37**	**0.01**	**-2.05**	**-0.24**

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

The result of Table 5b shows the result of the Scheffe Post Hoc test of homogeneity for the difference in the mean rating among Catholics, Mainline Protestants, Evangelical and Pentecostal and Indigenous churches on the attitudes towards COVID-19 and its control measures among members of different Christian denominations in Port Harcourt, and how these attitudes compare. The results indicate that there are significant differences between the means for Mainline Protestant and Evangelical Pentecostal & Others, with a mean difference of 1.14, a standard error of 0.37, and a p-value of $0.01 < 0.05$. Also, a significant difference exists between the means for Evangelical Pentecostal & Others and Mainline Protestant with a mean difference of -1.14, a standard error of 0.37, and a p-value of $0.01 < 0.05$. The findings imply that the difference in the mean rating among Mainline Protestants, Evangelical and Pentecostal and Indigenous churches on the attitudes towards COVID-19 and its control measures among members of different Christian denominations in Port Harcourt differ substantially.

Hypothesis Three: There is no significant difference in the mean rating among Catholics, Mainline Protestants, Evangelical and Pentecostal and Indigenous churches on the COVID-19 control measures practised by members of different Christian denominations in Port Harcourt, and how these measures compare

Table 6: Summary of ANOVA on the difference in the mean rating among Catholics, Mainline Protestants, Evangelical and Pentecostal and Indigenous churches on the COVID-19 control measures practised by members of different Christian denominations in Port Harcourt, and how these measures compare

ANOVA					
Sources	**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
Between Groups	103.03	2	51.51	2.94	0.05
Within Groups	6660.81	380	17.53		
Total	6763.83	382			

Table 6 shows that there is no significant difference in the mean rating among Catholics, Mainline Protestants, Evangelical and Pentecostal and Indigenous churches on the COVID-19 control measures practised by members of different Christian denominations in Port Harcourt, and how these measures compare (F_2, 380 = 2.94 = 0.05). The null hypothesis three is retained at the 0.05 level of significance.

Discussion of Findings

This study compared COVID-19 control measures adopted by members of Christian denominations in Port Harcourt Rivers State. From the data gathered and analysis carried out, the findings of research question one showed that the grand mean of 3.13 for the Catholic denomination, 3.07 for the Mainline Protestants denomination, and 3.10 for Evangelical, Pentecostal & Others denomination, shows that there is a slight difference among Christian denominations in Port Harcourt Rivers State concerning the knowledge of COVID-19 and its control measures vary among members of different Christian denominations in Port Harcourt. Furthermore, the result of hypothesis one showed that there is no significant difference in the mean rating among Catholics, Mainline Protestants, Evangelical and Pentecostal and Indigenous churches on how the knowledge of COVID-19 and its control measures varies among members

of different Christian denominations in Port Harcourt. The findings are consistent with the study by Okoroetal. (2022) which revealed a significant moderate, positive correlation between knowledge and attitude/practice, and a significantly higher knowledge level among those with higher educational qualifications. The findings are corroborated by Okoro et al. (2022), which revealed a significant moderate, positive correlation between knowledge and attitude/practice, and a significantly higher knowledge level among those with higher educational qualifications. The majority of the respondents (87.9%) believed that there were confirmed cases of COVID-19 in Nigeria, whereas 85.1%, 78.7%, and75.9% believed that there were cases in other parts of the world, the world will win the battle against COVID-19, and that there will be successful control of the disease, respectively.

The findings of research question two showed that the grand mean of 3.12 for the Catholic denomination, 3.15 for the Mainline Protestants denomination, and 3.03 for Evangelical, Pentecostal and Others denominations, shows that there is a substantial difference among Christian denominations in Port Harcourt Rivers State concerning the attitudes towards COVID-19 and its control measures among members of different Christian denominations in Port Harcourt, and how do these attitudes compare. Furthermore, the result of hypothesis two showed that there is a significant difference in the mean rating among Catholics, Mainline Protestants, Evangelical and Pentecostal and Indigenous churches on the attitudes towards COVID-19 and its control measures among members of different Christian denominations in Port Harcourt, and how these attitudes compare. The findings are corroborated by Odion (2022), who that the value and benefit of faith includes its efficacy on the behaviours and attitudes displayed in the engagement or non-engagement of people. This is to the extent of the people's faith, religious

and spiritual beliefs, along with the support that they find in their being members of faith communities

The findings of research question three showed that the grand mean of 3.04 for the Catholic denomination, 3.16 for the Mainline Protestants denomination, and 3.08 for Evangelical, Pentecostal and Others denominations, shows that there is a slight difference among Christian denominations in Port Harcourt Rivers State concerning the COVID-19 control measures practised by members of different Christian denominations in Port Harcourt, and how do these measures compare. Furthermore, the result of hypothesis three showed that there is a significant difference in the mean rating among Catholics, Mainline Protestants, Evangelical and Pentecostal and Indigenous churches on the COVID-19 control measures practised by members of different Christian denominations in Port Harcourt, and how these measures compare.

Conclusion

This study compared COVID-19 control measures adopted by members of Christian denominations in Port Harcourt Rivers State. The results of the study indicate that there is a significant difference in the mean rating among Catholics, Mainline Protestants, Evangelical and Pentecostal and Indigenous churches on the attitudes towards COVID-19 and its control measures among members of different Christian denominations in Port Harcourt, and there is significant difference in the mean rating among Catholics, Mainline Protestants, Evangelical and Pentecostal and Indigenous churches on the determinants of COVID-19 vaccination uptake among members of different Christian denominations in Port Harcourt, while the difference in the mean rating among Catholics, Mainline Protestants, Evangelical and Pentecostal and Indigenous churches on how the knowledge of COVID-19 and its control measures vary among members of different Christian denominations in Port Harcourt, the COVID-19 control measures

practiced by members of different Christian denominations in Port Harcourt, and the uptake of COVID-19 vaccination among members of different Christian denominations in Port Harcourt do not differ.

Based on these findings, this study concluded that there is a clear variation in attitudes and behaviours towards COVID-19 and vaccination uptake among different Christian denominations in Port Harcourt; which may be influenced by religious beliefs, cultural practices, and access to information. Also, there is a consistent level of adherence to COVID-19 control measures and vaccination uptake among members of various Christian denominations in Port Harcourt. Consequently, public health interventions aimed at increasing vaccination rates should consider the unique factors that influence each denomination's attitudes and behaviours.

Recommendations

Considering the findings, discussion and conclusions of this study, the following recommendations are made:

1. Religious leaders from different Christian denominations in Port Harcourt should collaborate to ensure consistent and accurate dissemination of information on COVID-19 and its control measures to their members.

2. Religious leaders should work together to educate their members on the importance of adhering to COVID-19 control measures, regardless of denominational differences.

3. The Rivers State Ministry of Health should collaborate with leaders of all Christian denominations in Port Harcourt to ensure consistent and effective communication of COVID-19 control measures to their members.

Disclaimer (Artificial intelligence)

Authors hereby declare that NO generative AI technologies such as Large Language Models(ChatGPT, COPILOT, etc.) and text-to-image generators have been used during the writing or editing of this manuscript.

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