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EVALUATION OF COVID-19 PREVENTION AND CONTROL PROTOCOL COMPLIANCE AMONG PUPIL'S IN IKENNE LOCAL GOVERNMENT AREA, OGUN STATE

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ABSTRACT: *In early December 2019, an outbreak of coronavirus disease 2019 (COVID-19), caused by a novel severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), occurred in Wuhan City, Hubei Province, China. On January 30, 2020 the World Health Organization declared the outbreak as a Public Health Emergency of International Concern. On 26th January, President Mohammed Buhari released COVID-19 health. With the emergence of the second wave of COVID-19 parent/guardians, teachers, schools administrators and other stakeholders were to ensure full compliance with all COVID-19 protocols as released by NCDC and Government. Survey research design was used for the study. The population comprised of 481primary school students and teachers in the ten government and private owned primary schools in Ikenne Local Government of Ogun State. Total enumeration sampling technique was adopted. A structured and validated questionnaire was used to collect the data. Cronbach's alpha reliability coefficient for the constructs obtained was 0.893. The response rate was 89%. Data analysis was done using descriptive and inferential statistics. The finding showed that all the respondents were aware of COVID-19. This finding indicated that schools' comply with Federal Ministry of Education guidelines on schools and learning facilities reopening after COVID-19 closures in Ogun State. The findings of this study revealed that the majority of the pupils had good adherence to COVID-19 prevention protocol as compared with the teachers who had poor compliance to COVID prevention protocol. Relative to other prevention strategies, wearing of facemask was the least implemented measure by the teachers. The findings revealed that the schools faced some of these challenges that hinder the effective implementation of the prevention protocol such as inadequate supply of hand washing soap and water, inadequate supply of hand sanitizers, inadequate classroom, inadequate enforcement of social distance and inadequate cleaning and disinfectant for cleaning of surface objects. Findings concluded that the schools complied with Federal Ministry of Education guidelines on schools and learning facilities reopening after COVID-19 closures in Ogun state, Nigeria to a great extent. The guideline incorporates preventive measures such as hand washing, social distancing, wearing of face masks to contain and minimize the spread of the virus. The compliance to Federal Ministry of Education guidelines on schools and learning facilities reopening after COVID-19 closures is the right direction toward reducing the transmission of the disease.*

KEYWORDS: COVID-19, Prevention Protocols, Guidelines.

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INTRODUCTION

Background of the Study

A lethal viral outbreak known as coronavirus disease 2019 (COVID-19), previously known as 2019-novel coronavirus, marched across the year 2020. The coronavirus belongs to a family of viruses that may cause various symptoms such as pneumonia, fever, breathing difficulty, and lung infection (Wuhan Municipal Health and Health Commission, 2020). These viruses are common in animals all over the world, but only a few cases have been reported in humans. The World Health Organization (WHO) used the term 2019 novel coronavirus to refer to a coronavirus that affected the lower respiratory tract of patients with pneumonia in Wuhan, China on 29 December 2019 (Li, Guan, Wu, Wang, Zhou, Tong, 2020). COVID-19 was reported from Wuhan, Hubei Province's capital and main business center (Wuhan city, 2020). The WHO announced that the official name of the 2019 novel coronavirus is coronavirus disease (COVID-19).

Human cases with onset of symptoms in early December 2019 have been reported by Chinese authorities after retrospective investigations. Although some of the earliest cases were linked to a Wuhan wholesale food market, others were not. Many of the first patients were either market stall owners, market workers, or casual market guests. Environmental samples collected from this market in December 2019 tested positive for SARS-CoV-2, indicating that the market in Wuhan City was either the center of the outbreak or played a part in its initial amplification. On January 1, 2020, the business center was closed. The World Health Organization (WHO) announced the COVID-19 a public health emergency of international significance on January 30, 2020. The COVID-19 epidemic was declared a pandemic after six weeks. COVID-19 was declared a pandemic by the World Health Organization on March 11, 2020, after it killed more than 100,000 people in at least 100 countries, according to epidemiological guidelines (Callaway, 2020). The disease has evolved and is now a major concern all over the world.

Fever, cough, respiratory problems, shortness of breath, and breathing difficulty are all symptoms of COVID-19 illness (World Health Organization (WHO), 2020). Lower-respiratory tract infections like influenza and bronchitis, as well as acute respiratory distress syndrome and severe acute respiratory syndrome (SARS) in severe diseases, can all be fatal. Patients with chronic clinical problems, such as cardiopulmonary illness, immunocompromised adults, babies, and the elderly, are more susceptible to these risks (Center for Disease Control and Prevention (CDC), 2020). COVID-19 is currently projected to have a global death rate of 3.41 percent (COVID, 2020). COVID-19's virological characteristics may indicate that the virus has a lower chance of surviving.

The most common symptoms of COVID-19 are fever, dry cough, and fatigue. Other symptoms that are less common and may affect some patients include loss of taste or smell, nasal congestion, conjunctivitis (also known as red eyes), sore throat, headache, muscle or joint pain, different types of skin rash, nausea or vomiting, diarrhea and chills or dizziness. Symptoms of severe COVID-19 disease include shortness of breath, loss of appetite, confusion, persistent pain or pressure in the chest, and high temperature (above 38 °C). Other less common symptoms are irritability, confusion, reduced consciousness (sometimes associated with seizures), anxiety, depression, sleep disorders and severe and rare neurological complications such as strokes, brain inflammation, delirium and nerve damage (WHO, 2020).

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Patients with a mild clinical presentation may not initially require hospitalization, but clinical signs and symptoms may worsen, with progression to lower respiratory tract disease in the second week of illness. Risk factors for progressing to severe illness may include, but are not limited to, older age and underlying chronic medical conditions (eg, lung disease, moderate to severe asthma, cancer, heart failure, cerebrovascular disease, renal disease, liver disease, diabetes, immunocompromising conditions, and severe obesity). Emergency medical attention should be sought if the patient develops trouble breathing, persistent pain or chest pressure, new confusion, inability to awaken or to stay awake, or bluish lips or face.

People at most risk of being affected by COVID-19 are people aged 60 years and above and those with underlying medical problems like high blood pressure, heart and lung problems, diabetes, obesity or cancer, are at higher risk of developing serious illness. However, anyone can get sick with COVID-19 and become seriously ill or die at any age.

Respiratory infections can be spread by droplets of various sizes: respiratory droplets are larger than 5-10 m in diameter, while droplet nuclei are smaller than 5 m in diameter. COVID-19 virus is primarily transmitted between people through respiratory droplets and contact routes, according to current evidence. When a person is in direct contact (within 1 m) with someone who has respiratory symptoms (e.g., coughing or sneezing), his or her mucosae (mouth and nose) or conjunctiva (eyes) are at risk of being exposed to potentially infective respiratory droplets. Fomites in the immediate vicinity of the infected person will also transmit the disease.

Globally, as of 4th March 2021, there have been 114,853,685 confirmed cases of COVID-19, including 2,554,694 deaths, reported to World Health Organization. Experts warned of the possibility of the virus circulating in Africa shortly after it emerged in late 2019, citing the continent's strong trade ties with Beijing and the fragility of its medical services. Despite pockets of infection on the African continent, Nigeria's first index case arrived on February 27, 2020; since then, the cases have increased every day, with 323 confirmed cases and 10 deaths as of April 13, 2020. (CDC, 2020). COVID-19 infection has a case fatality ratio of 0.03 in Nigeria right now (i.e. 3 percent of total confirmed cases).

On the 4th of March 2021, 709 new confirmed cases and 12 deaths were recorded in Nigeria (National center for disease control, 2020). Till date, 157671 cases have been confirmed, 136335 cases have been discharged and 1951 deaths have been recorded in 36 states and the Federal Capital Territory. In Nigeria, the first case of COVID-19 was discovered on February 27, 2020 in Lagos State, in an Italian tourist on a business trip to the Ewekoro cement plant in Ogun State. Although there was no immediate epidemic in the state, the government of Ogun State and the Federal Republic of Nigeria placed in place a series of immediate measures in response to COVID-19.

World health (2020) instructed primary schools to listen to children’s concerns and answer their questions in an age-appropriate manner; don’t overwhelm them with too much information. Encourage them to express and communicate their feelings. Discuss the different reactions they may experience and explain that these are normal reactions to an abnormal situation. Emphasize that children can do a lot to keep themselves and others safe. Introduce the concept of social distance (standing further away from friends, avoiding large crowds, not touching people if you don’t need to, etc.)

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Focus on good health behaviors, such as covering coughs and sneezes with the elbow and washing hands. Help children understand the basic concepts of disease prevention and control. Use exercises that demonstrate how germs can spread. For example, by putting colored water in a spray bottle and spraying over a piece of white paper. Observe how far the droplets travel. Demonstrate why it is important to wash hands for 20 seconds with soap and water - Put a small amount of glitter in students' hands and have them wash them with just water, notice how much glitter remains, then have them wash for 20 seconds with soap and water • Have students analyze texts to identify high risk behaviors and suggest modifying behaviors

The regular number of reported cases of COVID-19 was collected from the Nigeria Centre for Disease Control (NCDC) and the Ogun State Ministry of Health's publicly accessible epidemic situation survey, as well as a preliminary epidemiological overview of the COVID-19 outbreak in Ogun state between February 27th and June 28th, 2020, and a breakdown of the disease in the state's local governments. In Ogun state, Nigeria, a total of 774 reported cases and 18 COVID-19 deaths were registered in 19 of the state's 20 local government areas. Ogun state has recorded 4416 cases of COVID-19 as at 4th March 2020 (NCDC, 2020). This makes Ogun State 8th placed in Nigeria with 47 patients recorded dead through the disease.

The Federal Government of Nigeria, in collaboration with the Federal Ministry of Health and the PTF-COVID-19, took a number of steps to halt the spread of the disease and protect Nigerians' health. This included a temporary suspension of non-essential activities, school closures, and a ban on international flights, among other things. Nigeria is one of the countries that began to ease the lockout measures put in place at the start of the COVID-19 pandemic. This is to strike a balance between saving life and livelihoods while still dealing with the outbreak's socioeconomic impact. Further to reviewing the response nationwide, the PTF-COVID-19 announced the extension of Phase 3 of the Eased Lockdown for a period of four weeks, effective from 19th of October 2020.

Ogun State Ministry of Education announced to the general public that the resumption date for all Primary, Secondary schools and Government Science and Technical Colleges in the state was Monday 18th January 2021. On 26th January, President Mohammed Buhari released COVID-19 health protection and regulation in consideration of the urgent need to protect the health and wellbeing of Nigerians in the face of the widespread and the rising number of COVID-19 cases in Nigeria which was made up of six (6) parts. With the emergence of the second wave of COVID-19 parent/guardians, teachers, schools administrators and other stakeholders were to ensure full compliance with all COVID-19 protocols/guidelines as released by NCDC and Government. This include, among others: wearing of face mask by all learners, teachers and other non-teaching staff at all time; use of infrared thermometer for temperature check; use of hand washing facilities with soap and water; use of hand sanitizer; social and physical distancing should be maintained while large gathering such as assembly should be discouraged and isolation room, health clinic/bay already created in schools should be functional and regularly maintained. Ogun State Ministry of Education announced stakeholders are to ensure strict compliance.

In severe cases, COVID-19 can ultimately manifest itself as pneumonia; patients can develop acute respiratory distress syndrome in a short period of time and die due to multiple organ failure (Guo *et al*, 2019). Compliance to prevention and control of COVID-19 protocols is of great importance judging by how deadly and how easily communicable it is. This study is

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focused on evaluating covid-19 prevention and control in selected primary schools in Ikenne local government area, Ogun state.

Objectives of the Study

The main objective of the study is to evaluate covid-19 prevention and control in selected primary schools in Ikennelocal government area, Ogun state.

The specific objectives of the study are;

1. Determine COVID-19 prevention and control protocols followed in selected primary schools in Ikenne local government area, Ogun state.
2. Assess level of adherence to COVID-19 prevention and control protocol in selected primary schools in Ikenne local government area, Ogun state.
3. Determine the Socio-demographic characteristics of the pupils in the selected primary school in Ikenne local government area, Ogun state.
4. Determine challenges of following COVID-19 prevention and control protocols in selected primary schools in Ikenne local government area, Ogun state.

Research Questions

Specifically, the study will be guided by the following research questions:

1. What are COVID-19 prevention and control protocols followed in selected primary schools in Ikenne local government area, Ogun state?
2. What are the level of adherence to COVID-19 prevention and control protocol in selected primary schools in Ikenne local government area, Ogun state?
3. What are the demographic features of the pupils and teachers in the selected primary school in Ikenne local government area, Ogun state?
4. What are challenges faced in following COVID-19 prevention and control in selected primary schools in Ikenne local government area, Ogun state?

Scope of the Study

The study focuses on evaluation of COVID-19 prevention and control in selected primary schools in Ikenne local government area, Ogun state. The study was limited to ten primary schools which involves five (5) private owned and five (5) government owned primary schools. The selection of the schools is based on geopolitical wards. There are 5 political wards in Ikenne local government which include Irolu, Ikenne, Ipreu, Ogere and Ilishan. In each political ward, a private and government owned primary school will be selected to ensure coverage of the entire Ikenne local government. The schools are Crown Kids primary school, A.U.D primary school, Saint Saviour primary school, Peakan International Nursery and Primary School, Wesley Primary School, Divine Favour Nursery and Primary School, Jesus is Lord Nursery and Primary School, Wesley primary school, God's guide Montessori Nursery and Primary School, Saint Barnabas primary school. The primary pupils between classes

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Primary 3 to 6 will be respondents to research instruments administered and data collected will be analyzed.

Justification of the Study

In the absence of a vaccination or successful medicinal medications, proper health habits such as hand washing, cough etiquette, surface disinfection, and social distancing are the most effective tools toward COVID-19. According to the World Health Organization (WHO), "the safest way to avoid and slow spread is to be well educated about SARS-CoV-2, the disease it produces, and the precautions that can be taken." This study would inform the primary schools in Ikenne local government of their level of compliance to COVID-19 prevention and control protocol. This way corrections would be made at necessary points and this would help deliver better COVID-19 prevention and control protocol to pupils.

Also, this study will inform Ogun State Ministry of Education on how effectively the schools in Ikenne Local government has followed the COVID-19 prevention and control protocols. Furthermore, this study would inform the Ministry of health of necessary COVID-19 prevention and control equipment to be provided to primary schools in Ogun state. Finally, this would help ensure safety of lives of these young pupils.

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Research Design

The study adopted survey research design. The design enables the researcher to collect data from respondents to evaluate covid-19 prevention and control protocol in selected primary schools in Ikenne local government area, Ogun state.

Sampling Techniques

A simple random sampling technique was used to determine the sample size for the study.

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Sample Size

The population of the study were ten (10) selected public primary school in Ikenne local Government area, four hundred and eighty-one (481) pupil were randomly selected using Leslie Fisher's formula for sample size determination

$n=Z^2Pq/e^2$

e= level of precision at 0.05

Z=1.96

Q= 1-p where p is rated at a level of 40% which is 0.40

n= Sample size expected

$n = 1.96^2*0.40(1-0.45)/0.05^2$

n= 3.8416*0.5*0.60/0.0025

n= 0.873964/0.0025

n= 481.399

n=481

Research Instrumentation

The instrument used for this study was a self-structured questionnaire designed by the researcher. A questionnaire is used to collect the data relevant for the study. The questionnaire was titled Evaluation of COVID-19 prevention and control protocols. The respondents were expected to respond to the items. The questionnaire contains the following sections:

Section A provides demographic information of respondents, such as age and respective class

Section B designed to carefully analyze the COVID-19 prevention and control protocols followed in selected primary schools.

Section C includes identifying the level of adherence COVID-19 prevention and control protocol

Section D Determines challenges faced in following COVID-19 prevention and control protocols in selected primary schools in Ikenne local government area, Ogun state.

Data Collection Procedure

Appropriate authority of the Schools will be informed and an appointment will be made with the school authority. The pupils will be approached when they are on break so that they will not miss their classes. Pupils will be informed on **the purpose of the study. All pupils who are consented and have accepted to partake in** the survey were asked to complete the questionnaire. All completed questionnaires will be collected for analysis.

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Validity and Reliability of Instrument

The self-structured questionnaire was shown to the supervisor who made the necessary corrections and amendments and to give it face validity. The same questionnaire was also given to an expert in the field to make their inputs and content validity of the instrument was done by making sure the instrument was related to the aim and objectives of the study

Reliability

Pre-test was carried out among 10% of the sample size in a public primary school in Ikenne Local government.

The data was analyzed using Cronbach's Alpha coefficient and the results yielded an overall reliability of 0.893 which is 89%.

Analytical Techniques

The data collected was analyzed using the statistical package of social (SPSS) version 21. Descriptive statistics and inferential statistics was used.

Descriptive statistics includes; Frequency tables, percentage, mean and standard deviation.

Inferential statistic that was used was Chi-square and was adopted in testing the hypothesis at 0.05 level of significance.

Ethical Consideration

SEthical consent was acquired from Babcock University Research Ethics Committee. Permission was also obtained from the study area local authority. Respondent was educated on the motive of study so as to enable them participate effectively. Privacy and secretly were guaranteed during the course of the study as private information were not to be disclosed by respondents in the questionnaire.

RESULTS

Social-demographic Characteristics of Respondents

The results of the findings were presented. This includes respondent's socio-demographic characteristics, respondents' adherence to COVID 19 prevention protocol, adherence to COVID 19 prevention and control protocols by school, and challenges faced by school in adherence to COVID 19 prevention and control protocol. Four hundred and twenty questionnaires were administered to the pupils but four hundred and fourteen questionnaires were completely and correctly filled and the data analyses were based on these numbers (414) and the response rate was 98.5 per cent for the pupils.

Socio-demographic Characteristics of Respondents

The socio-demographic characteristics of the pupils' are shown in table 4.1. The pupils were of ages ranging from 6 to 16 years with a mean of 10.56 ± 1.84 years. More than half 268(64.7%) of the pupils were in private school. More than half 209(50.5%) of the pupils were

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female. Majority 331(80%) of the pupils were Christians with 111(26.8%) in basic 4. Most 281(67.9%) of the pupils lived with their parents and the majority 361(87.2%) of their parents/guardians had primary education. Most 268(64.7%) of the pupils parents were traders. On the pupil's awareness of COVID-19, All 414(100%) the pupils had heard about COVID-19. The pupils source of information on COVID-19 as follows; Health professional 65(15.7%); Family 105(25.4%) friends 42(10.1%) and TV program 183(44.4%). Majority 341(82.4%) of the pupils had washed their hands on the day of data collection with 186(54.5%) had washed their hands twice. Those who had not washed their hands gave the following reasons; "my hands were not dirty" 31(42.5%), lack of water 24(32.9%) and lack of handing washing materials 18(24.6%) (See, Table 4.1.1)

Table 4.1.1: Pupils Awareness of COVID-19

Item	Respondents in this study= 414	
	Frequency(n)	Per cent (%)
Have you had of COVID 19	414	100
Yes		
Sources of Information on COVID-19		
Health professional	65	15.7
Family	105	25.4
Friends	42	10.1
TV program	183	44.2
Campaigns	19	4.6
Have you washed your hands today?		
Yes	341	82.4
No	73	17.6
***How many times have you washed your hands today**	13	3.8
Once	186	54.4
Twice	12	3.5
Thrice	120	35.2
4 times	4	1.2
5 times	6	1.7
6 times and more		
****Why have you not washed your hands today?**		
Lack of water	24	32.9
Lack of hand washing materials	18	24.6
Hands are not dirty	31	42.5

N=341; **N= 73

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As shown in table 4.2 below most 271(65.5%) of the pupils stated that they always wash their hands with soap and water. Slight above half (208(50.2%) of the pupils reported they disinfect their hands always.Many 284(68.6) of the pupils' stated that they wear a protective mask always. . Less than half 178 (43.0) of the pupils reported that they always wear protective gloves. More than half 242(58.5%) of the pupils' stated that they don't touch their face and 239(27.7%) reported that they don't shake hands with their schoolmate. Many 267(64.5%) of the pupils' reported that they don't hug others. More than half 269(65.0) of the pupils reported that they maintain the recommended distance with the majority 304(73.4%) reporting that they respect movement restrictions. .More than half 241(58.2%) of the pupils stated that they avoid contact with an elderly person. . More than half 241(58.2%) of the pupils stated that they avoid contact with an elderly person. While only 7(11.9%) of the respondents reported that they avoided the elderly person. Less than half 198(47.3%) of the respondents reported that they don't meet with family. . Most 276(66.7%) of the pupils reported that their families had a good nutrition plan. More than half 272(65.5%) of the pupils reported that they use disinfectants to clean their clothes and shoes.

Pupils' level of Adherence to COVID-19 prevention and control protocol measured on a 39 point rating scale showed a mean score of 31.04±5.3. Majority 358(85%) of the pupils had good adherence to COVID-19 prevention and control protocol (See, Table 4.2.3)

Table 4.2 Pupils' Adherence to COVID-19 Prevention and Control Protocol

N=414

Statements	Always (%)	Sometimes (%)	Rarely (%)	Never (%)
I wash my hands wash with soap and water	271(65.5)	46(11.1)	36(8.7)	61(14.7)
I disinfect my hands	208(50.2)	115(27.8)	19(4.6)	72(17.4)
I wear a protective mask	284(68.6)	54(13.0)	24(5.8)	52(12.6)
I wear protective gloves	178(43.0)	198(47.8)	23(5.6)	15(3.6)
I don't touch my face	242(58.5)	130(31.4)	24(5.8)	18(4.3)
I don't shake hands with my school mate	239(57.7)	125(30.2)	15(3.6)	35(8.5)
I don't hug others	267(64.5)	107(25.8)	24(5.8)	16(3.9)
Maintaining recommended distance	269(65.0)	85(20.5)	24(5.8)	36(8.7)
I respect movement restrictions	304(73.4)	66(15.9)	21(5.1)	23(5.6)
I avoid contact with the elderly	241(58.2)	15(27.8)	44(10.6)	14(3.4)
I don't meet with family members	198(47.3)	158(38.2)	41(9.9)	19(4.6)
My family nutrition plan is good	276(66.7)	102(24.6)	12(2.9)	24(5.8)
I use disinfectants to clean my clothes and shoes	272(65.7)	92(22.2)	20(4.8)	30(7.2)

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Table 4.2.1: Pupils' Level of Adherence to COVID-19 Prevention and Control Protocol

Items	Frequency(n=414)	Percentage (%)	x(SE)
Poor	2	0.5	31.04(0.26)±5.3
Fair	60	14.5	
Good	352	85.0	

COVID-19 Prevention and Control Protocol Observed by Schools as Reported by the Pupils' and Teacher's

Majority 377(91.1%) of the pupils reported that they were given education by their school. Most 368(88.9%) of the pupils reported that their school provided them with a face mask. Also, majority 377(91.1%) of the pupils reported that their school provides them with a place for washing hands. Most 355 (85.7%) of the pupils reported that their school made them wash their hands before entering their classes. Many 338(80.7%) of the pupils stated that their school made sure they wear their face mask at all times. Majority 328(79.2%) of the pupils reported that they used hand sanitizer before we entered our classes in my school. Also most 306(73.9%) of the pupils reported that their class teacher made sure that they maintained social distancing in the class. Majority 304(73.4%) of the pupils' reported that their school made sure they do not hug themselves in the school. Majority 311(75.1%) of the pupils' reported that they always maintained social distancing during assembly (See, Table 4.3)

Furthermore, school adherence to COVID-19 prevention and control measured on a 9 point rating scale as reported by pupils showed a mean of 7.39±1.74; 7.84±1.49 respectively. Majority of the pupils 388(93.7%) reported good adherence to COVID-19 prevention and control protocol by the schools.

Table 4.3: COVID-19 Prevention and Control Protocol Observed by Schools as Reported by the Pupils'

Statement	Respondents in this study= 414	
	Yes (%)	NO (%)
My school educated us on COVID -19	377(91.1)	37(8.9)
My school provides face mask	368(88.9)	46(11.1)
My school provided a place for washing hands.	377(91.1)	37(8.9)
my school makes sure we wash our hands before entering our classes	355(85.7)	59(14.3)
my school makes sure we wear our face mask at all time	334(80.7)	80(19.3)
We use hand sanitizer before we enter our classes in my school	328(79.2)	89(20.8)
My class teacher makes sure we maintain social distancing in the class	306(73.9)	108(26.1)
My school makes sure we do not hug ourselves in the school	304(73.4)	110(26.6)
we always maintain social distancing at the assembly in my school	311(75.1)	103(24.9)

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Table 4.3.1: Level of Adherence to COVID-19 Prevention and Control Protocol by Schools Reported by Pupils

Items	Frequency(n=59)	Percentage (%)	x(SE)
Poor	26	6.3	7.39(0.08)±1.74
Good	388	93.7	

Challenges Faced By Schools in Observing COVID-19 Prevention and Control Measures as Reported by Pupils' and Teachers.

Majority of the pupils reported the following as the challenges faced by their school in observing COVID-19 control measures; inadequate supply of hand washing soaps 263(63.5%) inadequate supply of hand sanitizers239(57.7%); insufficient water supply 250(60.4%); inadequate space in classrooms to enforce social distancing 228(55.1%); and inappropriate cleaning and disinfection of surface and objects regularly touched246(59.4%) (See, Table 4.4).

Table 4.4 Challenges Faced By Schools in Observing COVID-19 Prevention and Control Measures Reported by Pupils'

Statement	Respondents in this study= 414	
	Yes (%)	NO (%)
Inadequate supply of hand washing soaps	263(63.5)	151(36.5)
Inadequate supply of hand sanitizers	239(57.7)	175(42.3)
insufficient water supply	250(60.4)	164(39.6)
Inadequate space in classrooms to enforce social distancing	228(55.1)	186(44.9)
inappropriate cleaning and disinfection of surface and objects regularly touched	246(59.4)	168(40.6)

DISCUSSION OF FINDINGS

The finding showed that all the respondents were aware of COVID-19. This finding is in agreement with previous studies in Iran by Akalu et al., (2020) a bi-national study in Egypt and Nigeria by Hager et al., (2020). This is probably due to awareness creation activities, and channels of information dissemination as majority of the information were disseminated through mass media, and health professionals.

This finding indicated that schools complied with Federal Ministry of Education guidelines on schools and learning facilities reopening after COVID-19 closures in Ogun State. The pupils and the teachers reported that educational programs on COVID-19 for the pupils and teachers were carried out in their schools, social distancing was promoted by ensuring that it was observed in the classroom and on the assembly group, disinfection of the entire school premises, availability of hand sanitizers at the gate,, availability of safe water, facilities soap and disinfectants to support WASH requirements. This is in agreement with the finding of Atiya and Poorva (2020) which reported that COVID-19 awareness and preventive practices include avoiding social gathering, maintaining distance while talking, hand washings, avoiding

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physical contact, using sanitizers, wearing face masks and avoid touching nose, and mouths among others.

This also supported the finding of Kebede, Yitayih, Birhanu, Mekonen and Ambelu (2020) reported that preventive practices towards COVID-19 pandemic in Universities include; frequent hand washing, avoidance of hands shake and use of hand sanitizers. The agreement between findings could be due to the fact that COVID-19 is a global pandemic with no cure and can also be easily contracted. The absence of a standard cure for COVID-19 is bound to contribute to the high extent of Federal Ministry of Education guidelines on schools and learning facilities reopening after COVID-19 closures. This may be why no cases of COVID - 19 was reported among school pupils after school reopening in Ikenne Local Government Area.

Adhering to preventive measures was found by studies as vital in containing the spread of the virus (Jordan, 2020) with physical/social distancing found to be the most effective preventive measure (Prem, Liu, Russell, Kucher, Eggo & Davies, 2020). Physical/social distancing as found in the present study is one preventive measure that was not strictly observed by most of the teachers'. This is because traditionally, communal living entails some measure of close interaction with family and friends especially during social gatherings like traditional marriage, and burial rites.

The findings of this study revealed that the majority of the pupils had good adherence to COVID-19 prevention protocol.

This study findings are also lower than the study conducted in Iran, where 95.4%, 93%, and 80% of the participants adhered to hand washing with soap and water, avoiding crowded places, clean hands with other disinfectants, respectively (Kakemam et al., 2020).

Relative to other prevention strategies, wearing of facemask was the least implemented measure by the teachers. This is in line with the research report from Malaysia (Azlan et al., 2020) this is probably because of cost, unavailability/shortage, and lack of knowledge on how to wear facemask or worries with mask-related problems around the face and the respiratory system. The other possible explanation is the fear of stigma. Through the development of new behavior needs time, special emphasis on awareness creation activities on how to wear and remove facemask is mandatory for all ordinary citizens. Even those who wear facemasks did not utilize it effectively: they put it below their mouth, frequently touch the outer side of the mask, even handle it in their pocket, and so on.

The findings revealed that the schools faced some of these challenges that hinder the effective implementation of the prevention protocol such as inadequate supply of hand washing soap and water, inadequate supply of hand sanitizers, inadequate classroom, inadequate enforcement of social distance and inadequate cleaning and disinfectant for cleaning of surface objects. This findings corroborate the findings of Gibert et al (2020) and Abdelhadiz et al., (2020) that deficiency of hand cleanliness supplies, testing packs, and absence of personal protective equipment (PPE), resistance of the public to the recommended prevention strategies, are the main barriers to break the transmission of COVID-19 in its infancy stage.

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SUMMARY, CONCLUSION AND RECOMMENDATIONS

Summary

Nigeria reported its first confirmed case of coronavirus on February 27, 2020. A report from the National Center for Disease Control (NCDC) revealed that the first case of COVID-19 in Nigeria involved an Italian citizen who entered the country on February 24, since then, cases have been increasing. The Ministry of Education announced reopening of school for secondary school exit classes on August 4th to enable them prepare for the West African Senior School Certificate Examination (WASSCE) to commence August 17th. According to Federal Ministry of Education (2020), the guidelines for the safe reopening of schools and learning facilities after the COVID-19 pandemic outline actions, measures, and requirements needed for all formal and non-formal learning spaces for all ages, including, but not limited to, Early Childhood Care Development and Education (ECCE), basic and senior; secondary schools, and tertiary institutions.

Strict adherence or compliance with the COVID-19 directives is always a serious challenge in Nigeria. There was partial adherence to WHO COVID-19 preventive in Nigeria. Typical scenarios include; poor practice of good washing and social distancing in public places like banks, public offices and business organizations among others. Agusi et al (2020) stressed that the defaulters of COVID-19 preventive measures could be attributed to insubordination and tendency for civil disobedience in developing country where the citizen´s patriotism and respect for government is poor. Failure to abide by Ministry of Education guidelines poses a great danger in Nigeria where there is a decaying health care system. Thus, it becomes imperative to investigate assessed schools compliance with Federal Ministry of Education guidelines on schools and learning facilities reopening after COVID-19 closures in Ikenne LGA, Ogun state Nigeria.

Four research questions were formulated. The study adopted a cross-sectional design. Sample random sampling technique was used to select four hundred and fourteen pupils and fifty-nine teachers. A validated questionnaire which was self-administered was used for data collection. Data collected were analysed by using descriptive statistics of frequency tables, and mean.

The findings revealed that the schools adherence to the COVID 19 prevention and control measures. Majority of the pupils complied with the protocol while teachers had poor adherence to the protocol.

Conclusion

Based on the finding, it is concluded that the schools complied with Federal Ministry of Education guidelines on schools and learning facilities reopening after COVID-19 closures in Ogun state, Nigeria to a great extent. The guideline incorporates preventive measures such as: hand washing, social distancing, wearing of face masks to contain and minimize the spread of the virus. The compliance to Federal Ministry of Education guidelines on schools and learning facilities reopening after COVID-19 closures is the right direction toward reducing the transmission of the disease.

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Recommendation

Based on the findings of this study the following are therefore recommended:

1. The Ministry of Education should organize a regular awareness campaign to sensitize school staff and students to improve compliance of the COVID-19 guidelines in school.

2. The State Ministry of Education should encourage and support teachers to participate in training programs in order to acquaint them with knowledge of preventing the spread of COVID-19 in the school system.

3. Physical/social distancing needs to be emphasized during community sensitization programs to help people understand the danger in hugging, handshakes, and close seating arrangements.

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