



ASSESSING THE PRACTICE OF THE PREVENTIVE GUIDELINES IN THE NEW WAVES OF COVID-19 PANDEMIC AMONG SECONDARY SCHOOL TEACHERS IN ENUGU EDUCATION ZONE

C. M. Ugwuegede, Ph.D; Agu Kate Amechi, M.Sc & N. E. Eze, Ph.D

Department of Human Kinetics and Health Education, Faculty of Education. Enugu State University of Science and Technology (ESUT), Agbani, Enugu.

Abstract

The study examined practice of COVID-19 preventive guidelines in the new waves of the disease among secondary school teachers in Enugu Education Zone. Three, research questions and three null hypotheses guided the study. The hypotheses were tested at .05 level of significance. The study adopted descriptive survey research design and the study was carried out in Enugu Education Zone. The population for the study consisted of 1935 (287 males and 1648 females) teachers in public secondary schools in Enugu Education Zone. A total of 194 (29 males and 165 female) teachers in secondary schools in the Education Zone served as research respondents. Multi-stage procedure namely; stratified, purposive and proportionate samplings were used during the sampling, and Structured and validated questionnaire was used to collect data from the respondents. A total of 187 copies out of 194 copies of the instrument correctly filled and returned were used at the level of data analysis. The analysis of data was carried out using mean and standard deviation while hypotheses were tested using t-test statistic. Findings showed evidence of the practices of washing hands with soap and clean water before eating food, covering mouth and nose when coughing and sneezing, self-isolation when suspected willingly, regular use of hand sanitizers, use of nose and face mask, cleaning and disinfecting high-touch surfaces and covering of spit in Enugu State. ($\bar{x}=2.17$). Findings also showed that working from home, restrictions of public gathering, social distancing, avoidance of public transportation,, closing of communities, disinfection of public places, fines to defaulters and jail terms for defaulters were observed at low extent ($\bar{x}=2.03$) while quarantining of suspects, wearing of nose or face mask when going for medical care, taking off mask and storing it in a clean plastic bag, going for counselling when suspected and preferring home management to quarantine were observed at low extent, $\bar{x}=2.31$). Gender differences were as well recorded in the practices of COVID-19 preventive guidelines ($P>0.05$). Based on these, the study concluded that there were serious gaps in the practices of COVID-19 preventive guidelines by secondary school teachers in Enugu Education Zone. The recommendation among others include interventions; such as provision of free nose masks, sanitizers and others preventive materials while government should institute surveillance in schools in the Zone to ensure compliance to preventive guidelines by teachers and students in the event of subsequent pandemic like COVID-19.

Key words: Prevention, COVID-19, Practice, assessment, Guideline.

Introduction

Corona virus is one of the re-emerging infectious diseases that have plagued mankind in recent time with far-reaching global impact on health and economy. According to Kanikwu and Nwazuruoke (2020), Corona virus is a respiratory syndrome that can spread from person to person through direct contact with respiratory droplets that are produced when an infected person coughs or sneezes; assessment and in the



process produce as many as 10,000 droplets. This pandemic disease is novel and infectious; involving severe acute respiratory tract syndrome known as coronavirus-2 (SAS-CesOV-2) (Okoro, Ekeroku & Nweze, 2021).

From historically documentation however, acute respiratory tract infection had existed before the year 2003 as zoometric severe Acute Respiratory Syndrome-coronavirus (SARS-COV) (Ajisegiri, Odusanya & Joshi, 2020). Still, the emergence of coronaviruses attracted interest beyond causing mild upper respiratory tract infection and showing elements of resemblances with the Middle East respiratory syndrome-coronavirus (MERS-COV) in September 2012.

From the series of reports received by the WHO, UNICEF, CDC and other stakeholders in December 2019 following the index cases in Wuhan City, Hubei province of China, corona virus was confirmed to be clusters of pneumonia cases of unknown causes. The Chinese authorities subsequently identified a novel strain of coronavirus (SARS-Cov 2) as the causative agent (Ajisegiri, Odusanya & Joshi, 2020). Sequel to the advice of the International Health Regulation Emergency Committee, the Director-General of the WHO declared the COVID-19 outbreak as public health Emergency of International Concern (PHEIC) on 30 January 2020 and characterized it as a pandemic on 11 March 2020 (Omoronyia, Ekpenyong, Ukwéh & Mpama, 2020).

The outbreak and spread of COVID-19 was rapid that within a couple of weeks, it has spread to virtually all the continents of the world with first case in Africa reported in Egypt in February, 2020. About the same period, globally, over 137.3 million confirmed cases and over 2,961,025 deaths were recorded (Habib, Dayyab & Illiyasu, 2021).

In Nigeria, the index case of coronavirus was confirmed in Lagos State, South west geopolitical zone on 27 February 2020. This was a 44-year old man, an Italian citizen who returned from Milan, Italy, on 24 February and presented his status at Lagos State University hospital Ikeja on 26th February 2020 (Okoro, Ekeroku & Nweze, 2021). The confirmation of the index case of 216 people were identified as contacts of COVID-19 and needed to be followed up. Consequently, the Nigeria centre for Disease Control (NCDC) (2020), observed that COVID-19 has a wide spectrum of symptoms which, include dry cough, fever, anosmia (loss of smell), weakness, headache, body pains, vomiting, sore throat and respiratory difficulty that at the onset happens from 2 to 14 days. Nwankwo and Nwazuruoke (2020), congruently affirmed these identifiable symptoms of coronavirus; cough, fever, dyspnea, fatigue, muscle aches, sore throat, unexplained loss of taste or smell to be similar to symptoms of common cold, malaria and bronchitis. Saidu and Hope (2020), then corroborate these views asserting that the symptoms of corona virus includes fever, rash on skin, discoloration of Fingers or toes, Flu-like cough, sore throat, fatigue, shortness of breath, diarrhoea, nausea and vomiting.



These symptoms show that COVID-19 can be contracted by all age groups but the elderly are more vulnerable (Ngogi, 2020). Ngogi (2020), adds that the vulnerability factors are obesity, underlying medical conditions such as diabetes mellitus, systemic hypertension and other cardiac pathologies, and immune compromising disease such as HIV infection. Adedeji and Adeniran (2020), state that the risk of death in Covid-19 infected individuals increases with older age, presence of hypertension, diabetes and coronary heart diseases. Similarly, mortality rate has been reported to be higher among these categories of people by (Okoro, Ekeroku and Nweze, (2021). when they state that older people are the most vulnerable. It is therefore, necessary that individuals including those that work within the school system be familiarized with the preventive guidelines of the disease for behavioural modifications that will reduce its contraction.

The preventive guidelines for COVID-19 are recognized as one of the effective ways to either minimize or completely eradicate the spread of the disease and its mortality. Notable among these preventive mechanisms were regular hand washing with soap and water, use of alcohol-based hand sanitizers, wearing of nose and face masks in public places, avoidance of crowded places and maintenance of social distancing (WHO, 2021; Ajisegiri, Odusanya & Joshi, 2020). Leveraging from WHO recommended guidelines, the NCDC (2022), classifies preventive guidelines for COVID-19 into three major areas namely personal level, community-based guidelines, hospital based as well as government efforts at getting people maintain proper hygiene.

Along with these preventive guidelines, hygiene measures that are non-pharmaceutical are the major areas of recommendations during the period. These measures regarded as non-pharmaceutical preventive measures for coronavirus can however be considered under personal, government, hospital and community levels (Okoro, Ekeroku & Nweze, 2021). The authors argue that at each level, there are responsibilities to be shouldered to curtail the spread of the virus. These guidelines refer to activities that are carried out at personal, hospital and community levels to ensure reduction in the spread of the virus and the mortality associated with it. The choice of the three preventive guidelines is based on the fact that the respondents in this study (teachers) come into contact with students on daily basis in their line of duties, visit the hospital for medical care and could utilize the knowledge gained in slowing the spread of COVID 19.

A critical investigation however shows that some secondary school teachers in Enugu education zone may not be practicing the preventive guidelines in the schools and at home. This did not not only predispose them to the disease but resulted in the further spread of the virus. But even with practice of personal preventive measures without a corresponding practice at the community level where these teachers reside did not yield any meaningful result towards curtailing the spread of the virus.



Community is an important area of interest regarding the practice of COVID-19 preventive guidelines by teachers in Enugu education zone. This is as Community-based preventive guidelines relate activities and policies that are geared towards minimizing the contraction of the disease within a community setting. This is too, as community-based preventive guidelines like closure of schools, working from home, restriction of public gatherings specifically geared towards limiting the spread of diseases that are transmitted from person to person and maintenance of physical distancing. While it was necessary that community-based preventive guidelines be integrated as one of the measures for curtailing the spread of COVID-19, it was also necessary that adequate practices of hospital-based guidelines be included in the procedures.

Hospital-based guidelines was necessary because everybody; including the secondary school teachers in Enugu education zone access medical care in the hospitals. This implies that exhibiting quality practices of COVID-19 personal and community-based guidelines without similar practices of hospital-based guidelines do not effectively reflect teachers' practice of COVID 19 preventive measures in Enugu education zone. Hospital-based guidelines refer to activities and programmes put in place within the hospital setting to curtail the spread of COVID-19 pandemic. A good number of these preventive guidelines includes quarantine, disinfection of public places, blood screening, provision of sanitation facilities (like; hand washing stations, soap, water, dust bins, face masks), social distancing, isolation, care for infected/suspected persons, health education, health counselling and others (WHO, 2020).

From the foregoing, it means that the practice of COVID- preventive guidelines in secondary schools in Enugu education zone ought to be comprehensive to ensure quality health, teaching and learning. The extent and quality of this practice might differ among male and female secondary school teachers in Enugu education zone based on the opinion of scholars (Adotey, 2020; Hatus &Asamoah, 2020). It is on this note that this study bears the burden of assessing the practice of COVID-19 preventive guidelines/measures among male and female secondary school teachers in Enugu education zone.

Statement of the Problem

Following the outbreak of COVID-19 pandemic, substantial efforts were made by putting out guidelines in order to curtail further spread of the virus in the general population. It is regrettable that these guidelines put in place were largely abandoned in all sectors of which education sector is inclusive. Under normal circumstances, teachers in secondary schools as role models are expected to be practicing the COVID-19 preventive guidelines such as wearing of face mask and observing social distancing to minimize contact with patients' fluids. The assumption in several quarters is that the virus has been successfully eradicated. But with the new waves of the disease identified, there is every indication that the pandemic is still here with us and requires improved practices of the preventive guidelines.



Additionally, the approved preventive guidelines such as social distancing, regular hand washing with soap and water, wearing of face mask and others should be identified in public places including schools with teachers acting as implementers. In Enugu Education Zone, many teachers who are adjudged knowledgeable to educate both the students and the general public do not observe the above outlined COVID guidelines. Furthermore, the WASH materials that were put in place following the outbreak of coronavirus in 2019 are no longer in place in majority of the secondary schools in Enugu education zone. These suggest gaps in the practices of COVID-19 guidelines by secondary school teachers. These gaps therefore imply that the entire school population is at high risk of contracting the new waves of the virus in the zone

Purpose of the Study

The main purpose of this study is to examine the practice of COVID-19 prevention guidelines among secondary school teachers in Enugu Education Zone. Specifically, the study sought to:

1. ascertain the extent of the practice of personal preventive guidelines for COVID-19 among teachers in secondary schools in Enugu Education Zone.
2. examine the extent of practice of community-based preventive guidelines for COVID-19 among teachers in secondary schools in Enugu Education.
3. investigate the extent of practice of hospital-based preventive guidelines for COVID-19 among teachers in secondary schools in Enugu Education Zone.

Research Questions: The following research questions guided the study.

1. What is the extent of practice of personal preventive guidelines for COVID-19 among teachers in secondary schools in Enugu Education Zone?
2. What is the extent of practice of community-based preventive guidelines for COVID-19 among teachers in secondary schools in Enugu Education Zone?
3. What is the extent of practice of hospital-based preventive guidelines for COVID-19 among teachers in secondary schools in Enugu Education Zone?

Hypotheses: The following null hypotheses were tested at 0.05 level of significance.

- Ho₁: Male and female teachers do not differ significantly in their mean ratings regarding the extent of practice of personal preventive guidelines for COVID-19 in Enugu Education Zone
- Ho₂: There is no significant difference in the mean rating of male and female teachers regarding the extent of practice of community-based preventive guidelines for COVID-19 in Enugu Education Zone
- Ho₃: Male and female teachers do not differ significantly in their mean ratings regarding the extent of practice of hospital-based preventive guidelines for COVID-19 in Enugu Education Zone

Methodology

The research design adopted for the study is descriptive survey research design. The study was carried out in Enugu Education zone, Enugu State. The population for the



study consisted 1935 (287 males and 1648 females) public secondary school teachers in Enugu Education Zone. The sample size for the study was 194 secondary school teachers determined using the principles of the rule of thumb. Multi-stage procedure involving three stages namely stratified, purposive and proportionate random sampling techniques were deployed during the sampling. Structured and validated questionnaire tagged “Questionnaire on Practice of COVID-19 Prevention Guidelines (QPCPG)” was used as instrument for data collection. The internal consistency was determined using Cronbach Alpha with the overall reliability index of 0.75 adjudged high indicating that the instrument was reliable. The 194 copies of the questionnaire were administered personally by the researcher with the help of six research assistants duly briefed and retrieved on the spot during school hours. After the administration, a total of 187 (96.4%) copies out of 194 copies were not returned leaving the final sample to 187. The data analysis of data was done with mean and standard deviation while the **hypotheses** were tested using t-test statistic at .05 level of significance. The decision rule for the research questions was taken using the real limit of numbers. For the hypotheses, it was rejected if the p- value is greater or equal to the value of the significance and was accepted when otherwise.

Results:

Research Question One: What is the level of knowledge of Personal preventive guidelines for COVID-19 among teacher in secondary schools in Enugu Education Zone?

Research Question One: What is the extent of practice of personal preventive guidelines for COVID-19 among secondary school teachers in Enugu Education Zone?

Table 1: Mean with Standard Deviation of the Respondents on the Extent of Practice of Personal Preventive Guidelines for COVID-19.

		n=187		
S/N	I practice the following personal preventive guidelines for COVID-19	\bar{X}	SD	Dec.
1	Regular bathing.	3.01	0.91	GE
2	Washing hand with soap and clean water before eating food	2.39	0.85	LE
3	Covering mouth and nose when coughing and sneezing	2.23	0.90	LE
4	Keeping social distancing from suspected and sick people.	3.00	0.80	GE
5	Willingness to self-isolate when suspected.	2.02	0.99	LE
6	Regular use of hand sanitizers	2.11	1.03	LE
7	Willingness to wear nose and face mask	2.15	0.90	LE
8	Cleaning and disinfecting high-touch surfaces at home and school regularly	2.10	0.85	LE
9	Maintaining physical distancing with other people	2.17	0.82	LE



S/N	I practice the following personal preventive guidelines for COVID-19	\bar{X}	SD	Dec.
10	Praying to cure the diseases	2.66	0.92	GE
11	covering of spit	2.07	0.90	LE
	Grand Mean	2.17	0.90	LE

Data as presented in table 1 shows that out of 187 teachers in secondary schools in Enugu Education Zone that responded to items 1-11 that deal with extent of practice of personal preventive guidelines for COVID-19, items 29, 32 and 38 signify great extent. However, items 30 31, 33, 34, 35, 36 37 and 39 all show low extent. This signifies low extent. The grand mean of 2.17 with SD .900 signifies low extent. This means that teachers in secondary schools in Enugu Education Zone showed evidence of low extent practices of washing hand with soap and clean water before eating food, covering mouth and nose when coughing and sneezing, self-isolate when suspected willingly, regular use of hand sanitizers, use of nose and face mask, cleaning and disinfecting high-touch surfaces and covering of spit in Enugu State.

Research Question Two: What is the extent of practice of community-based preventive guidelines for COVID-19 among secondary school teachers in Enugu Education Zone?

Table 2: Mean and Standard Deviation of the Respondents on the Extent of Practice of Community-Based Preventive Guidelines for COVID-19.

N=187				
S/N	I practice the following community-based preventive guidelines for COVID-19	\bar{X}	SD	Dec.
12	Closing of schools	2.19	0.84	GE
13	working from home	1.67	0.92	LE
14	restrictions of public gathering	2.33	0.88	LE
15	maintain social distancing from others	1.43	0.78	LE
16	avoidance of public transportation	1.90	0.74	LE
17	closing of communities	2.24	0.82	LE
18	Closure of offices and establishments.	2.15	0.82	GE
19	disinfection of public places and surfaces in school	2.30	0.74	LE
20	strict imposition of fines to defaulters	2.10	0.80	LE
21	jail terms for defaulters	2.03	0.82	LE
	Grand Mean	2.03	0.82	LE

From the data as presented in table 2, out of 187 teachers in secondary schools in Enugu Education Zone that responded to items 12-21 that deal with extent of practice of community-based preventive guidelines for COVID-19, items 40 and 46 signify



great extent. However, items 41, 42, 43, 44, 45, 47, 48 and 49 all show low extent. This signifies low extent. The grand mean of 2.03 with SD .820 signifies great extent. This means that teachers in secondary schools in Enugu Education Zone showed low extent practices of working from home, restrictions of public gathering, maintain social distancing, avoidance of public transportation, closing of communities, disinfection of public places, strict imposition of fines to defaulters and ail terms for defaulters in Enugu State.

Research Questions Three: What is the extent of practice of hospital-based preventive measures for COVID-19 among secondary school teachers in Enugu Education Zone?

Table 5: Mean and Standard Deviation of the Respondents on the Extent of Practice of Hospital-Based Preventive Guidelines for COVID-19.

n=187				
S/N	I practice the following hospital-based preventive guidelines for COVID-19	\bar{X}	SD	Dec.
22	I quarantine if suspected	2.10	0.97	LE
23	I insist on proper blood screening before transfusion.	2.60	0.82	GE
24	I wear nose or face mask when going for medical care.	2.25	1.00	LE
25	I practice social distancing at the hospital.	2.31	0.93	LE
26	Usually I take off mask and store it in a clean plastic bag	1.70	1.04	LE
28	I dispose off medical mask in a trash bin	2.81	0.98	GE
29	Do not use masks with valves	2.53	1.02	GE
30	I go for counselling when suspected	1.92	0.90	LE
31	I prefer home management to quarantine	2.60	0.96	GE
	Grand Mean	2.31	0.96	LE

Data as presented in table 5 shows that out of 187 teachers in secondary schools in Enugu Education Zone that responded to items 22-31 that deal with extent of practice of hospital-based preventive guidelines for COVID-19, items 51, 55, 56, and 56 signify great extent. However, items 50, 52, 53, 54 and 57 show low extent. This signifies low extent. The grand mean of 2.31 with SD .960 signifies low extent. This means that teachers in secondary schools in Enugu Education Zone practice quarantine if suspected, wear nose or face mask when going for medical care, take off mask and store it in a clean plastic bag, go for counselling when suspected and prefer home management to quarantine at low extent.

Hypothesis 2: There is no significant difference in the mean rating of male and female teachers regarding the extent of practice of community-based preventive guidelines for COVID-19 in Enugu Education Zone.

**Table 5: t-test Analysis of Mean Rating of the Respondents on the Extent of Practice of Community-Based Preventive Guidelines for COVID-19**

S/N	Practice the use of Vaccine	Male=28		Female=159		t-cal	p-value	Dec.
		\bar{X}_1	SD	\bar{X}_2	SD			
1	Closing of schools	2.22	1.07	2.15	0.61	-0.87	0.46	NS
2	Working from home	1.89	1.01	1.44	0.83	-0.23	0.11	NS
3	Restrictions of public gathering	2.13	0.76	2.52	1.00	-1.38	0.13	NS
4	Maintain social distancing from others	1.55	0.85	1.30	0.71	-1.34	0.17	NS
5	Avoidance of public transportation	1.85	0.60	1.95	0.87	-1.35	0.17	NS
6	Closing of communities	2.28	0.71	2.20	0.92	-1.83	0.37	NS
7	Closure of offices and establishments.	2.22	0.80	2.07	0.84	-0.50	0.17	NS
8	Disinfection of public places and surfaces in school	2.34	0.64	2.25	0.83	-0.50	0.15	NS
9	Strict imposition of fines to defaulters	2.19	0.67	2.01	0.92	-1.41	0.50	NS
10	Jail terms for defaulters	2.19	0.67	2.01	0.92	-1.41	0.50	NS

Male Teachers = 28, No. of female Teachers = 159, Mean of male teachers, Mean of female teachers. Df = 185, P = 0.05, S = Significant, NS = Not Significant.

The results in Table 5 show that the 9 identified items on extent of practice of community-based preventive guidelines for COVID-19 had their p-values ranged from 0.11 to 0.50 which were greater than 0.05 at 185 degree of freedom. This implies that male and female teachers in secondary schools in Enugu education zone did not differ significantly in their opinions on the extent of practice of community-based preventive guidelines for COVID-19. Therefore, the null hypothesis of no significant difference was upheld.



Hypothesis 1: Male and female teachers do not differ significantly in their mean ratings regarding the extent of practice of COVID-19 personal preventive guidelines.

Table 4: t-test Analysis of mean Ratings of the Respondents on the Extent of Practice of Personal Preventive Guidelines for COVID-19

S/N		Male =28		Female =159		t-cal	p-value	Dec.
		\bar{X}_1	SD	\bar{X}_2	SD			
1	Regular bathing.	3.22	0.86	2.80	0.96	-1.75	1.00	NS
2	Washing hand with soap and clean water before eating food	3.00	0.88	2.80	0.82	0.31	0.58	NS
3	Covering mouth and nose when coughing and sneezing.	2.53	0.80	2.91	1.00	-0.92	0.56	NS
4	Keeping social distancing from suspected and sick people.	3.25	0.54	2.75	1.05	-0.90	0.53	NS
5	Willingness to self-isolate when suspected	3.03	1.01	3.00	0.96	-0.63	0.33	NS
6	Regular use of hand sanitizers	3.22	0.99	3.00	1.06	0.53	0.65	NS
7	Willingness to wear nose and face mask	3.09	0.81	3.20	0.99	-1.08	0.51	NS
8	Cleaning and disinfecting high-touch surfaces at home and school regularly	3.12	0.88	3.15	0.82	-1.03	0.70	NS
9	Maintaining physical distancing with other people	3.37	0.88	3.50	0.75	0.95	0.33	NS
10	Praying to cure the diseases	3.11	0.87	3.29	0.97	-0.82	0.70	NS
11	Covering of spit	3.11	0.87	3.29	0.97	-0.82	0.70	NS

Male Teachers = 28, No. of female Teachers = 159, Mean of male teachers=28 Mean of female teachers=159, Df = 185, P = 0.05, S = Significant, NS = Not Significant.

The results in table 4 show that 2 identified on the extent of practice of personal hygiene guidelines had their p-values ranged from 0.31 to 1.00 at 185 degree of freedom. The null hypothesis of no significant difference was upheld. This indicated that male and female teachers in public secondary schools in Enugu Education Zone had similar views as regards to the extent of practice of personal preventive guidelines for COVID-19.



Hypothesis 3: Male and female teachers do not differ significantly in their mean ratings regarding the extent of practice of hospital-based preventive guidelines for COVID-19.

Table 6: t-test Analysis of Mean Ratings of the Respondents on the Extent of Practice of Hospital-Based Preventive Measures for COVID-19

S/N	Practice of Facemask Guidelines	Male=28		Female=159		t-cal	p-value	Dec.
		\bar{X}_1	SD	\bar{X}_2	SD			
1	Quarantine is necessary when suspected	2.19	0.91	2.01	1.03	-1.66	0.15	NS
2	I insist on proper blood screening before transfusion.	2.50	0.72	2.70	0.91	-1.24	0.75	NS
3	I wear nose or face mask when going for medical care.	2.57	1.02	2.53	0.97	-1.41	0.14	NS
4	I practice social distancing at the hospital.	2.52	0.96	2.50	0.89	1.31	0.39	NS
5	Usually I take off mask and store it in a clean plastic bag	1.68	1.08	1.71	1.01	-0.39	0.15	NS
6	I dispose off medical mask in a trash bin	1.91	0.94	1.71	1.01	-0.39	0.15	NS
7	Do not use masks with valves	2.40	1.05	2.39	0.99	-0.43	0.89	NS
8	I go for counselling when suspected	2.19	1.01	1.65	0.78	0.00	0.86	NS
9	I prefer home to management quarantine	2.19	1.01	1.65	0.78	0.00	0.86	NS

Male Teachers = 28, No. of female Teachers = 159, Mean of male teachers, Mean of female teachers. Df = 185, P = 0.05, S = Significant, NS = Not Significant.

Data presented in Table 6 revealed that the 8 identified items on the extent of practice of hospital-based preventive guidelines for COVID-19 had their p-values ranged from 0.14 to 89 at 185 degree of freedom. Therefore, the null hypothesis was not rejected. This indicates that male and female teachers in secondary schools in Enugu education zone had uniform opinions on the extent of practice of hospital-based preventive guidelines for COVID-19.

Discussion of the findings

Evidence from analysis showed evidence of low extent practices of washing hands with soap and clean water before eating food, covering mouth and nose when coughing and sneezing, self-isolation when suspected regular use of hand sanitizers,



nose and face masks, cleaning and disinfecting high-touch surfaces and covering of spit in Enugu State.

It is also discovered that male and female teachers in public secondary schools in Enugu Education Zone had similar views on the extent of the practice of personal preventive guidelines for COVID-19. The disagreement is expected because in those studies conducted in Lagos State where the virus was first reported are most likely to play consciousness than those outside Lagos just like the teachers in secondary schools in Enugu Education Zone. On the other hand, the corresponding hypothesis revealed that male and female teachers in public secondary schools in Enugu education zone had similar views as regards to the extent of the practice of the COVID-19 personal preventive guidelines. This disagreed with the view of Ngogi (2020), which demonstrated that most of the people both male and female in Pretoria, South Africa displayed high level practice of Covid-19 personal hygiene guidelines. The main reasons for this disagreement could be that teachers are of similar background and orientation unlike in the reviewed study that made use of people of diverse groups in South Africa.

Further results of the analysis revealed teachers observe working from home, restrictions of public gathering, social distancing, avoidance of public transportation, closing of communities, disinfection of public places, fines to defaulters and jail terms for defaulters at low extent. The hypothesis shows that male and female teachers in secondary schools in Enugu education zone did not differ significantly on the extent of practice of community-based preventive guidelines for COVID-19. This finding agrees with Downing and Seguí (2022) reported low level of compliance in the use of COVID-19 community-based guidelines in Nigeria. The finding was surprising because despite all the efforts made by Ministry of Health on COVID-19 guidelines, secondary school teachers in Enugu Education Zone still had poor practice of COVID-19 preventive guidelines. This could be a fall out of stigma that goes on in the general population for those that observe the preventive guidelines for COVID-19. Perhaps, some of the teachers in secondary schools in the study area try to shy away from practicing the guidelines to avoid being ridiculed in the community.

The study further showed that teachers in secondary schools' observation of quarantine when suspected, wearing of nose or face mask when going for medical care, taking off masks and storing them in a clean plastic bags, going for counseling when suspected and preferring home management to quarantine are also observed at low extent. at low extent in the Zone. Indeed, the corresponding hypothesis revealed that male and female teachers in secondary schools in Enugu Education Zone had uniform opinions on the extent of practice of hospital-based preventive guidelines for COVID-19. The implication is that the null hypothesis was not rejected. The result of the study therefore depicts that gender has no influence on the responses of the respondents. The wearing of facemask has been reportedly poor among people in Nigeria. For instance, data from Rivers State Nigeria on compliance



to use of facemask among teachers in public secondary schools, was found to be scanty (Omoronyia, Ekpenyong, Ukwah & Mpama, 2020) while Ndukwe (2021), found that 70.2% of Nigerians are not actually using facemask in the public. Similarly, Idris (2022), reported poor compliance of civil servants in Katsina in the application of facemask protocols such as wearing, handling, removal and disposal of facemask. In all, Respondents' poorer performance in terms of adherence to protocols on the use of facemask and other hospital-based guidelines could be largely attributable to the laissez-faire attitude of respondents in this study.

Conclusion

Based on the findings, the study concluded that serious gaps exist in all aspects of the practices of COVID-19 preventive guideline which ought to be reversed. These gaps recorded with respect to practices of preventive guidelines for COVID-19 is an indicative of deficits in the Health Education curriculum in secondary schools regarding interventions on health promotion programmes are not impacting meaningfully on the teachers hence should be revisited by the curriculum planners.

Recommendations: Consequent upon the findings of this study and conclusions drawn, the researcher recommends as follows:

1. The school authority as well as government should immediately provide schools with COVID-19 facilities in order to spur the practice of preventive guidelines by teachers.
2. Governments at all levels (Federal, State and Local Government) should embark on massive public enlightenment campaign/sensitization on the importance of COVID-19 personal hygiene guidelines, through social media, television, radio, and engage the political, religious and traditional leaders in this campaign.
3. Hospitals in Enugu Education Zone should educate their Health care workers on the full compliance to COVID-19 protocols so that their patients are teachers can emulate them. School surveillance on compliance of COVID-19 preventive guidelines is necessary in the Education Zone to ensure compliance by the teachers and students.

References

- Adotey, S.K. (2020). *Higher education in Africa and COVID-19*. Available at <https://www.weforum>. Accessed 4/3/21
- Ajisegiri, S.W., Odusanya, O.O. & Joshi, R. (2020). COVID-19 outbreak situation in Nigeria and the need for effective engagement of community health workers for epidemic response, *global Biosecurity*, 1(4);1-9.
- Habib, A.M., Dayyab, F.M., & Iliyasu, G. (2021) knowledge, attitude and practice survey of COVID-19 pandemic in northern Nigeria. Available at <https://doi.org>, accessed 14/4/21.



- Hatsu, S., & Asamoah, E.S. (2020). *Online teaching and learning amid COVID-19*. Accessed at www.myjoyonline.com
- Ipinmimo, T. M. (2021). Knowledge of COVID-19 and practice of preventive measures among adult residents during the ease of lockdown in Nigeria. [OA.mg. https://oa.mg/work/njm.njm42-21](https://oa.mg/work/njm.njm42-21)
- Kanikwu, N. P. & Nwazuruoke, C.J. (2020) knowledge of Coronavirus disease 2019 and practice of prevention protocols among nursing students in South-South, Nigeria. *Nigerian Health Journal*, 20 (1): 26-35.
- Matiba, L.M. (2015). The impact of exercise (physical activity) and healthy lifestyle(eating)among the youth: A literature review. *Unpublished thesis*, Lapland University of Applied Sciences, Australia.
- Ngogi, E.M. (2020). The impact of Covid-19 pandemic on education: navigating forward the pedagogy of blended learning. *University of Pretoria, South Africa*, 5, 4-9. Nigeria Centre for Disease Control [NCDC] (2020). *COVID-19 Pandemic Outbreak*. Retrieved from, <https://covid19.ncdc.gov>
- Okeke, E. (2010). Breaking gender barriers on achievement in science using hands on, minds-on science. In U. Nzewi (Ed.) *Proceedings of the Forty-Seven Annual Conference of Science Teachers' Association of Nigeria*. Ibadan: Heinemann. 211-214.
- Okoro, J., Ekeroku. & Nweze, B. (2021). Attitude and preventive practice towards COVID-19 disease and impact of awareness training on knowledge of the disease among correctional officers. *Emerald Open Research*, 1(1): 1-12.
- Omoronyia, O., Ekpenyong, N. Ukweh, I. & Mpama, E. (2020). Knowledge and practice of COVID-19 prevention among community health workers in rural Cross-River State, Nigeria: implication for disease control in Africa. *Pan African medical Journal*, 37 (50): 1-12
- Saidu, M. & Hope, O. A. (2020). Coronavirus pandemic in Nigeria: how can SMEs cope and flatten the curve? *European Journal of Accounting, Finance and Investment*, 6(5): 55-61
- Ugochukwu, A E. (2021). Determinants for acceptance of COVID-19 vaccine in Nigeria. *Cureus* 13(11): 87-93
- World Health Organization [WHO] (2020). *Responding to Community Spread of COVID-19*. Geneva: World Health Organization.