

STAKEHOLDERS' PERCEPTION OF UNIVERSITY COMPLIANCE WITH COVID-19 PREVENTION PROTOCOLS IN KWARA STATE, NIGERIA

BY

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Abstract

Coronavirus is a pandemic disease that has affected all facets of the national economy, including education. A poor level of compliance with prevention guidelines among the populace has been observed. Several kinds of research have been conducted in this regard, but few focused on the university system or no study has been able to holistically sample the view of university stakeholders on the level of compliance with the COVID-19 control measures within the university environment. This study thus investigated the stakeholders' perception of university compliance with COVID-19 prevention protocols in Kwara State. Simple random and convenient sampling techniques were used to select 400 respondents that participated in the study. The instrument used for data collection was a self-structured questionnaire. Out of the 400 administered questionnaires, 395 were adequate for data analysis. The descriptive statistics of mean, standard deviation and percentage were used to analyse the data collected for the study; using the SPSS statistical tool of version 23. The findings of the study revealed that there is a low level of compliance of universities in Kwara State to the COVID-19 classroom, face-covering and social distancing, disinfection and hygiene, and research conduct protocols; while partial compliance was found for events protocol. It was recommended on this basis that the university administrators should provide necessary tools, equipment, materials, create an enabling environment and constitutes functional committees for proper implementation of COVID-19 prevention protocols in the university system.

Keywords: *Stakeholders, perception, university compliance, Covid-19 and Prevention protocols*

Introduction

The experience of the COVID-19 pandemic can hardly fade out of people's memory across the globe. It is one of the terrific outbreaks that the year 2020 ushered in and lasted through the year and beyond. The term COVID-19 is a novel coronavirus disease that was first discovered in December 2019 in Wuhan, China. It was first named "acute respiratory syndrome coronavirus 2" (SARS-CoV-2), because of its genetic attributes similar to SARS. The World Health Organisation (2020) declared COVID-19 a pandemic of international concern and public health emergency. The COVID-19 disease has an incubation period of 4 days and it usually spreads across a short distance by air through respiratory droplets and direct contact with the infected person or surfaces or items that the person has touched. It is associated with varieties of diseases' symptoms similar, particularly, to Malaria such as cough and fever, tiredness, muscle aches, shortness of breath, difficulty in breathing, chest pain, loss of taste or smell, sore throat, headache, nausea, diarrhoea and vomiting (Buonsenso, Piano, Raffaelli, Bonadia, De-Gaetano & Franceschi, 2020; Mayo Clinic, 2020). In this view, it may be wrongly diagnosed as reported in the Enugu case index which was revealed by further laboratory testing (Olisah & Chika, 2020).

The effects of the COVID-19 pandemic are enormous; it cut across all facets of the global economy and various life endeavours. According to Praghlapati (2020), the pandemic has caused huge instability to the family organisation, health, tourism, business and education sectors all over the world. Families were compelled to maintain work-family balance with few supports. The lockdown had constrained parents to engage children in homeschooling coupled with some parents working from home, while others were too financially handicapped having lost their jobs or being bankrupt to the pandemic and those in healthcare were likely living away from their families (Fisher, Languilaire, Lawthom, Nieuwenhuis, Petts, Runswick-Cole & Yerkes, 2020). Many people experienced deep emotional and

behavioural reactions, such as fear, loneliness, boredom, insomnia, anxiety, anger, post-traumatic stress and depressive symptoms (Shigemura, Ursano, Morganstein, Kurosawa & Benedek, 2020).

On a global level, by 4th March 2021, the confirmed cases of COVID-19 were 114,853,685, including 2,554,694 deaths (National Center for Disease Control, 2021). According to Pettersson and Manley (2021), 262.2 million COVID-19 cases and 5.2 million deaths from authorities of 223 countries and territories have been documented since the first cases reported by China in December 2019. In Africa, the African Center for Disease Control (2021) reported total cases of 8,638,595 cases of infected people, 222,827 deaths, 8,089,604 recoveries in 82,148,236 testing. In Nigeria, from January 2020 to 6th November 2021, there have been 213,982 confirmed cases of COVID-19 with 2,975 deaths; and as of November 2021, a total of 9,846,182 vaccine doses have been administered (World Health Organisation, 2021). Kwara State was among the top 10 with 4,001 confirmed cases of COVID-19 and 64 deaths as of 30th November, 2021 (Nigeria Centre for Disease Control, 2021).

The above statistics indicated that the coronavirus pandemic is still ongoing and the situation might be disastrous should all preventive and control protocols stipulated by the WHO be neglected at this time. At the emergence of the outbreak when vigorous efforts are being made by the World Health Organisation, other healthcare agencies or organisations and the governments of various countries in the world to salvage the situation, they came up with a total lockdown of all businesses and institutions across the globe. But on realizing that the pandemic might turn down the world economic system, the lockdown was relapsed after a few months but different preventive protocols or measures were put in place so that it does not capsize the entirety of human existence. So, the education system also resumed and learning continues at each level of study. In the education sector, the Nigerian Centre for Disease Control stressed that, for safe reopening by 18 January 2021, schools must be ready to implement the preventive protocols to contain the contract and spread of the virus. Some of the measures include classroom protocol, face-covering and social distancing, disinfection and cleaning protocol, events and research protocols among others within the school environments. The NCDC requested that school administrators ensure compliance and adherence to preventive protocols. In this regard, school facilities were directed to make all the necessary tools and equipment available for use and should set up ad-hoc committees to monitor and promote compliance. Some of these include water, hand-washing gadgets and soaps and ensure that students, teachers and others in the school environment use their face masks and maintain at least two meters from each other (Odi, 2021).

Nwagbara, Osual, Chireshe, Bolarinwa, Saeed, Khuzwayo, et. al. (2021) was of the view that in sub-Saharan African are noncompliant with proposed health and safety measures recommended by the World Health Organization (WHO) and respective country health departments. Amzat, Aminu, Kolo, Akinyele, Ogundairo and Danjibo (2020); and Agusi, Ijoma, Nnochin, Njoku-Achu, Nwosuh and Meseko (2020) had reported a low level of compliance to COVID-19 preventive protocols among the Nigerian public. Nnama-Okechukwu, Chukwu and Nkechukwu (2020) indicated no compliance in Anambra state, Ufuophu-Biri and Bebenimibo (2021) revealed partial compliance with the protocols in Delta State, while Okueso, Buraimo and Adekoya (2020) established a low level of adherence among the general public in Ogun State. In Kwara State, partial compliance was observed in private schools when the schools resumed in January and zero compliance was reported among the public school students (Akinyemi, 2021). Akinyemi further noted that control measures such as wearing of face-cover, hand-washing, hand sanitizing and social distancing were totally disregarded by the students, teachers and staff, particularly, in the schools. As for the tertiary education system, Okafor (2020) found a low level of compliance in Nigerian universities despite a considerable level of awareness about the coronavirus disease in the country. A similar result was reported by Adebawale, Adenubi, Adesokan, Oloye, Bankole, Fadipe, Ayo-Ajayi and Okinloye (2021) where a relatively low level of compliance was found among the veterinary medical students that participated in the study. People's non-compliance or low/partial compliance with the COVID-19 prevention protocols might be attributed to inadequate provisions for implementing the preventive protocols, poor perception of the mass media, religious belief, lack of survival means, thereby, encouraging the majority to forget about the existence of the disease pandemic and continue with their normal way of life. However, Galasso, Pons, Profeta, Becher, Brouard and Foucault (2020) have indicated that public compliance to health-promoting measures is central to any effort to contain infectious diseases; as compliance with the prevention protocols will help reduce risks of further spread. Matrajt and Leung (2020) found a strong positive link between periods of implementing and relaxing of social distancing in the US and increases or falls in positive cases, hospitalizations and deaths related to COVID-19.

Assessment of COVID-19 prevention compliance is very germane at this time as Nigeria has reopened its economy and is facing the risk of disease resurgence. Similarly, while some nations have relaxed some preventive protocols, the resurgence of COVID-19 in some areas means that countries may re-impose the restrictions. For example, a

more contagious Delta variant had been detected on July 8, 2021; 1,866 cases were recorded in just 2 weeks and a 154% increase from the 735 cases was recorded two weeks before the announcement (Asadu, 2021). The fast-spreading of Omicron variant in Nigeria is also currently forcing many countries to reintroduce social control measures such as movement restrictions and compulsory wearing of facemasks in the public; as it has currently spread to more than 50 countries (Kopechi, 2021). This calls for concern by the governments and public health experts, as the continuation of universities' teaching and learning processes could be disastrous should appropriate steps not be taken. Hence, the assessment of stakeholders' perception of compliance with COVID-19 prevention protocols in Universities in Kwara State, Nigeria.

Statement of the Problem

In reality, the Nigerian government had taken appropriate steps in containing the coronavirus disease pandemic. The government provided support to businesses and individual citizens, it made money transfer to the poor and vulnerable households, the CBN offered a credit of N3 million to some poor families impacted by the disease, the government distributed food to different households and provided media with adequate logistics to create awareness and disseminate information among the citizens about the COVID-19 pandemic. However, corruption and opaque accountability marred the whole effort put in by the government in responding to the pandemic. For instance, Uyi (2021) reported that the executive director of the Civil Society Legislative and Advocacy Centre (CISLAC) who is also Nigeria's representative for Transparency International, Auwal Rafsanjani raised an alarm that the NSCDC was unable to give an explanation on how the "3.4 billion loan collected by the Nigerian government from IMF was spent. In addition, Dixit, Ogundeji and Onwujekwe (2020) have observed that Nigeria is better in the diagnosis of new health risks (even though its sustainability is doubtful) through real-time surveillance, and laboratory capabilities to test the diseases but has limited capacity to respond to a sudden health risk; some of the policy responses have weaknesses and taken together, are not commensurate with the magnitude of the problem. When schools were about to be reopened, lecturers and non-academic staff of universities were against such a step, lamenting that they cannot risk their lives working in disease-prone environments.

In contrast, the university authorities announced that appropriate prevention protocols will be put in place and ensure its total compliance for the safety of everyone in the university environment. At the initial stage, hand-washing and sanitiser equipment were placed at the gate entrance of every university and all were compelled to do the needful. A nose mask was made compulsory to the extent that anyone without it is arrested by the securities. Signs of 'No face mask, no entry' were also placed in major entrance within the school environment. The universities administrators also constituted a COVID-19 committee at the administrative, faculty and departmental levels to ensure compliance to the prevention protocols and explore other means to reduce contraction among individuals in the university environment. It appears, however, that currently, there has been a drastic decline in compliance with these control measures; as many students and staff are now seen attending classes without using nose-masks or maintaining social distance and other protective protocols as stipulated by the NCDC are gradually dropped; except for few people who are complying.

Empirical studies are scarce on the COVID-19 prevention protocols in Nigeria and particularly, in Kwara State, especially, those conducted from the viewpoint of different stakeholders in the university education system. Therefore, the researchers deemed it imperative to embark on stakeholders' perception of the university's compliance with COVID-19 prevention protocols in Kwara State, Nigeria.

Objectives of the Study

The study determined the:

1. Level of compliance with COVID-19 classroom protocol as perceived by university stakeholders in Kwara State.
2. Level of compliance with COVID-19 face-covering and social distancing protocol as perceived by university stakeholders in Kwara State.
3. Level of compliance with COVID-19 disinfection and hygiene protocol as perceived by university stakeholders in Kwara State.
4. Level of University's compliance with COVID-19 events protocol as perceived by stakeholders in Kwara State.
5. Level of compliance with COVID-19 research conduct protocol as perceived by university stakeholders in Kwara State.

Research Questions

The following research questions emerged from the study's objectives:

1. What is the level of compliance with COVID-19 classroom protocol as perceived by university stakeholders in Kwara State?
2. What is the level of compliance with COVID-19 face-covering and social distancing protocol as perceived by university stakeholders in Kwara State?
3. What is the level of compliance with COVID-19 disinfection and hygiene protocol as perceived by university stakeholders in Kwara State?
4. What is the level of compliance with COVID-19 events protocol as perceived by university stakeholders in Kwara State?
5. What is the level of compliance with COVID-19 research conduct protocol as perceived by university stakeholders in Kwara State?

Methodology

This study is a quantitative research approach as it collected numerical information from the respondent through the use of a closed-structured questionnaire; thus, the descriptive survey design was used to determine the level of compliance with COVID-19 prevention protocols among university stakeholders in Kwara State. The population for this study comprised the students, academic and non-academic staff, business owners and students' parents from the six universities in Kwara State; the universities include University of Ilorin, Kwara State University, Landmark University, Al-Hikmah University, Summit University and Crown Hill University. There is no actual statistic for the identified population; thus, the population of this study is regarded as infinite or unknown. In this view, 400 respondents were selected and participated in this study as suggested by Rose, Spinks and Isabel (2015) for an unknown population. However, 395 responses of the respondents were valid and included in the data analysis. The respondents were selected using purposive and convenient sampling techniques. Simple random sampling technique was used to select three universities (University of Ilorin, Kwara State University and Al-Hikmah University) representing the Federal State and Private owned universities. Respondents from each of these universities were reached at their comfort zone within the university environment.

The instrument used for the study was adapted a self-structured questionnaire having reviewed the literature. The instrument was a self-structured close-ended questionnaire with demographic characteristics of the respondents in section A and the COVID-19 prevention compliance in section B. The items were divided into five phases, namely; classroom protocol; face-covering and social distancing protocol, disinfection and hygiene protocol, events and research conduct protocols; each segment has 5, 5, 5, 6 and 5 items respectively. It was patterned on five-point scoring format of strongly agree = 5; agree = 4; neutral = 3; disagree 2 and strongly disagree = 1. The main method of data analysis used was descriptive statistics of percentage to determine the level to which the universities adhere to the COVID-19 prevention protocols.

Results

The result of this study indicated that out of the 395 whose responses were analysed in this study, 245 (62.0%) were males; while 150 (38.0%) were females. This shows that the males were more represented in this study than their female counterparts. The stakeholders in this study include 127 (32.2%) of students, 90 (22.8%) of the academic staff of the university, 90 (28.8%) of non-academic staff of the university, 47 (11.9%) business owners within the university community and 41 (10.4%) students' parents were chosen for this study. Hence, students constituted the majority of respondents that took part in the study.

Research Question 1: What is the level of compliance with COVID-19 classroom protocol as perceived by university stakeholders in Kwara State?

Table 1: Mean, Standard Deviation and Percentage Distribution of Respondents' Perception of Compliance with COVID-19 Classroom Protocol

N	Items	SA	A	N	D	SD	Mean	SD
1	Students are making use of disinfectant materials to wipe their space before class	34 (8.6)	68 (17.2)	59 (14.9)	123 (31.1)	111 (28.1)	2.47	1.29
2	All lecturers and students use face-cover in the classroom	34 (8.6)	72 (18.2)	91 (23.0)	105 (26.6)	93 (23.5)	2.62	1.26
3	Eating is prohibited during class	32 (8.1)	91	104	111	57 (14.4)	2.82	1.17

			(23.0)	(26.3)	(28.1)			
4	Instructors deal with class of 20 or 30 students	46 (11.6)	52 (13.2)	94 (23.8)	135 (34.2)	68 (17.2)	2.68	1.23
5	Faculty that take a class field trip acquaint itself with the COVID protocols of the destination	28 (7.1)	86 (21.8)	109 (27.6)	103 (26.1)	69 (17.5)	2.75	1.18

Note: All values in parentheses () are in percentage

Table 1 shows that the level of compliance with the COVID-19 classroom protocol is low. This is indicated by the percentage distribution of the items skewed to the right side (between “Disagree = D” and “Strongly Disagree = SD” responses) of the table. This shows that many of the respondents believed that there is less compliance with COVID-19 classroom protocol in regards to the area of skewness. The mean values also indicated a similar level of compliance among the respondents as mean values of all the items were below the 3.0 benchmark mean value. It is thus inferred from the above that, level of compliance with the COVID-19 classroom protocol in universities in Kwara State is low.

Research Question 2: What is the level of compliance with COVID-19 face-covering and social distancing protocol as perceived by university stakeholders in Kwara State?

Table 2: Mean, Standard Deviation and Percentage Distribution of Respondents’ Perception of Compliance with COVID-19 Face-Covering and Social Distancing Protocol

N	Items	SA	A	N	D	SD	Mean	SD
1	Individuals are wearing face covers while in the university environment	26 (6.6)	88 (22.3)	80 (20.3)	118 (29.9)	83 (21.0)	2.64	1.22
2	Individuals do remove their face-cover only when they are alone in a single office or study room, residential room or are actively eating and drinking	27 (6.8)	85 (21.5)	67 (17.0)	117 (29.6)	99 (25.1)	2.55	1.26
3	Furniture are rearranged in common areas to maintain physical distancing	29 (7.3)	90 (22.8)	56 (14.2)	131 (33.2)	89 (22.5)	2.59	1.26
4	Staying out of crowded places and avoiding mass gatherings is complied with	40 (10.1)	62 (15.7)	69 (17.5)	130 (32.9)	94 (23.8)	2.55	1.28
5	Handshaking and other forms of physical contact are shunned	28 (7.1)	73 (18.5)	82 (20.8)	128 (32.4)	84 (21.3)	2.58	1.21

Note: All values in parentheses () are in percentage

Table 2 shows that the level of compliance with the COVID-19 face-covering and social distancing protocol is low. This is indicated by the percentage distribution of the items skewed to the right side (between “Disagree = D” and “Strongly Disagree = SD” responses) of the table. This shows that many of the respondents were of the view that there is less compliance with COVID-19 face-covering and social distancing protocol in regards to the area of skewness. The mean values also indicated a similar level of compliance among the respondents as mean values of all the items were below the 3.0 benchmark mean value. It is thus inferred from the above that, level of compliance with the COVID-19 face-covering and social distancing protocol in universities in Kwara State is low.

Research Question 3: What is the level of compliance with COVID-19 disinfection and cleaning protocol as perceived by university stakeholders in Kwara State?

Table 3: Mean, Standard Deviation and Percentage Distribution of Respondents’ Perception of Compliance with COVID-19 Disinfection and Hygiene Protocol

N	Items	SA	A	N	D	SD	Mean	SD
1	People wash their hands, face or blow their nose after touching anything in a public area	35 (8.9)	56 (14.2)	42 (10.6)	137 (34.7)	125 (31.6)	2.34	1.29

2	Disinfection stations with disinfectant wipes and hand sanitizers are available in classrooms, restrooms, communal areas such as lounges, lobbies and community kitchens	30 (7.6)	69 (17.5)	45 (11.4)	112 (28.4)	139 (35.2)	2.34	1.31
3	People wash their hands prior to eating	14 (3.5)	8 (2.0)	34 (8.6)	96 (24.3)	243 (61.5)	1.62	.97
4	People do always remember to cover their mouth and nose with a tissue when they cough or sneeze	26 (6.6)	98 (24.8)	108 (27.3)	94 (23.8)	69 (17.5)	2.79	1.18
5	There are routine cleaning of workspaces, classrooms and public spaces	32 (8.1)	86 (21.8)	83 (21.0)	102 (52.8)	92 (23.3)	2.66	1.27

Note: All values in parentheses () are in percentage

Table 3 shows that the level of compliance with the COVID-19 disinfection and hygiene protocol is low. This is indicated by the percentage distribution of the items skewed to the right side (between “Disagree = D” and “Strongly Disagree = SD” responses) of the table. This shows that many of the respondents were of the view that there is less compliance with COVID-19 disinfection and hygiene protocol in regards to the area of skewness. The mean values also indicated a similar level of compliance among the respondents as mean values of all the items were below the 3.0 benchmark mean value. It is thus inferred from the above that, level of compliance with the COVID-19 disinfection and hygiene protocol in universities Kwara State is low.

Research Question 4: What is the level of compliance with COVID-19 events protocol as perceived by university stakeholders in Kwara State?

Table 4: Mean, Standard Deviation and Percentage Distribution of Respondents’ Perception of Compliance with COVID-19 Events Protocol

N	Items	SA	A	N	D	SD	Mean	SD
1	All events’ participants follow the University COVID-19 protocols while on campus	37 (9.4)	112 (28.4)	80 (20.3)	108 (27.3)	58 (14.7)	2.90	1.23
2	Unvaccinated and not fully vaccinated attendees do refrain from mixing and mingling with others during events as much as possible	30 (7.6)	88 (22.3)	116 (29.4)	77 (19.5)	84 (21.3)	2.75	1.23
3	Events’ attendees do stay home if sick or exhibiting COVID-19 symptoms	37 (9.4)	106 (26.8)	100 (25.3)	96 (24.3)	56 (14.2)	2.93	1.20
4	Unvaccinated and not fully vaccinated attendees who have been in close contact with a person suspected or confirmed to have COVID-19 are asked to stay home and self-quarantine	29 (7.3)	121 (30.6)	101 (25.6)	96 (24.3)	48 (12.2)	2.97	1.15
5	Unvaccinated and not fully vaccinated people at higher risk for severe COVID-19 do consider additional protections or staying home	32 (8.1)	98 (24.8)	68 (17.2)	105 (26.6)	92 (23.3)	2.68	1.29
6	Provision for frequent hand-washing is made available at any event venue in the university	32 (8.1)	105 (26.6)	67 (17.0)	128 (32.4)	63 (15.9)	2.78	1.22

Note: All values in parentheses () are in percentage

Table 4 shows that the level of compliance with the COVID-19 events protocol is mild or partial. This is indicated by the percentage distribution of the items skewed to the middle side (between “Neutral = N” and “Agree = A” responses) of the table. This shows that many of the respondents were of the view that there is partial compliance with COVID-19 events protocol in regards to the area of skewness. The mean values also indicated a similar level of compliance among the respondents as mean values of one item is above 3.0 average values; while mean scores of the other five items were closer to the 3.0 benchmark mean value. It is thus inferred from the above that, level of compliance with the COVID-19 events protocol in universities Kwara State is partial.

Research Question 5: What is the level of compliance with COVID-19 research conduct protocol as perceived by university stakeholders in Kwara State?

Table 5: Mean, Standard Deviation and Percentage Distribution of Respondents’ Perception of Compliance with COVID-19 Research Conduct Protocol

N	Items	SA	A	N	D	SD	Mean	SD
1	In high occupancy labs, there is increase in the frequency of cleaning and disinfecting	44 (11.1)	84 (21.3)	85 (81.5)	111 (28.1)	71 (18.0)	2.79	1.27
2	Exchange of paper between participants and researchers is avoided unless there is a strongly justified need to use paper in the research	36 (9.1)	72 (18.2)	94 (23.8)	77 (19.5)	116 (29.4)	2.58	1.32
3	Very carefully outlined plans are put in place to ensure sanitization	36 (9.1)	68 (17.2)	107 (27.1)	84 (21.3)	100 (25.3)	2.64	1.27
4	There is consideration for the risk of contagion when the use and exchange of pens, digital devices, smart-phones, tablets are required for consent and/or research purposes	34 (8.6)	56 (14.2)	98 (24.8)	115 (29.1)	92 (23.3)	2.56	1.23
5	Electronic means is used to facilitate the consent process and data collection. For example, make use of email, online mechanisms such as Google Forms	23 (5.8)	118 (29.9)	63 (15.9)	101 (25.6)	90 (22.8)	2.70	1.27

Note: All values in parentheses () are in percentage

Table 5 shows that the level of compliance with the COVID-19 research conduct protocol is low. This is indicated by the percentage distribution of the items skewed to the right side (between “Disagree = D” and “Strongly Disagree = SD” responses) of the table. This shows that many of the respondents were of the view that there is less compliance with the COVID-19 research conduct protocol in regards to the area of skewness. The mean values also indicated a similar level of compliance among the respondents as mean values of all the items were below the 3.0 benchmark mean value. It is thus inferred from the above that, level of compliance with the COVID-19 research conduct protocol in universities in Kwara State is low.

Discussion

The first key finding of this study is that university stakeholders in Kwara State revealed that there is a low level of compliance with COVID-19 classroom, face-covering and social distancing, disinfection and hygiene and research conduct protocols; while partial compliance was found in research conduct protocol. This means that the lecturers and students in the universities can barely implement the COVID-19 prevention protocols. Implementing the protocol in the classroom environment might be difficult because of a large number of students that occupy each of the classes available. If the university administration decided to go by the NCDC recommendation of having between 20-30 students in a class, the facilities on the ground may not give room for that and if that is made possible, the manpower to carry out the teaching task is inadequate, except if the lecturers will be overworked. In such a scenario, other control measures such as not eating in the classroom while in the midst of a crowd cannot take effect; thus, the risk of spreading the virus among individuals in the university community. The finding is in line with the studies of Nnama-Okechukwu, Chukwu and Nkechukwu (2020); Agusi, Ijoma, Nnochin, Njoku-Achu,

Nwosuh and Meseko (2020) whose findings revealed a low level of compliance with the COVID-19 prevention protocols among the Nigerian populace. The similarity of this current finding with the previous studies, despite the difference in the categories of respondents and locale of the studies, could have resulted from the general belief system that many Nigerian people have about the COVID-19 disease that it is a foreign fabricated disease imported into the nation; and it is those who are coming in and out the country that are more susceptible to infections. Thus, students and lecturers exhibit a lackadaisical attitude to the prevention protocols and less adhere to them in the classroom.

Research question two answered revealed that there is a low level of compliance with COVID-19 face-covering and social distancing protocol in universities in Kwara State. This implies that many of the stakeholders in the university environment exhibit a low level of adherence to the prevention protocols stipulated by the University. In many Nigerian universities, it is not uncommon to see people removing their face-cover to the chin, immediately after security checkpoint; many re-use disposable nose masks rather than disposing it after the first use; while some do not understand the way a disposable nose mask should be placed. The so-called security personnel who are to enforce the implementation of the protocols were sometimes found in these same acts or not even using the face-cover at all. In terms of social distancing, the classroom set-up, motor pack operation, library system and other gathering do not encourage the implementation of social distancing; as many people were found maintaining close contact with one another without proper regard to the at least 3 feet from others (about an arms' length) guideline. The finding of this study is consistent with the studies by Nwakaego and Amosu (2021); Adebowale, Adenubi, Adesokan, Oloye, Bankole, Fadipe, Ayo-Ajayi and Okinloye (2021) whose findings showed that there is less compliance with the face-covering and social distancing protocol among the target respondents. On the contrary, Bruine de Bruin (2020) findings revealed that the undergraduate students of a university strictly adhered to the COVID-19 face-covering and social distancing protocol. Perhaps, because Bruine de Bruin study was conducted in a developed country that is proactive in addressing health-related risks or emergency contagious diseases, explained the difference with this current finding.

Another finding of this study is that there low level of compliance with COVID-19 disinfection and hygiene protocol in universities in Kwara State. The finding of this study suggests that individuals in the university environment were not practising personal hygiene and disinfection of their hands, body and surfaces. Initially, at the beginning of school reopening, many universities in Nigeria provided washing-hand basin, water, soap and sanitiser at the gate entrance, so that people can do the needful but a few months after, the practice was relaxed because of inadequate supply of those tools, equipment and materials. Normally, adequate provisions are supposed to be made to cover every destination in the university community, but the reverse is the case. Thus, it becomes difficult to proper implementation of personal and environmental hygiene within the university environment. In sub-Saharan Africa, Nwagbara, Osual, Chireshe, Bolarinwa, Saeed, Khuzwayo, et. al. (2021) has noted that people were non-compliant with the WHO coronavirus prevention protocols. The finding of this study is similar to the study of Okafor (2020) who reported a low level of compliance with COVID-19 prevention protocols. The finding of this study and the previous study are in agreement, perhaps, because they were both conducted in the university environment in a part of Nigeria. This finding suggests that maintaining personal and environmental hygiene in the Nigerian university environment could not be possible due to administrative and individuals' factors.

This study further revealed that there is a partial or moderate level of compliance with COVID-19 events protocol in the universities in Kwara State. The finding of this study implies that partial compliance to COVID-19 events prevention protocols was found among people in the university community. This might be because events usually involve the convergence of a multitude of people in a place such as a hall or event centre, thus, putting a measure in place to control the crowd and prevent them, to some extent, from mingling. Despite this, many people at different events were found violating the rules and regulations that guide the conduct of the event in preventing the spread of the disease. This might be because there is no sanction or punishment for violating the COVID-19 prevention protocol in the university environment. This current finding is in support of the study of Ufuophu-Biri and Bebenimbo (2021) whose findings revealed that there was partial compliance of the respondents to COVID-19 prevention protocols. The connection of this finding with that of the previous study could have been possible by the fact that they were both carried out in Nigerian people whose perception of disease could have been shaped by their traditional and religious beliefs.

It was also found that there is a low level of compliance with COVID-19 research conduct protocol in universities in Kwara State. This means that students, lecturers and research institutes in the university community exhibit a low level of adherence to the COVID-19 research conduct protocol. The individuals' negligence towards the research

conduct protocol could have resulted from their misconception and misinformation about the coronavirus disease. Many Nigerians believe that there is nothing like coronavirus in Nigeria, that social media are only fabricating stories to scare the citizens. It might also be because of the financial difficulty that prevents researchers from adopting alternative means of conducting research and lack of provision of an enabling environment to conduct research that will be free of risks of contracting and spreading coronavirus disease in the university system. The finding of this study is in tandem with the result of Amzat, Aminu, Kolo, Akinyele, Ogundairo and Danjibo (2020) which revealed that there was a low level of compliance to research protocols to prevent COVID-19 spread within the university environment. This finding suggests that the failure of university researchers to comply with the prevention protocols might jeopardise their effort in proffering a lasting solution to the coronavirus pandemic.

Conclusion

It is evident from the findings of this study that there is a low to the partial level of compliance to COVID-19 prevention protocols in universities in Kwara State. This suggests that there is poor compliance of university authorities to control, curtail and contain the spread of the COVID-19 disease in the university community; perhaps, due to different factors which further research may dwell into. If the tertiary education system that should be at the front burner of awareness creation and research findings to the pandemic is unable to effectively implement the prevention protocols; it means that many other sectors of the economy in Nigeria will likely exhibit zero compliance with the coronavirus prevention protocols. Therefore, there is a high tendency for an increase in the contract and spread of the disease among the populace.

Recommendations

Based on the findings of this study, it was recommended that:

1. The university authorities should provide an enabling classroom environment where the COVID-19 prevention protocols can be easily maintained and university lecturers should serve as models to their students by practising the prevention protocols while in the classroom and ensure that all students also comply with the protocols; thereby, containing the spread of the disease.
2. The university administrators should sustain the provision of necessary tools, equipment, materials, create an enabling environment and constitute functional COVID-19 committees for proper implementation of face-covering and social distancing, as well as, disinfection and cleaning protocols; thereby, making the university environment safe for teaching and learning.
3. The university administrator should sustain the set up of an ethical review committee who will be in charge of monitoring and ensuring that any kind of research to be conducted by either by the students, lecturers, faculties or departments and university visitors on research follows the COVID-19 prevention protocols as contained in the NCDC guidelines and advise the researchers accordingly on varying alternative means by which they can conduct their research; thereby, limiting the spread of the disease with the university environment.

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