

AWARENESS DISPOSITION OF COVID-19 PANDEMIC AMONG DIGITAL NATIVES IN UNIVERSITY OF NIGERIA, NSUKKA

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ABSTRACT

Objectives: *The study investigates the overall knowledge of Coronavirus pandemic among staff and students in University of Nigeria, Nsukka.*

Method: *Online questionnaire-based survey was utilized to collect data from 412 respondents. The questionnaire sought for the following data: demographics; general knowledge of Covid-19, ways the virus spread; sources of information on the pandemic; symptoms of the disease; preventive measure against the virus and treatment drugs/vaccines. The data collected were analyzed using percentages.*

Results: *Majority of the participants (82%) constitute students while 18% were staff indicating that students are more technology compliance. There was a good level of knowledge about Coronavirus, its symptoms and how it spread among the respondents, also majority of the participants (92.2%) indicated that social distancing is one of the most effective means of preventing the contraction of the disease and 67.2% agreed that there is no specific treatment for the disease. However, few participants (8%) agreed that there is nothing like Coronavirus.*

Conclusion: *there was a good level of knowledge on Coronavirus pandemic by majority of staff and students of university of Nigeria, Nsukka.*

Keywords: Awareness, Covid 19, Digital Natives, University.

INTRODUCTION

Presently, the whole world is passing through most difficult and heinous health challenge as a result of a deadly coronavirus disease. Coronavirus disease is a virus that infects humans, typically transmitting from person to person leading to an upper respiratory infection. According to World Health Organization (WHO), the disease belongs to the family of virus called severe acute respiratory syndrome corona virus 2 (SARS-CoV-2) (WHO 2020). This virus broke out in China in December 2019 where the first human cases of the disease were reported by WHO officials in Wuhan City. Deadly as the virus could be, within two months of the outbreak a total of 80,868 cases were confirmed and 3,101 deaths recorded in Chinese mainland as reported by National Health Commission of China. Apparently, on January 31, 2020 World Health

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Organization (WHO) declared this outbreak a “public health emergency of international concern” (Min et al., 2020).

There is a speculation that the virus is of animal origin which may have transmitted from animal to human as most of the patients during the outbreak have had a history of visit to local fish and wild animal market in Wuhan during the epidemic (Chan et al., 2020; Huang et al., 2020; Zhu et al., 2020). All available evidence to date suggests that the virus has a natural animal origin and is not a manipulated or constructed virus. However, other schools of thought alleged that the virus is a human made disease which may have leaked out of laboratory in Wuhan, China. Perhaps, SARS-CoV-2 is a laboratory construct created by china as a biological warfare against other countries of the world. The disease which spread mainly through respiratory droplets or close contact with the affected person has become a global concern as most countries are under lockdown and social distancing observations (Jaiswa & Saxena, 2000). The illness caused by SARS-CoV-2 was recently termed COVID-19 by the WHO, the new acronym derived from "coronavirus disease 2019 ". Within four months of the first confirmed case in Wuhan city, China in December 2019, COVID-19 has been on increase, spreading rapidly across the world and turning into pandemic affecting over 216 countries and claiming hundreds of thousand lives (WHO 2020). Torales (2020) posited that the stigma caused by the pandemic has imposed serious challenges to health sectors.

The global statistics of confirmed cases of COVID 19 and deaths recorded across affected countries as at 4th February, 2020, according to WHO is as follows;

- Total confirmed cases worldwide: 103,989,900
- Total deaths worldwide: 2,260,259 (WHO 2020)
- In Africa, the total confirmed cases and deaths are as Follows; Total confirmed cases: 2,616,892
- Total deaths: 4,473 (WHO 2020)
- In Nigeria, the total confirmed cases and deaths as reported by Nigeria Centre for Disease and Control are as follows;
- Total confirmed cases: 136,030
- Total deaths: 1,632
- Total recovered: 110,449
- Total active case: 23,949. (NCDC 2020)

The situation has become critically worrisome as cases are rapidly increasing in geometric progression on daily basis and there is no specific or approved vaccine for the treatment of the

disease presently. As a result of this rapid spread and no known vaccines for the treatments, all forms of economic, social gathering, educational activities etc. of the affected countries are on hold (lockdown). The only approved means of control for the pandemic remains the advice of medical experts which involves observation and maintenance of social distancing, washing of hands regularly with clean running water and detergents, wearing of face mask, avoid touching of the face, avoid touching of objects such as rails, sneezing on the elbow etc. the danger associated with the spread of the virus is that it spread from person to person through respiratory droplets (Ong et al., 2020).

In Nigeria, on the 23rd of March 2020, the National University Commission announced emergency one month break for all the Universities across the nation and vacation of students from campus as a means of curtailing and containing the spread of the virus following the first confirmed case of COVID 19 in Lagos in February 2020. The move was to observe social distancing and contribute in the containment of the virus. This situation has affected Nigerian University academic activities so much that there is urgent need to move from the conventional method of teaching to online method if the resources are available pending the containment of the virus.

However, notwithstanding the impact of COVID 19 on the academic activities of Nigeria universities, the awareness level of the staff and students who have vacated the university to various states across Nigeria remains unknown, with the help of technology the basic knowledge of the pandemic can be assessed among the staff and students who are digital natives with aim of providing data to the policy makers for the management of the pandemic.

Digital nativity is a term used to describe individuals who are conversant with technology in their early years and very competent in utilizing it to perform different functions. A digital native is one born or brought up in the era of digital technology and so are equipped with the right skills and competencies for the use of information and Communication Technology (ICT) facilities and resources (Tapscott, 1998; Sahin, 2009; Cut, 2017; Prensky, 2001). Wang, et al. (2014) opined that the current crops of students are characterized as digital natives. For example, the ease of access to information today has resulted from the emergence of ICT technologies (Akinbinu & Mashalla, 2014; Kaufman, 2015). Digital native are individuals who were born around year 2000 (currently 19 years and older). These classes of students have over the years applied technology in their daily activities, due to the emergence of the following innovative ICT gadgets and resources, such as portable digital devices iPod, smart phones, tablet devices, google Docs, YouTube, Social media and Cloud computing services. These tools have become an important part of these digital natives' daily activities as they are applied in handling various task of

different complexity such as information retrieval and sharing through smart technologies, connecting with people across the globe through social media platform over the Internet (Wang et al., 2014:637). Based on the national closure of schools and social distancing, the study was conducted through online platform in which the targeted participants involve staff and students who are ICT compliance.

Purpose of the Study

The objective of this study is to determine the awareness level of COVID-19 among university staff and students who are ICT compliance. Specifically, the study sought to identify:

- overall knowledge of Covid-19 among university staff and students
- ways in which the Coronavirus spread
- major sources of information on the Coronavirus pandemic
- symptoms that would make one think he/she has Coronavirus
- best practices for prevention of coronavirus
- treatment drugs/vaccines for coronavirus

MATERIALS AND METHODS

Study Design

The questionnaire was designed with reference to scientific literature and Nigerian government. The research questions were arranged together into six domains: general knowledge of coronavirus, how coronavirus spread, the major sources of information on the pandemic, the symptoms of coronavirus, prevention and treatments of the virus. The respondents had option of providing individual view/information that was not contained in the instrument. Based on the timeliness of the study, the validity of the items in the research questions was determined through interview with medical experts within University of Nigeria, Nsukka medical centre.

Sample

The population for the study was staff and students who are technology compliance.

Instrument and Procedure for Data Collection

The instrument for data collection was designed using Google form. An online survey platform was used to conduct an anonymous data collection. A standard invitation was sent with the link

to the survey to staff and students to participate through university based email and What Sapp group of different faculty, departments, centers and units within the university. This was sent on 9 April, 2020, and the survey remained open until 3 June, 2020. The instrument had two parts; part A is an open ended question used to elicit demographic information of the respondents such as the gender, Status (staff or students) and age. Part B was 60 item statements designed with checkbox that sought information on the knowledge of staff and students on COVID-19 pandemic

Data Analysis

The total number of responses were 412, staff $n=74$ (18%) and students $338=(82\%)$. The data generated were analyzed using percentages.

RESULTS

The demographic information of the participating staff and students was first examined in the study. Table 1 presents the demographic data of the respondents. It can be observed that staff constitutes 18% while students constitute 82%. Based on the gender, male participants were 44.2% while female were 55.8%. See table 1 for details.

Table 1 DESCRIPTIVE STATISTICS ON THE DEMOGRAPHIC INFORMATION OF PARTICIPATING STAFF AND STUDENTS			
Class		N	Percentage (%)
Status	Staff	74	18
	Students	338	82
Gender	Male	182	44.2
	Female	230	55.8
Age	16 -25	253	61.4
	26-41	132	32
	41 and above	27	6.6

DISCUSSION

The findings from this study revealed the distribution of the respondents with respect to status, gender and age. The study revealed that 82% of students participated for the study against 18% of

the university staff indicating that students are more technology complaints than staff. This is in line with the findings of Wang et al. (2014) that the current students are born in technology era. Similarly, the findings also revealed that 61.4% of the participants constituting 16 – 25 responded to the instrument indicating that young people are technology complaints (Prensky, 2001; Bakhor, 2016; Cut, 2017), 26 – 40 accounted for 32% while 41 and above constitute 6.6%. Furthermore, the finding also revealed 55.8% of the participants are female while 44.2 were male showing equity and gender equality

in technology utilization. This findings affirms (Dee, 2007; Olelewe, 2017) who asserted that gender bias and inequality are the root cause of gender differences in technology use.

The finding from research question 1 indicated that 58% of the participants agreed that coronavirus is a viral disease which can be contracted from droplets of an infected person or through infected surfaces. Similarly, majority of the participants (58.3%) believed that coronavirus was manufactured by China to dominate the world. Furthermore, few participants had a varied view on the virus, one of participants reported that coronavirus is a flu just like any other while some said it is a virus from unknown source. Another participant also reported than coronavirus is a scam by Nigerian government to loot money Table 2.

Table 2 PERCENTAGE RESPONSES OF STAFF AND STUDENTS ON THE KNOWLEDGE OF CORONAVIRUS				
S/N	Item Statement	Agree(Staff)	Agree(Students)	Agree(Total)
		n=74	n=338	n=412
1	It is a punishment from God because of our sins	15/119(3.6%)	104/119(10.5)	119(25.3%)
2	There is nothing like coronavirus, it is just a scam	5/33(1.2%)	28/33(6.8%)	33(8%)
3	It is a sign of the end of the age	12/64(3.4%)	50/64(12.1%)/	64(15.5%)
4	It is a disease that is transmitted from animals to human beings	60/164(14.6%)	104/164(25.2%)	164(39.8)
5	It is a viral disease	60/239(14.6)	179/239(43.4%)	239(58%)
7	It's a new strain of the SARS virus	68/148(16.5%)	80/148(19.4%)	148(35.9%)
8	It was sent by aliens from outer space to destroy the human race	33/81(8.%)	48/81(11.7%)	81(19.7%)
9	It is caused by 5G technology	25/58(6.1%)	33/58(8.0%)	58(14.1%)
10	It is manufactured by China to dominate the world	60/240(14.6%)	180/240(43.7%)	240(58.3)

Results presented in table 2 shows the general knowledge of staff and students on coronavirus disease. The findings of research question 2 indicated that majority of the participants agreed that coronavirus can be contracted through the following; Droplets of bodily fluids (e.g. saliva or mucus) from an infected person (88%); In close proximity to an infected person when he/she

coughs or sneezes (86.7%), and 85.4% agreed that the virus spread through physical contact with an infected person or surface. Furthermore, 15.3% of the participants agreed that coronavirus can be spread through 5G network Table 3.

Table 3				
PERCENTAGE RESPONSES OF STAFF AND STUDENTS ON HOW CORONAVIRUS SPREAD				
S/N	Item Statement	Agree(Staff)	Agree(Students)	Agree(Total)
		n=74	n=338	N=412
11	Physical contact with an infected person	70/352(17%)	282/352(68.4%)	352(85.4%)
12	Droplets of bodily fluids (e.g. saliva or mucus) from an infected person	72/350(15.8%)	278/350(72.2%)	350(88%)
13	Through 5G mobile networks	13/63(3.2%)	50/63(12.1%)	63(15.3%)
14	Touching infected surfaces and then touching the face	73/360(16.7%)	292/360(71.9%)	360(88.6%)
15	Through mosquito bites	0	4/4(1%)	4(1%)
16	In close proximity to an infected person when he/she coughs or sneezes	71/357(16.8%)	288/357(69.9%)	357(86.7%)
17	Through the air we breathe	12/54(2.9%)	42/54(10.2%)	54(13.1%)
18	Through sexual intercourse	7/51(1.7%)	44/51(10.7%)	51(12.4%)

Results presented in table 3 shows the awareness level of staff and students on how coronavirus spread. The finding on research question 3 presented in table 4 reveals that about 87.4% of the respondents agreed that media such as TV, Radio, newspaper and social media platform such as Facebook twitter and what Sapp among others are the major sources of information on coronavirus pandemic, however, 7% agreed that town crier is the source of the information. This finding corroborate the findings of (Villanti et al 2017; Olayinka & Philip, 2019; Lie et al 2019) that technology is the most efficient tool for information sharing Table 4.

Table 4				
PERCENTAGE RESPONSES OF STAFF AND STUDENTS ON SOURCES OF INFORMATION ON CORONAVIRUS				
S/N	Item Statement	Agree(Staff)	Agree(Students)	Agree(Total)
		n=74	n=338	N=412
19	WhatsApp group page	53/27(12.9%)	230/283(55.8%)	283(68.7%)
20	Twitter	45/128(10.9%)	83/128(20.2%)	128(31.1%)
21	Media (TV, Radio, Newspaper)	74/360(18%)	286/360(69.4%)	360(87.4%)
22	Nigeria Centre for Disease Control's (NCDC) official channels (social media platforms, website)	58/350(14.1%)	292/350(70.9%)	350(85.0%)
23	World Health Organization	44/289(10.7%)	245/289(59.4%)	289(70.1%)
24	Friends, relatives and colleagues	71/258(17.2%)	187/258(45.4%)	258(62.6%)
25	Instagram	10/109(2.4%)	99/109(24.1%)	109(26.5%)

26	Facebook	39/234(9.5%)	195/234(47.3%)	234(56.8%)
27	YouTube	11/124(2.9%)	112/124(27.2%)	124(30.1%)
28	Town crier	9/29(2.2%)	20/29(4.8%)	29(7.2%)

Results presented in table 4 shows the sources of information on coronavirus pandemic. The result presented in table 5 for research question 4 indicated that majority of the participants (93.7%) agreed that Fever, dry cough, tiredness, difficulty in breathing and shortness in breathing are major symptoms of coronavirus. This implies that the combination of these symptoms is a clear indication that one should turn in himself or herself for proper testing for the virus however, few participants agreed that aches, conjunctivitis and diarrhea are symptoms of coronavirus Table 5.

Table 5 PERCENTAGE RESPONSES OF STAFF AND STUDENTS ON SYMPTOMS OF CORONAVIRUS				
S/N	Item Statement	Agree(Staff) n=74	Agree(Students) n=338	Agree(Total) n=412
29	Fever, Dry cough and Tiredness	70/386(17%)	316/386(76.7%)	386(93.7)
30	Difficulty breathing or shortness of breath	71/383(17.2%)	312/383(75.8%)	383(93%)
31	Chest pain or pressure	64/253(15.5%)	189/253(45.9%)	253(61.4%)
32	Loss of speech or movement	8/29(1.9%)	21/29(5.1%)	29(7%)
33	Aches and pains	43/156(10.4%)	113/156(27.5%)	156(37.9%)
34	Sore throat	56/231(13.6%)	175/231(42.5%)	231(56.1%)
35	Diarrhea	2/94(0.5%)	92/94(22.3%)	94(22.8)
36	Conjunctivitis	7/54(1.7%)	47/54(11.4%)	54(13.1)
37	Headache	49/171(11.9%)	122/171(29.6%)	171(41.5%)
38	Loss of taste or smell	13/116(3.2%)	103/116(25.0%)	116(28.2%)
39	A rash on skin, or discoloration of fingers or toes	3/27(0.7%)	24/27(5.9%)	27(6.6%)

Results presented in table 5 shows the awareness level of staff and students on symptoms of coronavirus disease.

Similarly, the result presented on table 6 for research question 5 shows that over 91% of the participants agreed that the use of alcohol-based hand sanitizer, constant hand washing, social distancing and avoiding hand shaking or hugging are the most efficient way of preventing one from contracting the virus. This finding shows that observing personal hygiene and avoiding crowded places are good measure to prevent one from the disease Table 6.

Table 6
PERCENTAGE RESPONSES OF STAFF AND STUDENTS HOW TO PROTECT YOURSELF FROM CORONAVIRUS

S/N	Item Statement	Agree(Staff)	Agree(Students)	Agree(Total)
		n=74	n=338	n=412
40	There is nothing I can do to protect	4/18(1%)	14/18(3.4%)	18(4.4%)
41	Wash my hands with soap and water	74/376(17.9%)	302/376(73.3%)	376(91.2%)
42	Use alcohol-based hand sanitizer	70/378(17%)	308/378(74.7%)	378(91.7%)
43	Maintaining social distancing	66/380(16.0%)	314/380(76.2%)	380(92.2%)
44	Avoid handshake, hugging or physical contact with people generally	73/363(17.7%)	290/363(70.4%)	363(88.1)
45	Wear a face mask	69/367(16.8%)	298/367(72.3%)	367(89.1%)
46	Pray to God	44/302(11.3%)	258/302(66.0%)	302(77.3%)
47	Wear hand gloves	41/254(10%)	213/254(51.7%)	254(61.7%)
48	Shelter in a place (Self-isolation)	33/232(8%)	199/232(48.3%)	232(56.3%)
49	Use of drugs such as chloroquine	12/41(2.9%)	29/41(7.1%)	41(10%)

Results presented in table 6 shows the awareness level of staff and students on how to protect yourself from coronavirus disease. Furthermore, the result of the finding on the research question 6 as shown in table 7 indicated that majority of the respondents (67.2%) agreed that there is no specific treatment/drug known for curing the virus, however, few participants agreed that the use of antibiotics, chloroquine, hydroxychloroquine and vitamin C can be used to treat the virus. One participant also reported that ginger, garlic, turmeric, honey, and lemon can be used for the treatment of an infected person Table 7.

Table 7
PERCENTAGE RESPONSES OF STAFF AND STUDENTS ON TREATMENT DRUGS/VACCINES FOR CORONAVIRUS DISEASE

S/N	Item Statement	Agree(Staff)	Agree(Students)	Agree(Total)
		n=122	n=400	N=522
50	Antibiotics	10/73(2.4%)	63/73(15.3%)	73(17.7%)
51	Chloroquine	14/73(3.4%)	59/73(14.3%)	73(17.7%)
52	Failover	0	3/3(0.7%)	3(0.7%)
53	Hydroxychloroquine	11/58(2.7%)	47/58(11.4%)	58(14.1)
54	ChAdOx1 nCoV-19 by University of Oxford	2/9(0.5%)	7/9(1.7%)	9(2.2%)
55	Fusogenix DNA vaccine by Entos Pharmaceuticals	1/5(0.2%)	4/5(1%)	5(1.2%)
56	Japan flu drug	0	3/3(0.7%)	3(0.7%)
57	Nigerian Bitter cola	10/19(2.4%)	9/19(2.2%)	19(4.6%)
58	Vitamin C	39/127(9.5%)	88/127(21.3%)	127/(30.8%)
59	Treatment is based on the patient's clinical condition.	33/104(8%)	71/104(17.2%)	104(25.2%)

60	There is no specific treatment for disease caused by a novel coronavirus	67/277(16.3%)	210/277(50.9%)	277(67.2%)
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Results presented in table 7 shows the awareness level of staff and students on treatment drugs/vaccines for coronavirus disease.

Implication of the Findings

By identifying the awareness level of staff and students on Covid-19 pandemic, the government, institution management and policymakers in Nigeria can effectively respond to the pandemic by developing strategies for opening schools for academic activities without exposing the staff and students to the virus.

Limitations

The foremost limitation of this study was the utilization of online platform for data collection which affected the affected the population that participated in the study. This resulted from a large number of samples of the study residing at rural areas with poor internet connectivity. Secondly, the awareness level of the samples that are not ICT compliance was not recorded in the study.

CONCLUSION

Coronavirus is a novel virus that spread through the respiratory droplets and close proximity with an infected person or infected surfaces. Daily reports have also shown that the number of confirmed cases and death rate in Nigeria is on the increase which necessitated the indefinite closure of schools across the country. A great number of the respondents showed a good knowledge of coronavirus as result of mass education and sensitization campaign through different media platform.

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