



PERCEIVE HEALTH PRACTICES ON COVID-19 PANDEMIC AMONG UNDERGRADUATE STUDENTS OF TAI SOLARIN UNIVERSITY OF EDUCATION, IJAGUN, OGUN STATE



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Abstract: This study focused on perceive health practices on COVID-19 pandemic for healthful living among undergraduate students. Descriptive survey research was adopted. Twenty-six thousand, eight hundred and twenty-nine (26,829) was the total population out of which 1,800 was selected as respondents. Simple random sampling technique was adopted for the study. Self-structured questionnaire was used as instrument for data collection. The instrument was validated by experts in the field of Health Education and test-retest reliability was used and 0.89 established. Chi-square was used to analyze the data at 0.05 level of significant. Findings revealed that distancing from others, hand sanitisation and use of face masks are positive health practices on COVID-19 pandemic for healthful living among students of Tai Solarin University of education. It was recommended that continuous use of all variables tested would act as avenue to reduce the spread of COVID-19 pandemic among University students.

Keywords: COVID-19 pandemic, healthful living, health practices

Introduction

The last few years at most part of the world have witnessed the outbreak of COVID-19 disease (Corona Virus). The sudden outbreak which springed up from Wuhan, China in December, 2019 has become a major global health issues/crisis (World Health Organization, 2020). With COVID-19 outbreak in most countries of the world, human activities went into emergency and total lockdown cutting across all sectors including academic institutions with scientists around the world in a race to develop a vaccines, drugs and preventive measures against the virus to alleviate its symptoms.

Coronavirus disease is an infectious diseases caused by SARS-CoV-2 virus termed COVID-19 by the World Health Organization (www.who.int, 2020). International committee on Taxonomy of Viruses (ICTV) named the new virus causing the disease as severe acute respiratory coronavirus (SARS-CoV-2) on 11th February, 2020 (www.who.int/emergencies/diseases/novel-coronavirus-2019). The virus primarily spreads between infected person to people through close contact via aerosols and respiratory droplets that are exhaled when talking, breathing or otherwise exhaling as well as those produce from coughs or sneezes of an infected person (www.webmed.com, 2021). Recent research evaluated the survival of the COVID-19 virus on different surfaces and reported that the virus can remain viable for up to 72 h on plastic and stainless steel, up to four hours on copper and up to 24 h on cardboard (www.nih.gov, 2020).

SARS-Cov-2 viral disease is characterized by symptoms such as fever or chills, cough, difficulty breathing, fatigue, body aches, headache, loss of taste or smell, vomiting, diarrhea, running nose, nausea etc (Guan *et al* 2020). Most people infected with the virus will experience mild to moderate respiratory illness and recover while some people with certain medical conditions may become seriously ill and require medical attention, anyone can get sick with COVID-19 and become seriously ill or die at any age (World Health Organization, 2020).

The WHO (2020) announced that the outbreaks of the novel coronavirus has constituted a public health emergency of international concern and international community is mobilizing to find ways to significantly accelerate the development of intervention to slow down the outbreak in order to save lives and avert large scale crisis.

The pandemic has led to increased COVID-19 morbidity and mortality (Noor *et al.*, 2020). As of November 4, 2021,

COVID-19 pandemic has been recognized in 221 countries with a total of 249,3955,701 laboratory-tested and confirmed cases with 5,046,071 deaths (www.worldometers.info, 2021) and as at November 9, 2021 in Nigeria, it has recorded 212, 765 confirmed cases with 2906 deaths (COVID-19 ncdc.gov.ng, 2021).

In Nigeria, on March 19, 2020, in order to for-stall the spread of the disease, the government through the federal ministry of education ordered the closure of all schools at various levels. Getting students back to face to face education has remained the national priority throughout lockdown looking at the benefits that being in school brings to the physical and mental health of young people and as part of measures to control the pandemic in Nigerian Schools, the government of Nigeria in October, 2020 introduced a phased reopening of schools, commencing with final year students in tertiary institutions and junior and senior high schools to enable them prepare for their final examination while ensuring they observe COVID-19 safety protocol provided by Nigeria Center for Disease Control (NCDC), equally, the government has provided for public school, thermometer infrared to check the temperature. COVID-19 knowledge may increase significantly if health practices are implemented across academic institutions (Bao-Ling Zhong *et al.*, 2020).

Health Education and promotion are important components of disease prevention activities during and after outbreaks and health emergencies to communicate and engage quickly and effectively with the public and prevent infection, the best way to prevent and slow down COVID-19 transmission is to be well informed about the disease and how the virus spread, health promotion practices are needed for effective positive health behaviour that will reinforce skills needed to keep safe and healthy during and after the COVID-19 pandemic (Darren & Kurscheid, 2020). Health practices that are positive, engaging, entertaining are needed for effective change targeting students, practicing preventive measures such as hand-washing with soap and water, wearing of face-mask, social distancing, covering of the mouth and nose when coughing and avoiding touching of the face can prevent transmission of COVID-19 infection (WHO, 2020).

COVID-19 risks to universities students, staff and their surrounding communities are inevitably intertwined and complex as most students have the possibility of contacting the virus from other students who had probably come across other people who have the virus whom are asymptomatic. Although, the risk of severe health outcomes from COVID-19

in young adults without underlying health conditions is relatively low, but student go back home coming in close contact with older individuals such as parents, grandparents who are at greater risk of acquiring the disease from any infected person who are asymptomatic resulting in their illness or deaths. The increasing rates of COVID-19 among students necessitate health promotion practices because they needed to be aware of preventive measures, fake information and dangerous myths about COVID-19 in order to reduce its spread. Students need to be protected from transmission of COVID-19 in the community to keep school open, hence why this study investigated the perceive health practices on COVID-19 pandemic among undergraduate students of Tai Solarin University of Education for healthful living.

Materials and Methods

The study adopted the descriptive survey research design for the purpose of conducting an empirical investigation of health practices on COVID-19 pandemic among undergraduate students of Tai Solarin University of Education, Ijagun.

Quantitative data was collected through questionnaires. The questionnaires were based on variables of health practices which covers key points to reduce the risk of COVID-19 pandemic. The questionnaire was in two sections (A&B) – Section A contained items on respondent’s demographic data, while section B focused on compliance to health practices and measures towards reducing COVID-19 pandemic in the university. Using stratified sampling techniques, the university was stratified into 5 colleges, namely College of Science and Information Technology (COSIT), College of Special and Professional Education (COSPED), College of Vocational and Technical Education (COVTEd), College of Social and Management Sciences (COSMAS) and College of College of Humanities (COHUM) and each college was stratified into departments. The sample size comprises 1,800 students drawn proportionately across the five colleges of the universities. Proportionate sampling technique was used to pick respondents from each college, this sampling techniques is used to ensure a high degree of representatives of all the stratas in the population. 50% of the departments in each college were selected using simple random sampling method. A total of 1,890 questionnaires were distributed to the respondents, and only one thousand, eight hundred and twenty (1,800) were returned. The data generated from the study was analyzed using quantitative techniques. Descriptive statistics of frequency counts and percentages for the demographic data and Chi square to analyze the hypotheses.

Hypotheses

1. Face masking will not be a significant influence on COVID-19 pandemic among undergraduate students of Tai Solarin University of Education for healthful living
2. Regular hand-washing with soaps and the use of alcohol-based sanitizer will not be a significant influence on COVID-19 pandemic among undergraduate students of Tai Solarin University of Education for healthful living.
3. Physical distancing will not be a significant influence on COVID-19 pandemic among undergraduate students of Tai Solarin University of Education for healthful living.

Section A

This segment of the research deals with the frequency and percentage distribution of demographic data of the respondents.

The demographic composition of the respondents enumerated in Tables 1 above revealed that 55.6% of the respondents are females and 44.4% are male respondents, this implies that majority of the undergraduate students population are females.

The demographic composition of the respondents enumerated in Tables 2 revealed that 55.6% of the respondents are between 16 – 20 years, 33.3% are between 21 and 25 years and 11.1% are between 25 – 30 years. This implies that most undergraduate students of the University are between 16–20 years of age.

Table 1: Sex distribution of respondents

Gender	Frequency	Percentage (%)
Male	800	44.4%
Female	1000	55.6%
Total	1800	100%

Table 2: Age distribution of respondents

Age	Frequency	Percentage (%)
16-20 yrs	1000	55.6%
21-25 yrs	600	33.3%
25-30 yrs	200	11.1%
Total	1800	100%

Table 3: Class level distribution of respondents

Class (Leve)	Frequency	Percentage (%)
100	200	11.1%
200	300	16.7%
300	500	27.8%
400	800	44.4%
Total	1800	100%

The demographic composition of the respondents enumerated in Tables 3 revealed that 44.4% of the respondents are in 400 Level, 27.8% are in 300 Level, 16.7% are in 200 Level while 11.1% of the respondents are in 100 Level, this implies that majority of the respondents are in their final year on campus (400 Level).

Table 4: Table showing total No. of undergraduate students in each college of the university for 2020/2021 academic session

S/N	College	No. of Departments in each College	No. of selected Department	Total No. of students in each College (100-400 Level)	Total No. of students selected in each College	No. of respondents selected per College
1	College of Humanities	6	3	5404	2702	360
2	College of Science and Information Technology	6	3	5102	2551	342
3	College of Social and Management Sciences	4	2	6147	3074	414
4	College of Specialized and Professional Education	6	3	5855	2928	396
5	College of Vocational and Technical Education	4	2	4321	2161	288
Total		26	13	26,829	13416	1800

Source: Directorate of Academic Planning and Quality Assurance, Tai Solarin University of Education

The research hypotheses were tested using the frequency counts, percentages and inferential statistics of Chi-square (X^2) at 0.05 level of significance, this made the researcher to either reject or accept the hypotheses.

Hypotheses 1: Face masking will not significantly reduce the spread of COVID-19 pandemic among undergraduate students of Tai Solarin university of Education, Ijagun

Table 5: Chi-square on face masking and COVID-19 pandemic

S/N	SA	A	D	SD	Total
1	1100	590	50	60	1800
2	900	500	160	240	1800
3	1000	400	100	300	1800
4	1280	410	70	40	1800
5	890	450	170	290	1800
Total	5170	2350	550	930	9000
Average	1034	470	110	186	1800
Observed Responses	1034	470	110	186	1800
Freq.	1034	470	110	186	
%	57.4	26.1			
df			3		
Tab Val			7.815		
Cal Val			1178.38		
Remark			Sig.		
Total	1800	100			

X^2 calculated value = 1178.38; X^2 Table value = 7.815; P = 0.05; df = 3

Table 5 showed 1504 respondents representing 83.6% of the sampled population agreed with the statement under the hypotheses while 296 respondents representing 16.4% of the sampled population disagreed. Meanwhile, the chi square analysis showed a chi-Square calculated value of 1178.38 while the table value was 7.815 at a degree of freedom 3. The calculated Chi-square value was greater than the table value which showed a significant difference and thus the hypotheses was rejected. This means that the use of face-mask will significantly reduce the spread of COVID-19 pandemic among undergraduate students of Tai Solarin university of Education. This is in line with Leffler *et al.* (2020) findings which stated if compulsory mask mandate were implemented

in a country; it will have a large reduction effect on the control of respiratory infections and death rate, with a potential impact on gross domestic product of such country.

Hypotheses 2: Hand washing and the use of alcohol-based sanitizer will not significantly reduce the spread of COVID-19 pandemic among undergraduate students of Tai Solarin university of Education

Table 6: Chi-square on hand-washing with soap and the use of alcohol-based sanitizer and COVID-19 pandemic

S/N	SA	A	D	SD	Total
1	500	950	200	150	1800
2	1001	441	110	248	1800
3	840	875	41	44	1800
4	600	700	400	100	1800
5	1550	100	1000	50	1800
Total	4491	3066	851	592	9000
Average	898.2	613.2	170.2	118.5	1800
Observed Responses	898	613	170	119	1800
Freq.	898	613	170	119	
%	49.9	34.1			
df			3		
Tab Val			7.815		
Cal Val			922.7		
Remark			Sig.		
Total	1800	100			

X^2 calculated value = 922.7; X^2 Table value = 7.815; P = 0.05; df = 3

Table 6 showed 1511 respondents representing 83.9% of the sampled population agreed with the statements under the hypotheses while 289 respondents representing 16.1% of the sampled population disagreed. Meanwhile, the chi square analysis showed a Chi-square calculated value of 922.7 while the table value was 7.815 at a degree of freedom 3. The calculated Chi-square value was greater than the table value which showed a significant difference and thus the hypotheses was rejected. This means that hand-washing and the use of alcohol-based sanitizer will significantly reduce the spread of COVID-19 pandemic among undergraduate students of Tai Solarin University of Education.

This is in-line with Golin *et al.* (2020) findings that revealed that most alcohol-based hand sanitizers are efficient at inactivating engulfed virus such as coronavirus David

Goldberg (2020) in his findings supported that, to defend and forestall the spread of coronavirus infection, it is important to have 20 seconds of hand-washing with soap.

Hypotheses 3: Social/physical distancing will not statistically significantly limit the spread of COVID-19 pandemic among undergraduate students of Tai Solarin University of Education

Table 7: Chi-square on social distancing and COVID-19 pandemic

S/N	SA	A	D	SD	Total	
1	1600	91	80	29	1800	
2	1500	200	50	50	1800	
3	1300	400	30	70	1800	
4	900	600	200	100	1800	
5	950	450	300	100	1800	
Total	6250	1741	660	349	9000	
Average	1250	348.2	132	69.8	1800	
Observed	1250	348	132	70	1800	
Responses	Freq.	%	df	Tab Val	Cal Val	Remark
SA	1250	69.4				
A	348	19.3				
D	132	7.3	3	7.81	1990.9	Sig.
SD	70	3.9				
Total	1800	100				

X^2 calculated value = 1990.9; X^2 Table value = 7.815; $P = 0.05$; $df = 3$

Table 7 showed 1598 respondents representing 88.8% of the sampled population agreed with the statements under the hypotheses while 202 respondents representing 11.2% of the sampled population disagreed. Meanwhile, the chi square analysis showed a Chi-Square calculated value of 1990.9 while the table value was 7.815 at a degree of 3. The calculated Chi-square value was greater than the table value which showed a significant difference and thus the hypotheses was rejected. This means that social/physical distancing will significantly reduce the spread of COVID-19 pandemic among undergraduate students of Tai Solarin University of Education. This conforms with Jefferson *et al.* (2011) that pandemics of chronic respiratory viruses spread will dragged slowly through social distancing measures and isolation. Also Chu *et al.* (2020) findings supported that physical distancing of at least a metre is associated with a large change in the spread of COVID-19 infection.

Conclusion

Based on the findings of the study, the following conclusions were drawn:

1. Face masking will significantly reduce the spread of COVID-19 pandemic among undergraduate students of Tai Solarin university of Education.
2. Regular hand-washing with soap and the use of alcohol-based sanitizer will significantly reduce the spread of COVID-19 pandemic among undergraduate students of Tai Solarin University of Education.
3. Physical distancing will significantly reduce the spread of COVID-19 pandemic among undergraduate students of Tai Solarin University of Education.

Recommendations

Based on the conclusion of the study, the following recommendations were made:

1. Against the background of the pandemic, school authorities should combine efforts to ensure adequate training, sensitization, provision of protective equipment and materials, maintenance of social distancing and other

measures for reduction of the spread of the disease. Mask should fit well and be worn correctly and consistently

2. University authority should strengthen their efforts to collectively promote and protect institution safety and health, on that basis, accelerate efforts to implement the basic provisions of the provisions of the Education Act Cap laws of the Federation of Nigeria in order to build more healthy, sustainable, peaceful and inclusive school environment by putting in place proper infection prevention measures which should be reinforced in all units, centers and departments in the university, i.e. if possible, schools should use outdoor spaces for instruction
3. Institution parties should intensify efforts to jointly devise holistic approaches for joint consultations between students, employers and workers and/or their representatives to design, implement, monitor and evaluate best safety and health policies, measures and systems in ways that will capture divergent interests , positions and goals so that workers, students and all other people in the school can enjoy the highest attainable standard of physical and mental health.
4. Students and staff on campus should be made to go through screening test to identify infected people that will be used to identify those with or without symptoms who may be contagious before they have symptoms in order to slow the spread of the virus to others and university community members should be updated regularly through seminars, lectures, workshop etc on new ways of transmission of coronavirus disease and steps to take for protection in order to minimize the spread of transmissions such as the need to avoid congested places that could easily transmit the coronavirus infection.

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