



## Adherence of College of Education Students towards Prevention of COVID-19 Pandemic Disease

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### ABSTRACT

The brunt of COVID-19 is currently being felt in all spheres of human endeavor; it has affected the health, economy, education, religion, and overall well-being of all citizens. The study objectives are to investigate whether: (i) Kwara State College of Education students adhere to hand washing; (ii) adherence to receiving a vaccine for prevention of the COVID-19 pandemic; and (iii) to investigate if there is a difference between male and female students adherence towards preventive measures to COVID-19 pandemic. The descriptive research design of the survey type was employed for the study. The study population comprised all students of the College of Education Ilorin. A multi-stage sampling technique was used to select two hundred and fourteen (214) respondents who participated in the study. The study outcome indicated that students of the College of Education adhere to hand washing, not adherence to vaccine collection. There are differences in male and female adherence to preventive measures during the COVID-19 pandemic. Evidence realized from the study also recommends implication for the colleges of education authority to conduct a sensitization program for students on the benefits of adherence to all COVID-19 preventive measures designed by the Centre for Disease Control (CDC) and the World Health Organisation (WHO) on coronavirus disease to protect them as well as their family members against the coronavirus disease.

### INTRODUCTION

Three pathogenic Coronavirus outbreaks in the 21st century caused global economic progress and public health challenges. The first one was severe acute respiratory syndrome coronavirus disease in 2012, the second one started in 2012, which is Middle East respiratory syndrome coronavirus, and the third one started in 2019, which is severe acute respiratory syndrome coronavirus. Up till today, there is no specific treatment for the Coronavirus disease. In early 2020, a case of novel Coronavirus was established in Wuhan, China. Within a short period, the confirmed cases increased, and those tainted developed fever, cough, and even severe respiratory conditions, drawing the Chinese government's attention. Researchers discovered that 27 of the 41 established cases had a direct link with a seafood seller in the Wuhan market. Electron microscopy has shown that the virus has an envelope, and the particles are oval with a diameter of about 60–140 nm. Whole-genome sequencing analysis has shown that the virus belongs to a new type of Coronavirus of the  $\beta$  genus (Feng et al., 2020).

COVID-19, reported in late December 2019 from China (Wuhan), is a shocking pandemic for humans (Agegnehu et al., 2021; Sileshi et al., 2021). The disease was declared the sixth emergency health problem of international concern. Hence, this outbreak constitutes a public health risk through the international spread of the disease and requires a coordinated international response (Shewasinad et al., 2021).

The outbreak of the COVID-19 pandemic in 2019 across the globe wreaked havoc and left many people shaken and filled with uncertainty about the future. According to Worldometer (2021), COVID-19 has affected 219 countries and territories, and the pandemic caused adverse effects on social relationships, health, the economy, and education (Manyane, 2020; Marongwe & Kariyana, 2021) argued that more than any other pandemic that was experienced before. The World Health Organisation (WHO) warned the nations to brace for this novel disease which WHO declared a worldwide pandemic. According to (The Mail & Guardian 2020; Marongwe & Kariyana, 2021) pointed out that the pandemic was spreading faster like fire, pushing infections and deaths to soar daily in exponential numbers. People were left numb, and most businesses and activities stood at a standstill. Schools and universities across the globe were closed, leaving teachers, lecturers, and students mesmerized and confused.

At the end of 2019, the world was shocked by the news about the presence of a new virus named coronavirus disease or better known as COVID-19. The news began with the discovery of one of the residents living in the Hubei area, China. The 55-year-old person is thought to be the first victim to be exposed to the coronavirus disease. The incident occurred in November 2019 (Kurniawan et al., 2021). Coronavirus disease 2019 (COVID-19) is an emerging respiratory infection known to cause illnesses ranging from the common cold to severe acute respiratory syndrome. COVID-19 spreads from human to human through droplets and direct contact. Increased dissemination of information through the internet is associated with increased transmission of information from all geographical regions and disciplines regarding the recognition of COVID-19 (Shewasinad et al., 2021; Lai et al., 2020).

The COVID-19 pandemic reached sub-Saharan Africa by the end of February 2020 after it was declared a Public Health Emergency of International Concern by the World Health Organization (WHO) on 30 January 2020 (Shewasinad et al., 2021). With high levels of poverty and generally fragile health systems, sub-Saharan Africa, including Nigeria, has been facing an intricate regional COVID-19 epidemic and could also become a difficult task to control the virus reservoir, from where COVID-19 may be reintroduced to other regions that might have achieved control (Sileshi et al., 2021). The Federal Ministry of Health has confirmed a coronavirus disease (COVID-19) case in Lagos State, Nigeria. The first case was established on the 27th of February 2020 in Nigeria. All Nigerians should care for their health and maintain good respiratory and hand hygiene to protect themselves and their families. There is a need to follow preventive measures such as regular washing of hands and maintaining 5 feet distance between you and the person coughing or sneezing. Persons with persistent cough or sneezing should stay home or keep a social distance, but not mix in-crowd. You should cover your mouth and nose with a tissue and dispose of it immediately or stay home if you feel unwell with symptoms such as cough, fever, and breathing difficulty (Relief web, 2020).

Considering the burden created by the COVID-19 pandemic disease and the absence of effective treatment, authorities across the globe have designed various mitigation strategies to combat the spread of COVID-19 (Azene et al., 2020). Accordingly, the WHO recommends reducing contact with infected and non-infected persons, isolating and early diagnosing cases, and suitable personal and environmental measures are the only means to limit the spread of the disease (WHO, 2020a). As part of these measures, face mask use, hand washing, physical distancing, cough etiquette, and avoidance of crowded places are recommended (Amgain et al., 2020).

Although, adherence to defensive procedures is the only means to tackle the virus. Reluctance to do so has been reported to be a significant problem everywhere (Agegnehu et al., 2021; Sileshi et al., 2021). Also, the community's risk perception and poor adherence to COVID-19 mitigation measures still need to be addressed. A significant proportion of communities did not perceive the virus as a risk to health. People also think it originated from a laboratory, primarily causes mild symptoms, and affects the elderly (Kakemam et al., 2020). Conversely, there has yet to be an effective treatment for COVID-19 infection. Henceforth, adherence to COVID-19 preventive and control measures is the only option to stop its spread and minimize its disastrous impact on developing nations, so the knowledge and behavior changes are pillars to engage with preventive measures (Sileshi et al., 2021).

Ikemefuna et al. (2021) pointed out that the pandemic has negatively impacted business, education, health, and tourism globally. During the first wave, all the schools in Nigeria were closed, and this seriously affected students in tertiary institutions who had their semesters suspended due to the pandemic. While some countries have changed to online learning, many higher institutions in Nigeria lack virtual online educational materials for online teaching. Vaccines are the best hope for ending the pandemic to prevent COVID-19. To bring a vaccine-preventable disease under control, herd immunity is usually pursued. Herd immunity refers to enough people having immunity to infectious diseases through previous infection or vaccination. Herd immunity is the goal of vaccinations, and the more contagious the disease, the higher the threshold required for herd immunity. For example, the herd immunity required to control measles in a population is 95%. Scientists have estimated that 70–90% immunity is essential to provide herd immunity for COVID-19. Vaccine hesitancy refers to a delay in acceptance or refusal of vaccination despite the availability of vaccination services. Vaccine hesitancy may be driven by fear of the unknown, especially in Nigeria. Vaccine hesitancy could pose a severe problem for COVID-19 prevention and control. COVID-19 vaccine hesitancy is high among staff and students in a Nigerian university and is significantly influenced by marital status, respondents' age, and Christian denominational affiliation.

Globally, 40% of households need materials for washing hands, and just 19% of people wash their hands with soap after defecating. Similarly, 43% of healthcare facilities need basic materials for hand washing at points of care, and 47% of schools in less developed countries need more materials for hand washing. That means 900 million learners need the materials to wash their hands with soap and water while in school. People cannot hope to practice proper hygiene, and their health is at risk. Hand washing is the first line of defense against COVID-19 and prevents the spreading of other diseases that burden human health. The COVID-19 pandemic has highlighted on a proper scale the critical role of hand hygiene in preventing and reducing the spread of diseases. J-pal (2021) posited that the World Health Organization (WHO), national health agencies, and other experts had issued guidance on preventive measures against COVID-19, which include practicing social distancing, wearing a mask, and handwashing frequently. However, following this guidance is only sometimes feasible for everyone. As of September 14, 2021, the novel Coronavirus 2019 (COVID-19) has spread to every region of the world, infecting more than 224 million people and killing more than 4.6 million. No cure has yet been fully authorized, and the availability of preventive vaccines varies significantly by geography. As vaccines become available, increasing their uptake will be critical for stemming the pandemic.

Africa News (2021) argues that despite the assurances given by government and health officers on the safety and importance of the COVID-19 vaccine. The major factors responsible for the reluctance of people to receive the COVID-19 vaccine are a lack of trust in a government program and the non-challenge attitude of people. Most people are not ready to take the vaccine because leadership has been a major challenge and people tend not to trust the system in place; people feel that what the government is giving as vaccines may not be the same thing others are receiving. That is the typical person's understanding which is one of the significant factors despite the campaigns and enlightenment. Experts say vaccine hesitancy will threaten the COVID-19 response and prevent Nigeria from achieving herd immunity. People are always resistant to change on something new, but with time, people will see the benefit of taking the vaccine so that they protect themselves and, by extension, protect their families,

WHO reports that the best way to prevent and slow down the transmission of COVID-19 is to accurately and widely inform the public about the disease, the causes, the mode of transmission, and simple prevention methods such as hand washing with soap or use of hand sanitizers, maintaining social distance and staying home to remain protected from the infection (WHO, 2020b; Atkure et al., 2021). On the other hand, poor hand hygiene practices, overcrowding, and close physical contact like handshaking contribute to the fast virus spread within a brief period (FMOH, 2020). Implementing personal hygiene and public health interventions, especially in priority high-risk groups, is necessary to curb the spread of Coronavirus. Therefore, enhancing the community's knowledge and practice of COVID-19 symptoms & prevention methods will significantly contribute to reducing the outbreak's spread (Habib et al., 2021; Abuya et al., 2020).

The COVID-19 vaccines currently available are highly effective at preventing COVID-19 and severe illness, even in those who get COVID-19. The combination of vaccination and following the CDC's recommendations to protect the school community is the best protection from COVID-19. Proof of vaccination is required for all students in the 2021/2022 academic year. The vaccine approved for use by the WHO is acceptable. To meet this requirement, students receiving a vaccine that requires two doses must receive both doses. Students are strongly encouraged to complete the total doses of the appropriate vaccine at least two weeks before arriving on campus. Students need to present evidence of vaccination records at the point of registration. All students must have completed their COVID-19 vaccine or get an exemption letter before the resumption of the second semester. Students who fail to do so may be subject to disciplinary action, registration holds, or other restrictions to support community health (Lewis & Clark, 2021). The objectives of the study were as follows: (i) to investigate whether Kwara State College of Education Students Adherence to Hand Wash for Prevention of the COVID-19 Pandemic; (ii) to examine if Kwara State College of Education student's adherence to receive the vaccine for prevention of COVID-19 pandemic; and (iii) to investigate if there is difference between male and female students of the College of Education on adherence towards preventive measures of COVID-19 pandemic.

## **RESEARCH METHOD**

### **Study Area**

The study was conducted at the Kwara State College of Education, Ilorin. The College was established in September 1974 by the Kwara State Government. The College is located in the ancient city of Ilorin, the capital of Kwara State. The Kwara State College of Education, Ilorin, which has as its Motto: "Education for Excellence," was established

in September 1974. It was then christened the School of Education, and administered by the Kwara State College of Technology, Ilorin. The school started with only thirteen academic staff. Some of the school of Basic Studies staff were drawn to teach the academic subject contents. In contrast, those of the school of education taught other pedagogical aspects of the Nigeria Certificate in Education (NCE) courses. Such a method of training NCE teachers later proved unsatisfactory.

Consequently, the school was changed to an advanced Teachers' College in order to reflect the true purpose for which it was established. It was also given an advisory body. By 1976, the College was utterly detached from its parent body, Kwara State College of Technology Ilorin, with its Edict and Governing Council. In 1978, its name was changed to Kwara State College of Education to be cited in Oro, and its Edict was accordingly amended. It was also affiliated with the Ahmed Bello University, Zaira, for the moderation of examinations and certification. The College was later moved to a temporary site along Ilorin Lagos Road, where it occupied the former Federal Government College premises, pending the time its permanent structure would be erected as its permanent site in Oro. However, the then Governor of Kwara State, Alhaji Adamu Attah, declared in his convocation address to the College in 1980 that the College would remain in Ilorin while another one was to be established in Oro. It was that the College was affiliated with the University of Ilorin.

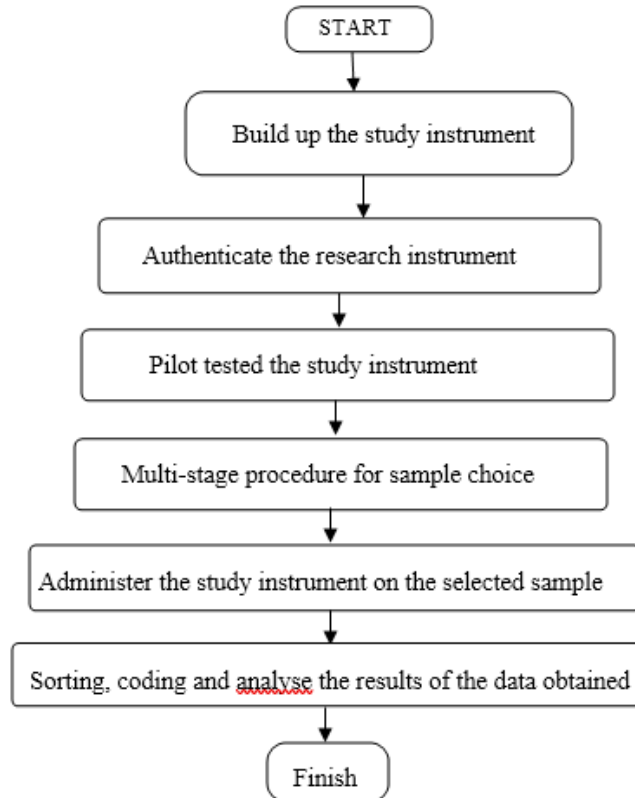
### **Participants**

The descriptive research design of the survey type was used for the study. A multi-stage sampling procedure was used for the study. Stage One, a simple random sampling technique, was used to select three out of six existing schools in the study area. The schools of Sciences, the School of Vocational Studies, and the School of Art and Social Studies were selected for the study. Stage two, the purposive sampling technique, was used to pick one department with the highest student enrolment in the selected schools. Department of Integrated Sciences, Department of Business Education, and Department of Social Studies were chosen for the study. In stage three, a proportionate sampling technique was used to choose 20% of the total population of the students in the selected departments. Of the 20% of respondents selected from the department of Integrated Science, 74, 81 respondents selected from the department of Business Education, and 59 respondents selected from the department of Social studies, representing 20% respectively. Stage four, the convenience sampling procedure, was used to choose respondents who participated in the study from the selected departments for the study during their departmental lectures and the respondents partake in the study were two hundred and fourteen (214).

### **Instrument, Validity, and Reliability Procedure**

The research instrument used for data collection was a questionnaire. Three experts in the related field validated the questionnaire used for the study. The instrument used for the study was a researcher-developed questionnaire validated by three experts from the related field. The reliability of the instrument was established using a test-retest method. Twenty copies of the questionnaire were administered to twenty respondents from College of Education students Oro who was not part of the study. Two weeks later, the instrument was re-administered, and Pearson product Moment Correlation was used to ascertain the instrument's reliability. The result of the correlation coefficient obtained was  $r = 0.87$ . The result was high enough, which made the research instrument reliable for the

study. The researcher administered the instrument with the help of the three trained research assistants. Non- parametric statistics of chi-square and t-test were used to analyze the result of stated hypotheses at 0.05 level of significance. Non-parametric statistics of Chi-square and t-test were used to test the hypotheses developed for the study at 0.05 level of significance using IBM/Statistical Package for Social Science version 25.0 version. The steps used for the research process can be seen in Figure 1.



**Figure 1.** The flow chart shows the study process

The researcher developed a questionnaire that was used as an instrument for the study. The data received from the quantitative instrument used for the study were subjected to analysis, and results obtained from the procedure became information (Printha, 2022) pointed out that a questionnaire is a list of questions or items used to gather data from respondents about their attitudes, experiences, or opinions. The questionnaire can be used to collect quantitative and/or qualitative information. Questionnaires are commonly used in market research and the social and health sciences. For example, a company may ask for feedback about a recent customer service experience, or psychology researchers may investigate health risk perceptions using questionnaires.

Saul (2018) argued that a questionnaire is a research instrument consisting of a series of questions to gather information from respondents. Questionnaires are written interviews. They can be carried out face to face, by telephone, computer or post. Data can be collected relatively quickly because the researcher would not need to be present when the questionnaires are completed. This is useful for large populations when interviews would be impractical. Questionnaires can effectively measure significant subjects' behavior, attitudes, preferences, opinions, and intentions more cheaply and quickly than other methods. Often a questionnaire uses both open and closed questions to collect data. This is beneficial as it means quantitative and qualitative data can be obtained.

Flores (2022) opined that a questionnaire is a research tool featuring a series of questions used to collect valuable information from respondents. These instruments include either written or oral questions and comprise an interview-style format. Questionnaires may be qualitative or quantitative and can be conducted online, by phone, on paper, or face-to-face. Questions do not necessarily have to be administered with a researcher present. Questionnaires feature open or closed questions and sometimes employ a mixture of both. Open-ended questions enable respondents to answer in their own words in as much or as little detail as they desire. Closed questions provide respondents with a series of predetermined responses they can choose from. The importance of questionnaires in research is immense, helping researchers gain relevant information quickly and effectively. Before creating a questionnaire for your study, you should first understand the meaning of questionnaires and their advantages and disadvantages.

## RESULTS AND DISCUSSION

The results obtained from the three hypotheses developed for the study are shown in Table 1, Table 2, and Table 3.

**H<sub>01</sub>:** Kwara State College of Education students do not significantly adhere to hand washes to prevent the COVID-19 pandemic.

**Table 1.** Adherence to hand washes for prevention of the COVID-19 pandemic.

S/N	ITEMS	SA	A	D	SD	ROW TOTAL	DF	CAL. P.VAL. VAL.	REMARKS
1	After exchanging a handshake with a colleague, I wash my hands with soap and water.	108 (50.5%)	92 (43.0%)	10 (4.7%)	4 (1.9%)	214			
2	I wash my hands with soap and water after touching an object.	86 (40.2%)	109 (50.9%)	13 (6.1%)	6 (2.8%)	214			
3	I wash my hands with soap and water before touching my mouth, eyes, nose, or ear.	75 (35.0%)	108 (50.5%)	27 (12.6%)	4 (1.9%)	214	9	44.54 0.000	H <sub>01</sub> Rejected
4	I wash my hands with soap and water several times a day.	53 (24.8%)	115 (53.7%)	40 (18.7%)	6 (2.8%)	214			
<b>Column Total</b>		<b>322</b>	<b>424</b>	<b>90</b>	<b>20</b>	<b>856</b>			

@0.05 alpha level

Table 1 shows the calculated chi-square value of 44.54 and the p.value of 0.000 with the degree of freedom nine at 0.05 alpha level. Since the p.value of 0.000 is less than 0.05 alpha level, the null hypothesis is not accepted. This implies that Kwara State College of Education students adhere to hand washing to prevent the COVID-19 pandemic.

**H<sub>02</sub>:** Kwara State College of Education students do not significantly adhere to receiving the vaccine for prevention of the COVID-19 pandemic

**Table 2.** Adherence to receiving the vaccine for prevention of the COVID-19 pandemic.

S/N	ITEMS	SA	A	D	SD	ROW TOTAL	DF	CAL. P.VAL. VAL.	REMARKS
5	I received the COVID-19 vaccine to get protection against coronavirus infection.	18 (8.4%)	29 (13.6%)	88 (41.1%)	79 (36.9%)	214			
6	I collected the COVID-19 vaccine because it is scientifically proven.	0 (0.0%)	7 (3.3%)	125 (58.4%)	82 (38.3%)	214			
7	The COVID-19 vaccine is not dangerous to my health.	10 (4.7%)	114 (53.3%)	68 (31.8%)	22 (10.3%)	214	9	199.0 0.73	H <sub>02</sub> Accepted
8	The COVID-19 vaccine is safe and boosts my immunity against coronavirus disease.	31 (14.5%)	39 (18.2%)	80 (37.4%)	64 (29.9%)	214			
<b>Column Total</b>		<b>59</b>	<b>189</b>	<b>361</b>	<b>247</b>	<b>856</b>			

@0.05 alpha level

Table 2 shows the calculated chi-square value of 199.00 and the p.value of 0.73 with the degree of freedom nine at 0.05 alpha level. Since the p.value of 0.73 is greater than the 0.05 alpha level, null hypothesis two is accepted. This means that Kwara State College of Education students are not adhering to receiving the vaccine to prevent the COVID-19 pandemic.

**H<sub>03</sub>:** There is no significant difference between males and females of the College of education on adherence to preventive measures for the COVID-19 pandemic

**Table 3.** The summary of the t-test shows male and female adherence toward preventive measures for the COVID-19 pandemic

Respondents	No	X	$\sigma$	df	t-Cal	p.value	Decision
Male	61	2.00	0.74	213	35.12	0.000	H <sub>03</sub> Rejected
Female	153	1.93	0.92				

P≤0.05

Table 3 revealed the calculated t-value of 35.12 and p.value of 0.000 with 213 degrees of freedom @ 0.05 alpha level. Since the p.value of 0.000 < 0.05 alpha level, thus,



hypothesis three is not accepted. This implies a difference between male and female students of the College of Education in adherence to preventive measures for the COVID-19 pandemic.

### **Results of Findings**

The result of the first hypothesis tested for the study showed that Kwara State College of Education students adhere to hand washing for the prevention of the COVID-19 pandemic. The result of the finding is divergent from the study by Shewasinad et al. (2021) among 683 respondents selected from communities in North Shoa Zone, Ethiopia. The study's outcome revealed that the community members' overall adherence level towards the recommended safety measures of COVID-19 was relatively low (44.1%). It is vital to consider the community's self-efficacy, perceived benefits, perceived barriers and perceived susceptibility to COVID-19 to improve its adherence to the recommended safety measures for COVID-19 pandemic diseases. Also, the result of the findings is not in line with the result of the study conducted by Silesh et al. (2021) among 2751 respondents selected for the study in the Oromia Regional State of Ethiopia to assess the level of adherence to COVID-19 preventive measures and associated factors in the study area.

The result indicated low adherence to COVID-19 preventive measures (8,3%). The associated factors were age, level of education, occupation, and knowledge. The result of this finding supports the message provided by the World Health Organisation (2020c) which argued that hand washing with soap remains one of our best defenses against the virus, along with other public health measures such as maintaining physical distance, avoiding crowded places, practicing cough etiquette and wearing a mask wherever recommended. 'Hand washing has always been one of the most effective ways of keeping diseases at bay. It is a simple act that pays dividends when it comes to keeping ourselves healthy and safe. Hand washing is also one of the key cornerstones of COVID-19 prevention. Now more than ever, as we embrace the new normal and live with COVID-19, hand hygiene needs to become an integral part of our daily routine and lives as we live through this pandemic and beyond to protect us from diseases.' With COVID-19 transmission mainly spreading between people through direct, indirect (through contaminated objects or surfaces), or close contact with infected people via mouth and nose secretions, washing hands with soap and running water is critical. To stop the spread of COVID-19 and other COVID-appropriate behaviors, hand washing at regular intervals is a must after coughing or sneezing, when caring for the sick, after using the toilet, before eating, while preparing food, and after handling animals or animal waste. Hand washing after touching common surfaces such as doorknobs or handles or after one comes back home from visiting a public place will keep us and others around us safe (Joseph, 2020).

The result of the second hypothesis tested for the study showed that Kwara State College of Education students are not adhering to receiving a vaccine for the prevention of the COVID-19 pandemic disease. The result of the finding agrees with the result of the cross-sectional survey using online goggles carried out by Ikemefuna et al. (2021) among 349 students and staff via different Whatsapp groups. The outcome measures were the proportion of persons willing to be vaccinated, vaccine hesitancy rates, and reasons for the hesitancy. The results show that 34.7% of the university community is willing to receive the COVID-19 vaccine when it is offered to them. It was discovered that marital

status, age, and Christian denomination affiliation influenced respondents' perception of COVID-19 vaccination.

Gender, occupation, vaccination experience, awareness of COVID-19, and previous symptoms of COVID-19 did not significantly influence respondents' willingness to be vaccinated. Also, the result of this finding corroborates with the outcomes findings of Tamam et al. (2021), who conducted an online, cross-sectional survey among 3,100 participants in Jordan on the acceptability of COVID-19 vaccines. The result indicated that Jordan's public acceptability of COVID-19 vaccines was fairly low (37.4%). Males (OR = 2.488, 95CI% = 1.834–3.375,  $p < .001$ ) and those who took the seasonal influenza vaccine (OR = 2.036, 95CI% = 1.306–3.174,  $p = .002$ ) were more likely to accept COVID-19 vaccines. Similarly, participants who believed that vaccines are generally safe (OR = 9.258, 95CI% = 6.020–14.237,  $p < .001$ ) and those who were willing to pay for vaccines (OR = 19.223, 95CI% = 13.665–27.042,  $p < .001$ ), once available, were more likely to accept the COVID-19 vaccines. However, those above 35 years old (OR = 0.376, 95CI% = 0.233–0.607,  $p < .001$ ) and employed participants (OR = 0.542, 95CI% = 0.405–0.725,  $p < .001$ ) were less likely to accept the COVID-19 vaccines. Moreover, participants who believed that there was a conspiracy behind COVID-19 (OR = 0.502, 95CI% = 0.356–0.709,  $p < .001$ ) and those who do not trust any source of information on COVID-19 vaccines (OR = 0.271, 95CI% = 0.183–0.400,  $p < .001$ ), were less likely to have acceptance towards them. The most trusted sources of information on COVID-19 vaccines were healthcare providers. Systematic interventions are required by public health authorities to reduce the levels of vaccine hesitancy and improve their acceptance. We believe these results, and precisely the low acceptability rate, is alarming to Jordanian health authorities. It should stir further studies on the root causes and the need for awareness campaigns. These interventions should revive the trust in national health authorities and structure awareness campaigns that offer transparent information about the safety and efficacy of the vaccines and the technology utilized in their production.

The result of the third hypothesis tested for the study showed that there is a difference between male and female students of Kwara State College of Education in adherence to preventive measures for the COVID-19 pandemic disease. This finding corroborates the result of an online survey conducted by Dwipayanti et al. (2021) among Indonesian citizens 18 years and above to examine the current hand hygiene behavior during the COVID-19 pandemic, post-pandemic behavior, and the relationship between behavior, psychosocial and contextual factors. The result showed that 82.3% of female respondents and 73.3% of male respondents reported hand washing eight times or more per day during the COVID-19 pandemic. Participants who perceived themselves as at higher risk of contracting COVID-19 will perceive hand washing as an effective preventive measure, perceive a more supportive norm for the practice, and notice barriers in access to hand washing facilities were more likely to engage in hand washing hygiene practice more frequently during the pandemic.

## CONCLUSION

The implication of the finding exposed that many people were affected by the outbreak of COVID-19 pandemic disease and students inclusive. The outcome of the study indicated that students of Kwara State College of Education Ilorin adhere to hand washing as a measure to prevent COVID-19, students of this institution do not adherence to vaccination as a preventive measure to COVID-19 and more of the female students in the study area adherence to COVID-19 preventive measures than their male colleagues.

This research study is limited to the College of Education Ilorin students, and others of the College of Education in Kwara State were not included in the study. The future researcher can conduct a similar study on other students from Colleges of Education in Kwara State to prop up and reinforce this research study. The researcher recommends that the school authority should conduct a sensitization program for students on the benefits of adherence to all COVID-19 preventive measures as designed by the Centre for Disease Control (CDC) and the World Health Organisation (WHO) coronavirus disease to protect them as well as their family members against coronavirus disease. The government should formulate a policy that will put sanctions on students who failed to present their evidence of receiving the COVID-19 vaccine certificate for the 2021/2022 second semester academic session.

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