

Relevance of adopting the Covid-19 Protocols to prevent the spread of Monkey pox among students of Kano State Universities and Colleges of Education

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Abstract

Following the confirmation of corona virus in Nigeria, federal government developed many measures to tackle its outbreak, among the measures was imposing general curfew in the country. Later, after lifting of the curfew, some protocols were introduced as preventive measures. As the pandemic of corona virus is moving out, another viral disease called Monkey pox sneaks in and distracts world's attention. This study intends to examine the perception of universities and colleges of education students owned by Kano state of the relevance of adopting the Covid - 19 protocols to prevent the spread of Monkey pox. Survey research design is adopted for the study; simple random sampling technique is used in selecting 378 participants from the study area. Questionnaire was the main instrument use to collect the data from the respondents. Descriptive statistics is used to analyze the data. The outcome of the study reveals that, differences exist in the perception of both the categories of the students. Part of the contribution of the study is that if developed additional justification on the perceptual differences among different categories of students. It is recommended that, government and or stake holders should consider the perceptions and interest of students whenever a new policy is forthcoming.

Keywords: Corona virus, Covid – 19 protocols, Monkey pox

1. INTRODUCTION

The CORONA VIRUS, a virus-caused pandemic, has affected the entire world. United Nations (2020) claims that the pandemic affects every element of society and would inevitably cause societal unrest. The virus was initially discovered in Wuhan, China, in December 2019, and it has since spread to practically every continent. According to Olapegba et-el (2020), the condition is brought on by severe acute respiratory syndrome, a new and dangerous strain of the Corona virus. According to Ebohon et - el (2021), the sickness is disseminated by aerosolized zoonotic droplets, and individuals can become infected by coming into close contact with those who are coughing or sneezing heavily while suffering from the virus. In Nigeria, the sickness was diagnosed on February 27, 2020, in Lagos, when an Italian civilian became an index case. According to WHO (2020), numerous nations have shown that COVID 19 transmission from one person to another can be managed. Their actions saved lives and gave the rest of the globe more

time and assurance to get ready for the coming of any disease that was similar. Many nations have improved their ability to identify and treat patients; hospitals now have the requisite personnel and resources.

To stop the virus from spreading further and to help manage the outbreak, infection control measures were implemented. Total lockdown of all human social and public activities was one of the control measures. According to Adekenle (2020), the epidemic has caused a complete shutdown of most human activity in different sections of the earth. According to the UN (2020), the epidemic affects every element of society and will inevitably cause social disruption, making it difficult or impossible to work. When someone comes into contact with an infected individual or touches something they have touched, the virus spreads quickly. According to NCDC (2020), Covid 19 spreads through droplets produced when an infected individual sneezes or coughs. The investigation also shows that a person can contract the virus by coming into close contact with an infected individual or by touching something that person has touched. Another viral disease has recently interrupt the attention of many countries, as immediately as it emerged, there have been cases of Monkey pox in more than ninety three (93) countries in the world, this attracts public attention and fear for possibly another public health problem.

Monkey pox is a viral disease that produces pox – like lesion on the skin. The history of Monkey pox can be traced back to (1958) but the professional diagnose was carried out in early 1970s (chaes 2022). Abdulmuetzel, (2022), see the transmission of Monkey pox mainly direct animal contact via bodily fluids, blood aerosol, or infected lesions, he further says, it can be through human –to-human close contact or respiratory secretions. According to WHO (2022), the most recent increase is primarily caused by close physical contact between men. Education is a sector where learners meet in close contact and learn mostly under common roofing, thus, transmission in such environment can be rapid, to control the spread, powerful measures should be taken among which is to stop the coming together of the students.

On March 19, 2020, the Nigerian government issued an order ordering the closure of all schools at all levels. This action was designed to stop the spread of the disease among the pupils. According to Adekun (2020), one of the key solutions for controlling the epidemic crisis is the complete lockdown of schools at all levels around the globe. As a result of the lockdown and the necessity to contain COVID-19, the educational sector has unintentionally shifted away from the traditional classroom environment, according to Ali (2020). A growing number of higher institutions have stopped offering classes in the traditional classroom format. National Survey on School Resumption during Covid 19 pandemic (2020), puts in their report that, there were consensus on impact of prolonged school closure on school dropout rates, learners academic achievement, number of out of school children and the effectiveness of remote learning during the period of school closure. In his analysis on the effectiveness of virtual learning during COVID 19 lockdown, Ebonhenet el (2021), opined that, electronic learning has not serve the purpose due to the difficulties with internet connection among other problems. On October, 12th 2020 federal government of Nigeria reopened schools after six month of closure to curtail the spread of the COVID - 19 pandemic, key to this reopening was the decline in the number of daily infection cases in the country. One important point to discuss here is that, does this means schools will be closed whenever emerge a public health problem that breeds rapidly in a crowd ?, just as the abrupt emergence of Monkey pox.

Educational institutions after reopening were set to begin academic activities delivery against the pandemic of Corona Virus; the protection of students and educational facilities is very essential. The schools were advised to take some precautionary measures to minimize the risk of contracting and spreading the Virus. To curtail the transmission of Corona Virus among staff and students, school management in line with the government policy enjoys each and individual person to abide by the protocols of Covid – 19. Some of the protocols are;

- Wearing face mark
- Washing hands regularly under a running water
- Observing social distance
- Using hand elbow to cover mouth while coughing or sneezing
- Avoiding hand shaking with others, e t c.

Some of these protocols are similar to those recommended to prevent one from contacting with monkey pox. WHO (2022), American Society for Microbiology ASM (2022), Chales (2022) and other writers, opined that Monkey pox is transmitted to human through close contact with an infected person or animal, or with material contaminated with the virus, they summarily recommend the following as preventive measures to prevent Monkey pox outbreak:

- Avoid contact with infected animals
- Wash your hands frequently with soap and water
- Avoid contact with people who may be infected with the virus
- Wear a mask that covers your mouth and nose when around others

People do not see the same thing when looking to an image, meet at a gathering or observing another thing. Every characteristics of an individual influences what he sees, hears, tests, touches and smells.

It is against this back ground that this study examines the perception of students of Kano state owned universities and colleges of education on the relevance of adopting the Covid – 19 protocols to prevent the spread of Monkey pox.

2. LITERATURE REVIEW

Concept of Disease

Disease is a specific abnormal condition that doesn't have an immediate external cause and that has an adverse effect on an organism's overall structure or function. It's common knowledge that diseases are medical illnesses with recognizable indications and symptoms. According to Williams (2016), a disease is any adverse variation from an organism's normal structural state that is typically accompanied by a set of symptoms and differs in nature from physical injury. Before assessing the state of sickness, it is necessary to understand the normal condition of an organism, and aberrant circumstances exhibit certain signs and symptoms.

Diseases are categorized in to two, non-contagious (non communicable) and contagious (communicable). Non contagious diseases are those that cannot be transmitted from one person to another or the probability of transmitting the disease to another person is low. William (2016) believes that non communicable diseases generally are long lasting and progress slowly. Meaning they don't normally infect another person just by contact.

A contagious disease is one that spreads quickly from one person to another due to the transmission of a pathogen, such as bacteria or viruses. Diseases that cause

illness and can be transmitted are referred to as communicable diseases. There are multiple ways that some contagious diseases can spread, such as the corona virus. So what is the Corona virus?

Corona Virus

The corona virus family, which causes respiratory illnesses, was initially discovered in 1937 by Aleem (2020). It was given the name "corona virus" because, when viewed under a microscope, it resembles a crown. The condition it causes, Corona virus disease 2019, is brought on by a new strain of the corona viruses (Covid 19) Corona is represented by Co, viruses by VT, and diseases by D. The world's health, education, and economy have all been greatly harmed by the Covid-19 epidemic, according to Nwangwu (2020). Despite the virus's current modest rate of devouring spread, the pandemic's effects have led to uncertainty and may even result in project failures.

The severe acute respiratory syndrome (SARS) virus and some kinds of the common cold are all members of the same virus family, which includes the corona virus. According to (Bras 2020), the virus has never been discovered in humans. Many academics and authors claimed that Wuhan, China, had the first instance of the Corona virus reported in December 2019.

Causes of Corona Virus

Covid 19 is caused by infection with the severe acute respiratory syndrome corona virus. Keni, et al (2020) argues that "corona virus disease is highly contagious disease caused by severe acute respiratory syndrome corona virus 'this is the common cause of the disease suggested by most writers.

Spread of the Virus

Corona Viruses are often found in bats, cats and Camels, most researchers mention bats only. The viruses live in but do not infect the animals, though Aaron (2020), believes that the virus cause illness to both humans and animals. Sometimes these viruses then spread to different animal species. The virus may change as they transfer to other species. Eventually the virus can jump to from animal species and begins to infect humans. Steve. The virus originated in animals, probably bats, and was transmitted to other animals before crossing into humans. NCDC (2020), writes that, most initial transmission appeared to be Zoonotic, person-to-person transmission is the most common mode of transmission currently. The virus which was identified in Wuhan, China with only one person but has rapidly spread to all regions of the world. Infected saliva, respiratory secretions, or their respiratory droplets, which are emitted when an infected person coughs, sneezes, talks, or sings, can be spread by direct, indirect, or close contact with infected people (WHO 2020).

The virus can also be spread by touching a surface that an infected person coughed or sneezed on. Both indoor and outdoor crowd can get people infected due to their closeness where droplets and other agents can be recurrent. Other modes like urine and feces of an infected person can also transmit the virus. Simply puts, people can catch Corona Virus from other people who have the virus. NCDC (2020), writes that corona viruses can be transmitted from person to person, usually after close contact with an infected patient. The spread is most likely when there is contact within (02) meters, and the closer a person is to the infected person the closer the risk of getting infected. UNICEF (2020) in its report mentions that the virus was identified in Wuhan,

China, in December 2019. By the end of March 2020, 205 countries had reported cases of Covid – 19.

Symptoms of infection

The incubation period of Covid -19 is between 2 – 14 days. This is the time between when a person gets infected and when they start showing symptoms. If a person remains well 14 days after contact with someone with confirmed Covid – 19, it is unlikely that they have been infected. (NCDC 2020). This shows that a person in close contact with infected person is vulnerable to be infected but is not automatic.

Many writers have highlighted the symptoms of the virus which include fever, dry cough, a running nose, fatigue and difficulty in breathing.

Prevention

Covid - 19 transfers from one person to another can be managed and prevented, according to reports from a number of nations. Awareness on the part of the individual is among the most crucial preventive actions. According to Olapegbaet, el (2020), understanding the infection pathways and the appropriate safeguards to take are necessary for controlling the pandemic. Keep up with any developments regarding the Covid 19 outbreak.

Regularly and thoroughly clean your hands with sanitizer

Maintain at least 1 meter (3feet) distance between yourself and anybody who is coughing or sneezing

Avoid touching eyes, nose, and mouth

Make sure that you and people around you follow good respiratory hygiene

Stay home if you feel unwell, if you have fever, cough, and difficulty breathing, seek medical attention.

Monkey pox

A double-stranded enclosed DNA virus that causes monkey pox is a zoonotic virus. According to abdulmuez et al. (2022), monkey pox is primarily spread through direct animal contact with bodily fluids including blood, aerosol, or an infected lesion. As there is no specific vaccine or medication to treat monkey pox, it is managed as a syndrome by controlling symptoms and reducing or eliminating sequelae. Central African nations are endemic for the monkey pox virus. Despite the fact that the first cases of monkey pox were found in monkeys maintained in the Democratic Republic of the Congo for study.

Symptoms

The Nigeria Center for Disease Control (2022) states that the clinical manifestation of the illness occurs in two phases, with the first invasive phase lasting for the first five days and characterized by fever, lymphadenopathy (swelling of the lymph nodes), back pain, severe headaches, myalgia (muscle aches), and severe asthenia as the primary symptoms (lack of energy). One to three days following the commencement of a fever, a maculopapular rash (skin lesions with flat bases) develops into tiny fluid-filled blisters (vesicles), which turn into pus-filled pustules (pustules) and subsequently crust over after ten days.

It can take up to three weeks to resolve everything. Virtually all patients would have lesions on their faces, 75% would have lesions on their hands and feet, and 30% would have genital involvement. The majority of cases concern the eyes, 20% of

which have lesions on the eyelid and some on the cornea. In 70% of patients, oral mucosa lesions are seen. In contrast to other infections with the Orthopox virus, the lymph node swelling might appear before the rash, and the number of skin lesions can range greatly from a few to thousands.

The symptoms of monkey pox often last between two and three weeks. Children are more likely to experience severe cases and to die from them; case fatalities have ranged from 1% to 10%, with instances in the Congo Basin having a higher case fatality rate. Furthermore, the accurate Cleveland Clinic (2022) stated that monkey pox rash can be uncomfortable and that the spots on it alter over time before scabbing and peeling off. It may take a few days to a few weeks before you experience any symptoms after exposure, however the following were the main symptoms of the virus, especially when it reached a severe level. Early indications of monkey pox include symptoms similar to the flu, such as:

- Fever.
- Chills.
- Headache.
- Muscle aches.
- Fatigue.
- Swollen lymph nodes.

According to McCollum & Damon (2014) the number of lesions on a given patient may range from a few to thousands. Lesions are often noted in the oral cavity and can cause difficulties with drinking and eating. Figures 1, 2 & 3 below presented an exclusive pictures of patients suffering from Monkey pox.



Figure 1: A patient with Monkey pox showing characteristic lesions adapted from McCollum & Damon, 2014.



Figure 2: Hand palm of Monkey pox Patient from Nigeria adapted from Are, 2022.



Figure 3: A case Photo of Monkey pox lesions from an endemic Monkey pox Country adapted from Rao; Mena & Peterson (2022) & World Health Organization (2022).

Transmission

Human contact with infected rodents is the major way that monkey pox spreads, although it can also happen when you come into contact with an infected person's skin. Monkey pox can pass from animal to human, however it is less prevalent, according to WHO (2022). Person to person spread (transmission) happens when you come into contact with an infected person's sores, scabs, respiratory droplets, or oral fluid. Typically through intimate or close circumstances.

3. METHODOLOGY

Descriptive Survey is the design for this research, it is adopted to allow the researchers administer questionnaire to many respondents at the same time through which information can be gathered. To gather information from the respondents at a period, Adamu (2015) maintains that survey is better implied.

Population of the study

Kano state at the time of conducting this research has two universities Yusuf Maitama Sule University, Kano state university of science and technology, and two colleges of educations, Sa'adatu Rimi college of Education and, Kano state college of Education and Preliminary Studies. The population is 48, 685, it includes males and females students at all the levels, schools and faculties most of the population is Hausa Fulani and largely Muslims.

Sampling and sampling technique

The samples of this study are 378 students and were drawn from the total population of the study is 48, 685. The samples are male and female students from each faculty and school of the universities and colleges of education owned by Kano state government. Simple random sampling technique was used to select 378 students as a sample. This is in line with the guide lines developed by Research Advisors (2006), which gave 378 as a sample size estimate for such a population. The selection of the sample to the study was proportionate.

Validation ad reliability of the Instrument

The face and content validity of the instrument were determined by opinions of experts in test and measurement from the universities and colleges of educations owned by Kano state. The reliability of the instrument was established by employing test re test.

A co efficient of reliability $r = 0.85$ were obtained. This indicates the consistency of the instrument.

Method of data collection

Since the population is large, as it covers all the students of Kano state universities and colleges of education, the researchers employed some assistants and participated in administering, explaining and collecting of the instrument from the respondents. Only the researchers and their assistants participated in administering and collecting back.

Method of analysis

The researchers used t – test statistics in analyzing the data, this is because the work want to determine whether difference exists between different samples, in such case t – test statistics for independent sample is better applied.

Testing hypotheses

1 There is no any difference between universities and colleges of Education students in their perceptions of the relevance of Covid 19 protocols in preventing the spread of Monkey Pox

2 There is no any gender difference in the perception of the relevance of the Covid 19 protocols in preventing the spread of Monkey pox among universities and colleges of education students.

4. RESULT

H₀₁: There is no any difference between universities and colleges of Education students in their perceptions of the relevance of Covid 19 protocols in preventing the spread of Monkey pox.

Table 1 T-test for universities and colleges of Education students

Institutions	N	Mean	SD	Df	t. Cal	P	Decision
Universities	215	48.4233	4.99087				
				376	3.935	0.000	Significant
Colleges	163	46.5092	4.24463				

Table 1 presents independent t-test for the difference in their perceptions of the relevance of Covid 19 protocols in preventing the spread of Monkey pox between universities and colleges of Education students. The result showed that a significant difference was found ($t(376) = 3.935$ $p = .000$), indicating that in their perceptions of the relevance of Covid 19 protocols in preventing the spread of Monkey Pox between universities and colleges of Education students. However, descriptive statistics showed that university students have higher perceptions of the relevance of Covid 19 protocols in preventing the spread of Monkey Pox than colleges counterpart ($M = 48.4233$ and 46.5092 ; $SD = 4.99087$ and 4.24463). Therefore, the hypothesis which states that there is no any difference between universities and colleges of Education students in their perceptions of the relevance of Covid 19 protocols in preventing the spread of Monkey Pox is therefore, rejected and alternative hypothesis accepted and thus concluded that there is some difference between universities and colleges of Education students in

their perceptions of the relevance of Covid 19 protocols in preventing the spread of Monkey Pox.

H₀₂: There is no any gender difference in the perception of the relevance of the Covid 19 protocols in preventing the spread of Monkey pox among universities students and colleges of education students.

Table 2 T-test for gender difference in the perception of the relevance of the Covid 19

Gender	N	Mean	SD	Df	t. Cal	P	Decision
Male	240	46.7042	4.64289				
				376	4.948	0.000	Significant
Female	138	49.1522	4.61021				

Table 2 presents independent t-test for the gender difference in the perception of the relevance of the Covid 19 protocols in preventing the spread of Monkey pox among universities and colleges of education students. The result showed that a significant difference was found ($t(376) = 4.948$ $p = .000$), indicating that there is differences in the perception of the relevance of the Covid 19 protocols in preventing the spread of Monkey pox among universities students and colleges of education students between male and female students. However, descriptive statistics showed that female students have higher perceptions of the relevance of Covid 19 protocols in preventing the spread of monkey pox than colleges counterpart ($M = 45.7$ and 49.15 ; $SD = 4.64$ and 4.61). Therefore, the hypothesis which states that there is no any gender difference in the perception of the relevance of the Covid 19 protocols in preventing the spread of Monkey pox among universities and colleges of education students is therefore, rejected and alternative hypothesis accepted and thus concluded that there is gender difference in the perception of the relevance of the Covid 19 protocols in preventing the spread of Monkey pox among universities students and colleges of education students.

Recommendation

Students should be sensitized on the need to abide by any law or policy introduce for their protection against any viral disease.

Government should make sure that students are properly guided on how to protect themselves from being infected especially in a crowd.

Government and or stake holders should make sure that, the perception and interest of students is considered whenever a policy is forth coming.

A measure to prevent the spread of Monkey pox should be diversified to cater for the perceptual differences of the students.

5. CONCLUSION

This study examines the perception of the students of Kano state universities and colleges of education. In order to achieve this, a total of 420 questionnaires were distributed out of which 385 students responded. The study used descriptive statistic, where t – test for independent variables was applied to test the hypotheses. The finding illustrates that there is institutional differences between the students of universities and colleges of education in their perception of the relevance of adopting Covid 19 protocols to prevent the spread of Monkey pox. There is a gender difference in the perception of universities and colleges of education students on the relevance of

adopting Covid -19 protocol to prevent the spread of Monkey pox. By implication, the result shows that, most of the students are aware of the Monkey pox, and they perceived that the Covid – 19 protocols are effective measures in preventing the spread of corona virus but differ in if the same measures can be adopted to prevent the spread of monkey pox. This shows that every characteristics of individual tends to affect his perception to a given stimuli.

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