

***Awareness on nature and Preventive Measures of Coronavirus (COVID-19)
among Teachers in Zaria Metropolis***

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Abstract

The study investigated teachers' awareness on nature and preventive measure of COVID-19 in Zaria metropolis. Two (2) objectives and research questions were formulated to guide the study. The population was comprised of all Government Secondary School teachers in Zaria metropolis, that is, Sabon Gari and Zaria LGA of Kaduna State. A simple random sampling technique was used to select the schools that participated in the study. Sample size of one hundred and thirty-eight (138) teachers was used for the study and data collected were analysed using descriptive statistics. A well-constructed and self-developed questionnaire titled "Teachers Awareness and Preventive Measures on COVID-19 Questionnaire (TAPMCQ)" was used to get the desired information from the Teachers. The results showed that the teachers were highly aware of the nature of COVID-19 and had high knowledge of the preventive measures. Based on the findings of this study, it was recommended that counsellors should stage awareness campaigns to sustain and improve the level of awareness and knowledge of preventive measures against the pandemic.

Keywords: Awareness, coronavirus, COVID-19, Preventive, Teachers

Introduction

Counselling is a process of helping individuals or group of people to gain self-understanding in order to be themselves. The task of counselling is to give the 'client' an opportunity to explore, discover and clarify ways of living in a more satisfying and resourceful manner. According to Feltham and Dryden (1993), counselling is a service sought by people in distress or in some degree of confusion who wish to discuss and resolve these in a relationship which is more disciplined and confidential than friendship, and perhaps less stigmatizing than helping relationships offered in traditional medical or psychiatric settings. The implication of the above definitions is

that counselling services can be used to help people in addressing their challenges through active participation.

In addition, students and young people are global citizens, powerful agents of change and the next generation of caregivers, scientists, and doctors. Any crisis presents the opportunity to help them learn, cultivate compassion and increase resilience while building a safer and more caring community. Having information and facts about COVID-19 will help to diminish teachers' fears and anxieties around the disease and support their ability to cope with any secondary impacts in their lives (All Saint Academy, 2020). These counsellors should provide key messages and considerations for engaging school administrators, teachers and staff, parents, caregivers and community members, as well as students themselves in promoting safe and healthy education.

The outbreak of coronavirus disease (COVID-19) has been declared a Public Health Emergency of International Concern (PHEIC) and the virus has spread to many countries and territories. While a lot is still unknown about the virus that causes COVID-19, it is said to be transmitted through direct contact with respiratory droplets of an infected person (generated through coughing and sneezing). Individuals can also be infected from touching surfaces contaminated with the virus and touching their face (e.g., eyes, nose and mouth). While COVID-19 continues to spread, it is important that communities take action to prevent further transmission, reduce the impacts of the outbreak and support control measures (Bender, Kerkhove & Eamer, 2020).

Measures taken by schools can prevent the entry and spread of COVID-19 by students and teachers who may have been exposed to the virus, while minimizing disruption and protecting students and teachers from discrimination (Denga, 2020). Most governments rolled out awareness campaigns through schools (and other platforms) on hygiene and sanitation to students. In Afghanistan, the Ministries of Education and Health launched a good hygiene practices awareness campaign through schools, television, and social media platforms. In Finland, while most schools are closed and remote learning and teaching is taking place with the support of educational technology, kindergartens continue operating with preventive measures and are open for families who need childcare. In addition, primary schools must organize contact teaching for those grades 1-3 students whose parents work in critical positions (such as health, education, logistics, supermarkets etc.). In Russia, Moscow city and Moscow Oblast moved to a free regime of school attendance. If families want to stop attending schools, they are free to do so. The compensation is providing distance education through technology. In Ethiopia, the Ministry of Education distributed communication material for students and parents on how to reduce risk of exposure.

In low capacity countries, (those that battled the Ebola outbreak in 2014-15 can serve as examples), governments can use education, physical and human resources to address the epidemic. Given their level of education and profile within communities of low literacy, educators can serve as advocates and resources that would increase awareness and provide guidance. For example, in Liberia and Sierra Leone, teachers were trained on protocols for screening of students for fever once schools resumed. They also benefited from teachers' expanding awareness about the causes of infection and symptoms.

Many countries restricted or cancelled extra-curricular, athletic, or community activities as a measure of reducing physical contact. This has been rolled out by individual schools, regionally, or nationally by governments looking to enforce social distancing. In countries across Europe and the Middle East, governments have enforced a ban on gatherings with large number of participants, including sporting and non-essential academic events. For example, in Belarus, where schools remain open, social interactions are limited, including also mass gatherings and interactions during school breaks. While schools are closed, many countries have turned to distance learning as a means of mitigating for lost time in continuing education services.

Some countries are simply putting resources on their website, and making available more products, but not necessarily online classes. Others, like Spain, are asking teachers to prepare online content and offer online classes. Infrastructure and familiarity with the tools seem to be driving successes (and challenges) of delivering learning. China for example, with robust connectivity, is offering distance learning successfully whereas others with limited penetration of internet, cell phone, or television (e.g. Vietnam, Mongolia) are finding it difficult to reach all students equally. In addition, many countries have challenges in ensuring that education services are equally accessible for employees/students with disabilities (Edward, 2020).

Providing resource to work at home can now be done using different technological options. But access to connectivity and different type of devices, and for example ensuring accessibility for students with disabilities, vary widely across income levels. Hence, a key challenge is not creating further inequalities. Some African countries (Kenya, Rwanda, South Africa, Senegal, Botswana, Gambia) can start preparing now as there is reasonable school connectivity and there are devices (tablets) for students to take home. In many countries, however, students have some access to mobile devices and optimizing accessible solutions to those should be the main emphasis. Although there is plenty of digital content available, some even open source, a key challenge is to prepare pedagogical material to be available in a structured way such that it could capture the attention of all students. Communication campaigns and information sharing are essential to assure parents of the safety of their children

returning to schools. This is critical in communities that have been ravaged by disaster and there is distrust in Government efforts to undertake measures. Communication could include a timeline of school sanitization (if schools have been used as isolation centers), dissemination of screening protocols (what would be the process if a student has a fever at school), provision of hand washing stations accessible for all and sundry, etc.

Restrictive preventive measures and policies are needed to control the COVID-19 outbreak. Increasing people's awareness is one potential measure to limit the spread of infectious disease that will have an impact on the economic, social, and mortality burdens of any infectious disease (Zuo & Liu, 2014). Once an infectious disease appears and expands in a country, the country's center for disease control and prevention will attempt to control the expansion of the disease. One of the methods used is quickly providing people with the necessary preventive knowledge to avoid the infection (Vasterman & Ruigrok, 2013). As soon as people are aware of the disease and preventive measures, they are able to change their behaviours and take careful measures to reduce their susceptibilities. Such measures can include frequent hand washing, avoiding direct contact with infected patients, vaccination (if available), and wearing masks. It has been shown that the administration of measles, rubella, and mumps vaccines are correlated with local measles outbreaks (Philipson, 1996).

Changing people's behaviours and responses during disease outbreaks can reduce the size of the outbreak rather than eliminate the presence of the disease itself. However, it is not fully understood to what extent individual behavioural responses can help to contain the disease (Funk, Gilad, Watkins & Jansen, 2009). Spreading awareness and health messages for contagious disease prevention could be achieved using various mechanisms, including through the media, holding public talks, and lectures. For example, spreading preventive knowledge through television was effective to control H1N1 influenza in the Mississippi Gulf Coast (Freiman, Montgomery, Green, Thomas, Kleiner & Boulton, 2011). In addition, awareness campaigns, websites, and television were used for public education about SARS in Singapore.

The impacts of COVID-19 pandemic on education in Nigeria has disrupted the 2020 academic calendar and has prevented Nigerian students' access to education as well as diminishing the quality of the learning experience in the country. Even now that opportunity exists following the reopening of schools for the exit classes only, parents and teachers are still worried about the safety of their children and their own health. Some parents are reluctant to send their children back to school. The questions as to how prepared the relevant authorities and school proprietors are to ensure safety of students returning to school and teachers alike, are also of pertinence (Oluka, Ezeh & Okotie, 2020).

Reopening schools more resiliently may be difficult if the existing education system has been struggling and schools do not have basic infrastructure to meet the needs of students. Bringing education facilities back to the original condition may not be enough if wash stations or latrines are not available and leaves students vulnerable once again to future health risks. So, recovering from crises presents opportunities to rebuild better (Bender, Kerkhove & Eamer, 2020).

Symptoms of COVID-19 includes cold, dry cough, catarrh, tiredness, fever, sore throat, nasal congestion, aches and pains or diarrhea, loss of sense of taste or smell, difficulty in breathing (severe case) (WHO, 2020). Preventive Measures of COVID-19 includes wearing of facemask, washing of hands regularly with soap and clean water, using hand sanitizer, covering nose and mouth with a disposable tissue or flexed elbow when coughing or sneezing, maintaining social distance (one Meter or 3feet), obeying the guidelines given by the government, staying at home and staying safe.

The virus is transmitted through direct contact with respiratory droplets of an infected person (generated through coughing and sneezing). Individuals can also be infected from touching surfaces contaminated with the virus and touching their face (e.g., eyes, nose, mouth). The COVID-19 virus may survive on surfaces for several hours, but simple disinfectants can kill it. Older people, and people with chronic medical conditions, such as diabetes and heart disease, appear to be more at risk of developing severe symptoms. As this is a new virus, stakeholders the world over are still learning about how it affects children. It is possible for people of any age to be infected with the virus, but so far there are relatively few cases of COVID-19 reported among children. This is a new virus and there is need to learn more about how it affects children. The virus can be fatal in rare cases, so far mainly among older people with pre-existing medical conditions (Bender et.al., 2020). Though vaccines are currently being researched and developed for COVID-19, however, many of the symptoms can be treated and getting early care from a healthcare provider can make the disease less dangerous. There are several clinical trials that are being conducted to evaluate potential therapeutics for COVID-19 (Ugwu, 2020). According to Rina, Saad, Ahmed, Abdulkarim, Pankaj, David, Saeed, Waquar & Fatimah (2020), the knowledge and awareness of the COVID-19 disease are important parameters for the adoption of protective measures that minimize the exposure risk of the illness.

Statement of the problem

The first outbreak of COVID-19 in Nigeria occurred on 27th February 2020 through an Italian businessman who visited the country. The declaration of this index case spurred the Nigerian Government, with the support of relevant health agencies to embark on measures targeted at curtailing the spread of the disease. However, despite all preventive and control efforts of the Nigerian government following the outbreak,

the disease had spread to all states of the federation. Controlling this rise in COVID-19 in the country was particularly challenging and thus gave reason for worry especially in the face of limited health care facilities to contend with the virus. Consequently, due to the adverse implications of the disease on people's health and economy as well as the urgent need for total eradication of the virus, it becomes expedient to evaluate the level of awareness and preventive measures about the virus in Nigerian education sector in general and teachers in particular.

In general many studies reported the awareness among healthcare students and professionals on COVID-19 (Guo, Zhou & Liu, 2020). Certain recent studies showed epidemiology, causes, clinical manifestation, diagnosis and control of coronavirus disease. Hence the level of awareness and preventive measures among teachers regarding the virus and its symptoms is limited. Therefore, it is deemed necessary to carry out a study on "awareness on nature and preventive measures of coronavirus (COVID-19) among teachers in Zaria metropolis".

Objectives of the study

1. To ascertain the level of awareness on COVID-19 among Government Secondary School Teachers.
2. To establish Government Secondary School teachers' level of knowledge on the preventive measures of COVID-19.

Research Questions

1. What is the level of the awareness of teachers on COVID-19?
2. What is the level of teachers' knowledge on the preventive measures of COVID-19?

Methodology

The research design adopted for the study was a descriptive survey. This design is considered appropriate because it enables the researchers to generate data through the standardized collection procedures based on highly structured research instrument(s) and well defined study concepts and related variables. The population of this research made up of all the Government Secondary School Teachers in Zaria Metropolis. The total population comprises of 352 Teachers in Sabon Gari Local Government Area and 1036 Teachers in Zaria Local Government Area. A total sample size of 138 Teachers was randomly selected from the total population of 1388 Teachers of Government Secondary Schools in Zaria Metropolis.

Table 1: Population of the study

LGAs	No. of Schools	No. of Teachers
ZARIA	11	352
SABON	25	1036
GARI		
TOTAL	36	1388

Source: Ministry of Education, Zaria Zonal Office (2020)

A well-constructed and self-developed questionnaire titled “Teachers Awareness and Preventive Measures on COVID-19 Questionnaire” (TAPMCQ) was used to get the desired information from the Teachers. The questionnaire was divided into three sections (A, B and C). Section A was for collection of information on personal data of respondents while Section B consisted of questions that elicited responses from the respondents on level of teachers’ awareness on COVID-19 and Section C consists of questions on the Preventive Measures on COVID-19. The sections B and C had response options scored thus: Strongly Agree (SA) =5, Agree (A) =4, Undecided (UND) =3, Disagree (D) =2 and Strongly Disagree (SD) =1.

The designed questionnaire was submitted to Measurement and Evaluation experts for vetting and correction before distributing copies of the questionnaire to the respondents. The reliability of the research instrument was determined using a split half test using the odd and even numbered items to form the two halves. The two halves were administered to a sample of teachers from other schools. The Pearson Product Moment Correlation Coefficient was used to determine the reliability of the instrument. A coefficient value of 0.65 indicated that the research instrument was reliable; hence it was adopted for getting the desired information for the study.

The researchers collected the needed data through the use of questionnaire. The administration of the questionnaire was carried out by the researchers. A total of 138 copies of the questionnaire were distributed to elicit responses from the Teachers and retrieved on the spot by the researchers. Responses from the questionnaire were analyzed using the descriptive statistics of mean and standard deviation.

Presentation of results

Research Question One: What is the level of awareness of teachers on COVID-19 in Zaria Metropolis?

Table 2: Level of Awareness of Teachers on COVID-19 in Zaria Metropolis

S/N	Statement	Mean	SD
1	I do believe that COVID-19 exists	3.75	1.48
2	No specific vaccine is approved for COVID-19 yet	3.50	1.32
3	COVID-19 is very contagious	3.62	1.41
4	COVID-19 is very dangerous to man	3.25	1.09
5	COVID-19 has killed millions of people around the world	3.50	1.32
6	COVID-19 originated from Wuhan City in China	3.25	1.09
7	COVID-19 symptoms are similar to ordinary fever	3.12	1.54
8	The virus is transmitted through direct contact with the droplet of an infected person	3.62	1.41
Summary for the cluster		3.45	1.33

Table 2 shows the results of the respondents' level of awareness on COVID-19. A mean score of 3.75 indicated that the teachers believe that COVID-19 existed; the teachers were also aware that no specific vaccine is approved for COVID-19 with a mean score of 3.50. The teachers were aware that COVID-19 is contagious with a mean score of 3.62. A mean score of 3.25 revealed that COVID-19 is very dangerous and it has killed millions of people around the world with a mean of 3.50. The respondents were aware that COVID-19 originated from Wuhan City in China with a mean of 3.25. With mean scores of 3.12 and 3.62, the teachers were aware that the symptoms of COVID-19 are similar to that of ordinary fever and the virus is transmitted through direct contact with the droplet of an infected person. More so, a cluster mean of 3.45 indicates that the teachers have high level of awareness on COVID-19.

Research Question Two: What is the level of teachers' knowledge on the preventive measures of COVID-19 in Zaria Metropolis?

Table 3: Level of Teachers’ knowledge on the Preventive Measures of COVID-19 in Zaria Metropolis

S/N	Statement	Mean	SD
1	Frequent washing of hands with soap and clean water is one of the preventive measures	3.37	1.22
2	Social distancing could prevent COVID-19 in the society	3.50	1.32
3	Wearing of face mask could be helpful in the reduction or elimination at all times	3.50	1.32
4	Avoiding crowded places can help to prevent COVID-19	3.62	1.41
5	Covering the nose when sneezing with a disposable tissue is also helpful	3.62	1.41
6	COVID-19 can be prevented by using hand sanitizer	2.87	1.36
7	Avoiding touching of one’s nose and eyes is best in the prevention of COVID-19	2.37	1.41
8	Staying at home helps in preventing COVID-19 from any further spread	2.87	1.17
Summary of the cluster		3.22	1.32

Table 3 shows the result of the respondents’ level of knowledge on the preventive measures of COVID-19. With a mean of 3.37, the respondents indicated their awareness that frequent washing of hands with soap and clean water is one of the preventive measures; they also indicated knowledge that social distancing could prevent COVID-19 in the society with a mean score of 3.50. Their responses also indicated their knowledge of the fact that awareness on wearing of face mask could be helpful in the reduction of COVID-19 with a mean of 3.50. A mean score of 3.62 indicated their awareness that avoiding crowded places can help to prevent COVID-19; and with a mean of 3.62, they affirm their awareness that covering of nose when sneezing with a disposable tissue is also helpful in preventing COVID-19. With mean scores of 2.87, 2.37 and 2.87 respectively, the respondents disagreed with the propositions that COVID-19 cannot be prevented by using hand sanitizer, avoiding touching of nose and eyes is not the best in the prevention of COVID-19, and staying at home could not help in preventing COVID-19 from further spread. These responses indicate that they are aware that these are preventive measures.

Discussion of the findings

This study investigated teachers’ awareness on the nature and the preventive measures of COVID-19 in Zaria Metropolis. Two research questions were formulated in line with the objectives of the study. Research question one which is on the level of awareness of teachers on COVID-19 in Zaria Metropolis was analysed using mean and the results show that the teachers in Zaria Metropolis are aware that COVID-19 existed, no specific vaccine is approved for COVID-19, COVID-19 is very contagious,

and it is very dangerous to man, COVID-19 has killed millions of people around the world. The respondents were aware that COVID-19 originated from Wuhan City in China; and that COVID-19 had similar symptoms with ordinary fever and the virus is transmitted through direct contact with the droplet of an infected person. The finding of this study is in line with that of Guan, Ni, Hu, Liang, Ou & He (2020), who posit that in 2019, a novel strain of coronavirus, severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), which is responsible for mild to severe respiratory infections, emerged for the first time in a Chinese city called Wuhan. The finding also agrees with that of Rina, Saad, Ahmed, Abdulkarim, Pankaj, David, Saeed, Waquar and Fatimah (2020), that the knowledge and awareness of the COVID-19 disease are important parameters for the adoption of protective measures that minimize the exposure risk of the illness.

Research question two which is on the level of teachers' knowledge on the preventive measures of COVID-19 in Zaria Metropolis was analyzed using mean and the results revealed that the teachers are knowledgeable on preventive measures against COVID-19 including frequent washing of hands with soap and clean water, social distancing, wearing of face masks, avoiding of crowded places as well as covering of nose when sneezing with a disposable tissue.

Conclusion

Based on the findings of the study and the discussion that followed, it is concluded that the teachers in Zaria Metropolis are aware that no specific vaccine is approved for COVID-19, COVID-19 is very contagious, and it is very dangerous to man, COVID-19 has killed millions of people around the world. The respondents were aware that COVID-19 originated from Wuhan City in China, COVID-19 had similar symptoms with ordinary fever and the virus is transmitted through direct contact with the droplet of an infected person. It is also concluded that teachers are knowledgeable on preventive measures against COVID-19 including frequent washing of hands with soap and clean water, social distancing, wearing of face masks, avoiding of crowded places as well as covering of nose when sneezing with a disposable tissue.

Recommendations

1. It is recommended that counsellors should liaise with school administration and stage awareness campaigns on the pandemic to sustain and improve the level of awareness on the pandemic.
2. More enlightenment on the preventive measures should be encouraged among the teachers as teachers deal with large number of students to avoid further spread of COVID-19 in Zaria metropolis.

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