Knowledge, perception and preventive measures on Covid-19 among Bingham University Library personnel

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Abstract

This paper examines the knowledge, perception and preventive measures of Covid-19 among Bingham University (BHU) Library personnel. A descriptive survey research design was adopted in conducting the research; A structured electronic questionnaire using 'Google Form' was employed on Bingham University library Staff WhatsApp platform to obtain data from 40 respondents, out of which 34 (85%) responses were received. The data obtained were analyzed using percentages. In answering the research questions, any percentage that ranged from 50% and above was regarded as positive and accepted while below 50% was regarded as negative and rejected. The paper revealed among others that a majority of Bingham University Library staff had the knowledge of Covid-19 with respect to its existence, origin, adverse effect and non-curative nature. The study further revealed that the staff also regarded the virus as real and without cure, non-political as well as not over exaggerated. However, they nursed the perception that the virus affects only those in Europe. Finally, it was also discovered that the isolation of returned books at the isolation section was the only preventive measure not taken seriously. The study recommended the inclusion of uncensored pictures and videos of Africans/Nigerians infected with Covid-19 during awareness campaigns and workshops, and the introduction of modern book sanitizer or sterilizing machines like the LIVA Book Sterilizer which is highly efficient in killing viruses and bacteria by UV-C (254 nm).

Keywords: Covid-19, Knowledge, Perception and prevention measure, University personnel, Bingham, Karu, Nasarawa State, Nigeria

Introduction

The nations of the world are currently experiencing a partial lockdown of socioeconomic, political and education activities due to the disease tagged Covid-19. Coronavirus disease surfaced in Wuhan, China in December 2019 and was later renamed by World Health Organization (WHO) as COVID-19 and today, this is recognized as a global pandemic by WHO. The disease is caused by a new and severe type of Corona-virus known as Severe Acute Respiratory Syndrome Coronavirus 2 (SARSCoV-2). On February 27, 2020, an Italian citizen became the index case for Covid-19 in Nigeria and as at today, the

infection has no known cure according to WHO and has become a worldwide plague causing major illness and death (Olapegba, 2020). The Nigerian Centre for Disease Control (NCDC) has been at the forefront in the enlightenment campaign of Covid-19, as such, the entire nation of Nigeria is circulated with the news of Covid-19 pandemic. All the stakeholders in the field of information dissemination have continued to spread the updates on covid-19 to create awareness and knowledge to people. As at today, the world has recorded millions of infected persons and thousands have died of the disease with Nigeria having a total number of 122, 996 infected persons, 98,

359 discharged and 1, 507 death cases (NCDC, 2021).

However, it is no gainsaying that no individual can develop beyond the level of his/her knowledge because one can only show what he/she knows or has knowledge about. According to Oxford Dictionary (1998) as cited by Ajibili (2017), knowledge is seen as a person's range of information. Knowledge could be generally seen as familiarity awareness or gained by experience (of a person, fact, or thing) thus, in some situation, knowledge and awareness could be used interchangeably. In a simple term, knowledge can be said to be familiarity, awareness, or understanding of someone or something, such as facts knowledge), (propositional skills (procedural knowledge). objects or (acquaintance knowledge). Knowledge can refer a theoretical or practical to understanding of a subject.

There has been a worldwide campaign on awareness and knowledge of Covid-19 and media organizations and other information centers are really putting tremendous efforts to educate and get everyone acquainted with the novel coronavirus. Global efforts have also been utilized to prevent the spread of the disease through political decisions together with personal behaviors, which depend on awareness of the public. Public awareness of dealing with highly infectious respiratory diseases plays a vital role in limiting the spread of the infection, especially in middle and low-income countries, where health systems have, at best, the moderate capacity to respond to outbreaks (Abdelhafiz, et al 2020). Similarly, Dinev and Goo (2005) opined that knowledge raises consciousness and awareness about a certain phenomenon and its personal and social benefits. Therefore, the knowledge of the existence of this disease (Covid-19) is invaluable and a pre-requisite to its avoidance. Knowledge of the disease is considered the first stepping stone to any health education activity that is implemented. Knowing the causes and transmission sources of a disease, increases the likelihood that people will become more aware of the spread of communicable diseases, and of the preventive measures to slow transmission.

In the same light, the perception of this disease has a way of influencing how an individual or group of people retort to its management or control to avoid its wide spread. Anderson (1999) argued that

> to recognize disease in ourselves or in others is to reflect, however fleetingly, on its moral importance. Our perceptions of disease have always prompted a search for attribution and responsibility; but more importantly they bring into focus the concerns we have about the way we live our relations to lives, our community, environment, and cosmos, and they challenge us to explain the purpose of malfunction and suffering.

In any outbreak of epidemic or pandemic, people ought to have positive attitude towards the information regarding the disease so as to curb, eradicate or manage it effectively. It is evidential that in Africa and particularly Nigeria, the Covid-19 pandemic has erroneously been perceived to be a disease for the Western world especially Asians and also for the affluence whose immune systems have been diminished by rich delicacies.

Man has constantly influenced his environment and has always developed permanent solution to his predicament or in worst scenario devised preventive measures to keep away anything undesirable such as illness or harm from occurring. According to Online Cambridge Dictionary (2020),

prevention is seen as the act of stopping something from happening or arising. Since prevention is better than cure and there is no known cure for the pandemic ravaging the world, preventive measures keep emerging on daily bases on how to stay safe from the virus. Even though world scientists and institutions currently research are researching in order to proffer permanent solution to the eradication of this pandemic, several measures have been prescribed to curb the disease. According to WHO (2020), measures like regular hand washing, using hand sanitizers, wearing face masks, cough or sneeze into your bent elbow, avoid touching your eyes, nose and mouth with unclean hands, staying at home, social distancing such as keeping two meters away from others, self-isolation when sick, and all helps in curtailing the virus. However, this work aims to assess knowledge, perception and preventive measures of Covid-19 among staff of Bingham University (BHU) Library.

Bingham University was established by Evangelical Church Winning All (ECWA) following its formal licensing by the National Universities Commission (NUC) on 5th January, 2005. As the name implies, the university was named after one of the trio pioneer of Sudan Interior Missionaries, Rowland Victor Bingham whose vision along with those of other founding fathers who desired to produce committed Christians and other graduates. Thus, the university emerged as a tool through which Christian centered leaders would be produced. The founding fathers intended to meet the soaring needs of not only quality secular tertiary education but education that recognizes and integrates moral and spiritual values in the face of degenerating social decadence in Nigerian university campuses (Ajibili and Gana, 2013). Academic programmes of Bingham University began in May 2006 at Jos ECWA Theological Seminary temporary site and

moved to its permanent site two years after, precisely in March 2008 to Karu, Nasarawa State, Nigeria, at the outskirts of Abuja, the Nigerian Federal Capital City. The university library works in conjunction with the ICT unit to provide electronic library services both via intranet and the internet, enabling students and staff access to a wide range of academic resources and databases including the robust NUC Virtual Library.

Bingham University practices a decentralized library system to enable it meet its users' information needs. There are six (6) main service points which are: Main Library, Library Annex, Environmental Science Library, Law Library, Medical Library, all on Karu campus with another Medical Library in Jos campus. Meanwhile, there are other subsidiary libraries established to augment the services of the aforementioned main service points, such as departmental libraries in computer science department, chemical science department, English, mass communication, accounting, business administration, political science, anatomy, physiology, and optometry departments.

Essentially, this work aimed to assess the knowledge, perception and preventive measures of Covid-19 among Bingham University Library personnel.

Statement of the problem

The Nigerian Presidential Task Force has been sensitizing the populace on the nature and danger of Covid-19 and has in conjunction with the World Health Organization prescribed several measures to curb this disease. It is no gainsaving that this virus has caused a pandemic that has drastically affected several critical sectors like the economic, social-political and most especially the educational sector of the country. This has resulted from partial lockdown to full lockdown in some major commercial cities in the country, including

the ban on inter-state travelling which have all led led to the closure of all primary, secondary and tertiary institutions for several months. Despite the lockdown some private universities like Bingham University (BHU) engaged in online teaching and rendering of essentially services both virtually and physically. During the period, academic staff thronged the library to access information resources for either personal research interest or for online teaching of their students as recommended by the National Universities Commission. The library had adopted measure intended to safeguard its personnel as it continued to render its conventional and online services. It was against this ground that this study set out to examine the extent of knowledge of Covid-19 among the library personnel, their perception of the virus, preventive measures put in place by the library management, as well as challenges militating against the preventive measures put in place by the library.

Objectives of the study

The objectives of the study were to:

- 1. Find out the extent of knowledge of Covid -19 among the BHU library personnel.
- 2. determine the level of perception of Covid -19 among the personnel.
- 3. examine the preventive measures available in the library.
- 4. explore the challenges militating against the preventive measures available in BHU library.

Literature review

The novel Coronavirus disease 2019 (COVID-19), first identified in Wuhan China in December 2019, has rapidly spread to almost every region of the world. The disease is caused by a new and severe type of Coronavirus known as severe acute respiratory syndrome coronavirus 2 (SARSCoV-2). The infection has no immediate treatment and vaccine, and it has according to World Health Organization become a worldwide pandemic causing significant morbidity and mortality (WHO, 2020).

COVID-19, from the family of Coronavirus (others include SARS, H5N1, H1N1 and MERS), is a contagious respiratory illness transmitted through the eyes, nose, and mouth, via droplets from coughs and sneezes, close contact with infected person and contaminated surfaces. It has an incubation period of approximately one to fourteen days. The symptoms include cough, fever and shortness of breath, and it is diagnosed through a laboratory test. The contagion could lead to severe respiratory problems or death, particularly among the elderly and persons with underlying chronic illnesses. Some infected persons however, are carriers for the virus with no symptoms while others may experience only a mild illness and recover easily (Sauer, 2020).

Knowledge of infection pathways and relevant precautions to take is needed to control the pandemic. While the scientific community continues to research possible vaccines or drugs for the viral infection, it is expected that adequate knowledge will motivate individuals to make decisions which may prevent and curb the epidemics. Knowledge such as regular hand washing, using hand sanitizers, wearing face masks, respiratory etiquettes, social distancing and self-isolation when sick are vital to reducing widespread infection (Leppin and Aro, 2009).

Studies like (Brug, Aro, Oenema, de Zwart, Richardus & Bishop, 2004; Choi & Yang, 2010; Hussain, Hussain & Hussain 2012; Olapegba e tal. 2020) Revealed that individuals' level of knowledge about an infectious disease can make them behave in ways that may help prevent infection.

The Coronavirus disease has overcome geographical barriers achieving a remarkable proliferation and because of that, different countries started public health protocols to control the spread of the virus, much of these protocols related to social distancing, hand washing, and locking down the cities (Zegarra-Valdivia, Chino-Vilca, and Ames-Guerrero, 2020).

To prevent further spread of the virus, civil societies and government agencies embarked on enlightenment campaigns for good hygiene and social distancing. Temperature screening was conducted at airports and those returning from countries with numerous confirmed cases of COVID-19 were implored to self-isolate (Ewodage, 2020).

On the other hand, some Nigerians due to superstitions and ignorance of the science behind the infection prefer only to pray and use other traditional means hence violating the social distancing rule set by the NCDC by attending churches and mosques during the lockdown and using anointing oils, talisman, herbs or other forms of rituals to prevent contracting and spreading the virus. They preached that lockdown, selfisolation and social distancing are un-African solutions to the pandemic (Abati, 2020) as cited by Olapegba, e'tal (2020).

However some people react to the perception using social media platforms (e.g. Whatsapp, Twitter, Facebook and Instagram) to spread fear, project fake news concerning the source of the virus, promote prejudice against China, incite panic buying, proffer fake cures and undermine medical advice, deliberately or ignorantly (Hassan, 2020).

Students were further inquired to assess their beliefs towards prevention of COVID-19. Majority of all the students (91.61%) positively agreed to the ways of preventing COVID-19 as prescribed by WHO. These precautionary measures are, cleaning hands with alcohol based sanitizer, avoid personal contact and maintaining at least 1 m distance or social distancing (Gohela, K.H., Patela, P.B., Shaha, P.M., Patela, J.R., Panditb, N. & Rautc, A., 2020).

Methods

The descriptive survey research design was adopted for the study. As part of Covid-19 preventive measures, a structured electronic questionnaire using 'Google Form' was employed on Bingham University Library Staff whatsapp group to obtain data from 40 respondents, out of which 34 responses were received. This gave a response rate of 85%. Electronic questionnaires eliminates the associated with printing costs and distributing paper-based questionnaire. Collecting data in electronic format reduces time and costs required for data processing and may increase public confidence in the anonymity of their responses. Above all, electronic questionnaire reduces the risk of contracting the disease (Covid-19) via contact paper-based physical with questionnaire. However, random sampling technique was used to overcome problems associated with large and dispersed population or where it is expensive and time consuming. Also, this justification is based on Nwana's account (as cited in Bassi and Camble, 2011) who stated that, if a population was in many hundreds, one needs a sample size of 20%, and if a population is in a few thousands, one needs a sample size of 10%, but for a population of several thousands, one needs a sample of 5% or less. The data collected were analyzed using percentages to answer the research questions. The decision for determining the lower and upper limits of the respondents' opinions was based on the real limits of number. Hence, any percentage that ranged from 50% and above was regarded as positive and accepted while below 50% was regarded as negative and rejected.

Findings and discussion

Table 1 shows the responses of respondents presented in percentages as regards the extent of awareness or knowledge of Covid-19 among BHU Library staff. The overall response showed that staff are aware that Covid-19 does exist, which had a positive response rate of 95.4% (72.7+22.7), while the knowledge of Covid-19 originating from China, the knowledge of Covid-19 being highly contagious, the knowledge of Covid-19 not having a feasible vaccine yet, all received responses above 50% thus this is generally accepted as positive response.

Therefore, going by the real limits of number, item 1-4 all scored above 50% on the positive. Thus, it is assumed that the lstaff do have good knowledge of the existence, origin, nature and the damages caused by Covid-19.

S/N	Item	Responses				Decision
		SA	Α	SD	D	
1.	I am very aware that Covid-19 does exist.	72.7	22.7	2.3	2.3	А
2.	I am very aware that Covid-19 originated from China.	68.2	31.8	0	0	А
3.	I am very aware that Covid-19 is highly contagious.	59.1	40.9	0	0	А
4.	I am very aware that Covid-19 has no feasible vaccine for now.	45.5	31.8	13.6	9.1	А

Table 1: Awareness of Covid-19

Key1: SA-Strongly Agree, A-Agree, SD-Strongly Disagree, D-Disagree.

Table 2:	Perception	of Covid-19
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S/N	ITEM	RES	PONSE	Decision		
		SA	А	SD	D	
1.	Covid-19 is fake, a scam and does not exist.	9.1	4.5	45.5	40.9	D
2.	Covid-19 is just a means of exploiting foreign aid by Africans.	13.6	9.1	50.0	27.3	D
3.	Covid-19 is not deadly as claimed but over exaggerated.	9.1	9.1	59.1	22.7	D
4.	Covid-19 affects only those in Europe	27.3	54.5	4.6	13.6	А
5.	Covid-19 is real and does not have a known cure for now.	31.8	31.8	13.6	22.8	А

Key1: SA-Strongly Agree, A-Agree, SD-Strongly Disagree, D-Disagree.

Table 2 shows the ratings of the responses of BHU Library staff as regards their perception of Covid-19. The overall rating showed that item 4 and 5 (Covid-19 affects only those in Europe, and Covid-19 is real and does not have a known cure for now) had positive response rates of 81%

(27.3+54.5) and 63.6% (31.8+31.8) respectively, while item 1, 2, and 3 (Covid-19 is fake, a scam and does not exist, Covid-19 is just a means of exploiting foreign aid by Africans, and Covid-19 is not deadly as claimed but over exaggerated) also had a high negative response rates.

Therefore, going by the real limits of number, item 4 and 5 scored above 50% positive response thus, it is assumed that

Table 3. Observance of preventive measures

BHU staff believe that Covid-19 affects only those in Europe and so far there is no feasible vaccine for it.

S/N	Item	Respor	Decision			
		SA	Α	SD	D	
1.	I often use face mask when working in the library.	36.4	50.0	13.6	0	А
2.	I often use hand sanitizer provided by the library.	63.6	27.3	9.1	0	А
3.	I often practice social distancing when working in the library.	45.5	50.0	0	4.5	А
4.	I often use the foot operating hand washing machine at the entrance of the library.	68.2	22.7	4.55	4.55	А
5.	I often keep returned books at the isolation section for 24hrs before shelving.	27.3	9.1	40.6	23.0	D

Key1: SA-Strongly Agree, A-Agree, SD-Strongly Disagree, D-Disagree.

Table 3 shows the ratings of the response of BHU library staff as regards preventive measures they comply to. The overall rating showed that item 1-4 (I often use face mask when working in the library, I often use hand sanitizer provided by the library, I often practice social distancing when working in the library, and I often use the foot operating hand washing machine at the entrance of the library) had response (36.4+50.0), rates of 86.4% 90.9% (63.6+27.3), 95.5% (45.5+50.0) and 90.9% (68.2+22.7) respectively. However, the

rating of item 5 (I often keep returned books at the isolation section for 24hrs before shelving) showed a response rate of 63.6% (40.6+23.0).

Therefore, going by the real limits of number, only item 5 (I often keep returned books at the isolation section for 24hrs before shelving) scored above 50% negative response thus, it is assumed that the BHU library staff rarely utilize the 'returned book' isolation section as a preventive measure for Covid-19.

	Table 4: Chanenges militating against preventive measures					
S/N	S/N Items Respon					Decision
		SA	Ā	SD	D	
1.	No strict adherence on the use of face mask.	22.7	18.2	40.9	18.2	D
2.	Most staff don't believe in the existence of Covid-19 in Nigeria.	50.0	4.5	18.2	27.3	Α
3.	Most library staff do not observe social distancing.	4.5	18.2	50.0	27.3	D
4.	No strict adherence on the use of hand sanitizers.	18.2	13.6	45.5	22.7	D

Table 1. Challenges militating against proventive measures

Key1: SA-Strongly Agree, A-Agree, SD-Strongly Disagree, D-Disagree.

Table 4 shows the ratings of the response of BHU library staff as regards challenges militating against preventive measures in the library. The overall rating showed that item 1, 3 and 4 (No strict adherence on the use of face mask, most library staff do not observe social distancing and, No strict adherence on the use of hand sanitizers) had response rates of 59.1% (40.9+18.2), 77.3% (50.0+27.3), and 68.2% (45.5+22.7) respectively. However, the rating of item 2 (Most staff don't believe in the existence of Covid-19 in Nigeria) showed a response rate of 54.5% (50.0+4.5).

Therefore, going by the real limits of number, only item 2 (Most staff don't believe in the existence of Covid-19 in Nigeria) scored above 50% positive response thus, it is assumed that BHU library staff believe that the virus thrives in Europe rather than Africa especially Nigeria.

Discussion

The findings are discussed according to the four research questions in their sequential order below, which are: To What Extent are You Aware of Covid-19? What is Your Perception of Covid-19? To What Extent Do You Take Preventive Measures? What are the Challenges Militating Against Preventive Measures?

The findings reveal that majority of library staff are very BHU much knowledgeable of the existence of Covid-19, where it originated from, its nature, symptoms and also the non-feasibility of a vaccine for the virus. Staff were asked to indicate the extent to which they agree on the knowledge they have on Covid-19. This inquiry only further revealed the positive impact of the awareness campaign embarked by the library management in conjunction with the university management to sensitize BHU library staff and the university community at large. However, there is no

gainsaying the fact that education which can also be seen in this content as awareness, is the yardstick for checking the development of any nation. It is in confirmation of this that Erwat, Isah and Fabunmi (2016) noted that "education is the bedrock of any society; no society can grow beyond its level of educational attainment". In other words, the first step in defeating Covid-19 is by receiving education or knowledge on its existence, where it originated from, its nature, symptoms, preventive measures and also accepting the fact that there is nonfeasibility of a vaccine for the virus, for now.

Also, the findings on the perception of Covid-19 among BHU library staff revealed that majority of them still believe that Covid-19 is a European/Asian infirmity hence, does not affect Africans in Africa, especially in Nigeria. This orientation was perhaps conceived basically because they are yet to witness a loved one who has it or had died from it. According to Cole (2008) as cited by Ajibili, (2017), the broadest possible reason for which we use information concerns the survival of mankind. In the same vein, there is the need for total comprehension of any information before it can be judiciously utilized. Therefore, sensitization campaign on Covid-19 not accompanied with uncensored pictures and videos of affected victims of Covid-19 in Africa especially in Nigeria to buttress its existence may do little or nothing in eradicating this doubt.

Despite the pandemic, there are few users who are likely to patronize the library to borrow hard copies of books that cannot be found online, and as a preventive measure these books are expected to be isolated for 24hrs after return by a borrower before being shelved or loaned out. Further findings revealed that majority of Covid-19 preventive measures stipulated and put in

place by the library was being adhered to except the regular moving of returned books to the isolation section by the staff of the library. This may be the outcome of staff perception that the virus does not exist in this country, perhaps because they are vet to witness a loved one who has it or had died from the virus. More so, the lack of proper orientation on the essence of isolating returned books for 24hrs could also be assumed to be a major cause of the aforementioned. Similarly, a borrower who is on queue may not have the patience to wait for 24hrs before borrowing a book hence, the ignorant staff is likely to lend the book out.

Finally, the study revealed that most staff of the library affirmed that Covid-19 is foreign and is yet to crossover to the shores of this country. Even though, BHU Library staff are knowledgeable of the existence of Covid-19, its characteristics, preventive measures, and non-feasibility of a vaccine, they still assume the virus is yet to invade the shores of this country as claimed by many. However, this could be one of the basic reason for some negligence exhibited by the library staff especially in the area of strict adherence to the isolation of returned books.

Conclusion

Despite the lockdown due to Covid-19 pandemic, the library was still expected to render its invaluable services both online and conventionally especially to few users who intended to patronize the physical library. Hence, for the benefit of the latter, the library management provided policies that would safeguard both its users and its personnel against the infectious disease. However, the study revealed some inadequacies on the aforementioned hence, the following recommendations are made:

1. The library should embark on an aggressive sensitization campaign on

Covid-19 and its adverse effect via workshops and seminars where uncensored pictures and videos of Africans/Nigerians who are affected with Covid-19 will be presented alongside. This will help eradicate doubts of the virus existence in Nigeria, amongst the library staff.

2. The introduction of modern book sterilizing machines like the LIVA Book Sterilizer which is highly efficient in killing viruses and bacteria by UV-C (254 nm). The disinfection time of the machine is adjustable and it is environmentally friendly. Books can be sanitized within few minutes at the point of return without having to go through 24 hours isolation thus saving the time of the next borrower and easing the routine of the staff on duty.

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