### Original article

# An Investigation on COVID-19 in Nigeria and Relationship with Age Groups

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#### **Abstract:**

Objective: Coronavirus disease 2019 (COVID-19) was first reported in Wuhan China in December 2019 and has immediately spread to essentially almost every area of the world. The infection is caused by a serious kind of acute respiratory condition known as coronavirus 2 (SARSCoV-2). Aim: The investigation was carried out to determine the knowledge, awareness, and relationship between Coronavirus and different age groups among Nigerians. Materials and Methods: The study recruited nine hundred and ninetyeight (998) participants who were of Nigerian origin and, aged 20 years or more who understood the substance of the banner who looked at its evaluation. A two-page enlistment flag was posted/reposted to groups in Whatsapp, Twitter and, Facebook. This banner contained a short presentation on the establishment, objective, reasoning, purposeful nature of help, attestations of mystery, and security similarly as the association of the practical reaction code of the online survey. Result and Discussion: The outcomes indicated that the majority of the respondents had sound information on COVID-19, 911(91.3%), in this manner knowing it to be a viral contamination. It was additionally observed that a large portion of the respondents, 850 (85.2%) concurred coming up next are manners by which one could get tainted with COVID-19; these among others include; shaking of hands with infected people, contacting objects contacted by infected people and sneezing or coughing by infected people. The outcome further portrays a huge relationship that existed between the members' age and questions raised on COVID-19 (p<0.001). *Conclusion*: It is along these lines that it is suggested that all partners ought to heighten their exertion in sharpening the overall population just as network base refinement program be done in other for the residents to comprehend and follow every single prudent step to curb COVID-19 in Nigeria.

**Keywords**: Knowledge, Awareness, Relationship, Nigeria, Covid-19

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### **Introduction**

In humans, several coronaviruses are known to cause respiratory contaminations extending from the ordinary infection to progressively genuine infirmities, for instance, Middle East Respiratory Syndrome and Severe Acute Respiratory Syndrome.<sup>1</sup> Coronavirus is a regular human pathogens, causing all around delicate exceptional respiratory illnesses termed as the standard cold <sup>2</sup> which was later distinguished in December 2019 in Wuhan, China.

Hubei Province, specifically its capital city

Wuhan, has been truly hit by the COVID-19 plague. Some exceptional measures were received to control the COVID-19 transmission in Hubei and different territories of China, including the suspension of open transportation, the closing of public spaces, close administration of networks, and separation and care for tainted individuals and suspected cases.<sup>3</sup>

The infection has no quick treatment and immunization, and it has as indicated by the World Health Organization <sup>4</sup> become an overall pandemic causing critical horribleness and mortality.

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There are 4,966,114 confirmed cases, 1,949,098 recoveries from the illness, and 323,635 deaths worldwide as of May 19, 2020.<sup>5</sup> On February 27, 2020, an Italian citizen became the index case for COVID-19 in Nigeria and as of May 19, 2020, there were 6175 laboratory-confirmed instances of COVID-19 in Nigeria with 1644 recoveries and 191 deaths. <sup>6</sup>

To forestall additionally the spread of the infection, common social orders and government organizations left on edification battles for good cleanliness and social distancing. Temperature screening was conducted at airports and those coming back from nations with various affirmed instances of COVID-19 were entreated to self-isolate. The Nigeria Center for Disease Control (NCDC) in relationship with State governments additionally started following and following of potential casualties and their contacts.

A study by Bao-Liang *et al.*, <sup>3</sup> showed an association between gender, age group, and COVID-19 and however, it was confirmed that there was a significant association with lower knowledge scores among Chinese residents and age group during the rapid rise period of COVID-19.

Given the significance of information on precautionary activities in curbing the spread of irresistible disease, for example, COVID-19, in this manner this examination was embraced to explore the knowledge, attitudes, and relationship between Coronavirus and age groups among Nigerians.

# **Materials and Methods**

The investigation adopted the cross-sectional quantitative research. Nine hundred and ninety-eight (998) individuals who were of Nigerian origin, 20 years or more who comprehended the substance of the banner took an interest in the investigation.

The study was conducted from April 30th to May 19th, the week when easing of the lockdown of the three major states (Abuja, Lagos and Ogun) in Nigeria. Since it was unrealistic to do a network-based national inspecting overview during this extraordinary period, the researchers chose to gather the information on the web. A two-page enrollment banner was posted/reposted to groups in Whatsapp, Twitter and, Facebook.

This banner contained a concise prologue to the foundation, objective, methods, deliberate nature of support, presentations of obscurity, and classification just as the connection and speedy reaction code of the online survey. Although the fact that the questionnaire was disseminated by residents, the authors didn't constrict the sample to Abuja, Lagos and Ogun occupants as it were. Occupants of other affected states in the country were additionally qualified for this study on the off chance that they were eager to take part.

The questionnaire comprised of two sections: socioeconomics and knowledge and awareness. Socioeconomic variables included age, gender, and, place of resident. A COVID-19 knowledge questionnaire was created by the authors. The survey had 21 inquiries, 14 concerning knowledge, 7 in regards to awareness. These inquiries were replied on a yes/no/don't know and perhaps premise.

Data obtained from the study were analyzed with the aid of the Statistical Package for Social Sciences (SPSS, 20.0). The chi-square test was used in testing the statistical significance of the study hypotheses.

#### Results

It was revealed from this study that of the nine hundred and ninety-eight (998) participants, four hundred and eighty-one (481) were males while five hundred and seventeen (517) were females. The respondents fall into the following age group in descending order: 20-30 years (35.8%), 30-40 years (48.0%), 40-50 years (8.1%), and above 50 years (8.1%).

Table 1 showed that most of the respondents had a sound knowledge of COVID-19, 911(91.3%), admitting it as a viral infection.

From table 2, it is seen that most of the respondents, 850 (85.2%) agreed the following are ways in which one could get infected with COVID-19; these include; shaking of hands with infected persons, touching objects touched by infected persons and sneezing or coughing by infected persons.

From table 3, it was deduced that most of the respondents, 901 (90.3%) admitted that the incubation period of COVID-19 is 2-14days. The majority of the respondents, 926 (92.8%) claimed that COVID-19 can be prevented by simply frequent washing of hands with running water and sanitizers, wearing face mask when outside, and coughing and sneezing in the elbow.

It was shown from table 4 that the majority of the respondents, 789 (79.1%) do check social media,

television, or print media, every day for updates on COVID-19 and at the same time frequently wash their hands, 891 (89.3%).

Table 5 depicts the significant relationship which existed between the participants' age and questions raised on COVID-19 (<0.001).

**Table 1: What is COVID-19** 

Statements	Observed and Frequency (%)
Viral infection	911(91.3)
Bacterial infection	43(4.3)
Genetic Disease	10(1.0)
Autoimmune	34(3.4)

Table 2: Modes of transmission of COVID-19

Statements	Observed and Frequency (%)	
Shaking of hands with infected person	23(2.3)	
Touching objects touched by infected persons	20 (2.0)	
Sneezing or coughing by infected persons	101 (10.0)	
All of the above	850 (85.2)	
Don't know	4 (0.4)	

Table 3: What is the incubation period and preventive ways of COVID-19

Incubation Period	Observed and Frequency (%)	
2-14 days	901 (90.3)	
14-21 days	90 (9.0)	
21-28 days	4 (0.4)	
Preventive ways for COVID-19	Observed and Frequency (%)	
Washing of hands with sanitizer	59(5.9)	
Avoid crowded place	9(0.9)	
Wearing of face mask when outside	2(0.2)	
Coughing and sneezing in elbow	2(0.2)	
All of the above	926(92.8)	

Table 4: How often do you check social media, television or print media for updates on COVID-19 /washing of hands

Check on social media, Television or print for updates On COVID-19	Observed and Frequency (%)	
Everyday	789 (79.1)	
Very often	109 (10.9)	
Sometimes Rarely Never	43(4.3) 30(3.0) 27(2.7)	
How often do you wash hands Frequently Sometimes Rarely	Observed and Frequency (%) 891(89.3) 101(10.1) 6(0.6)	

# **Discussion and Conclusion**

Coronavirus disease (COVID-19) has been portrayed as a disease brought about by another and extreme kind of Coronavirus known as serious acute respiratory condition coronavirus 2 (SARSCoV-2).<sup>7</sup> The disease has no quick treatment and immunization, and it has been indicated by the World Health Organization <sup>4</sup> as a pandemic causing noteworthy morbidity and mortality.

This study set out to survey the information and perspectives of residents in Nigeria about COVID-19 initial week of easing pandemic lockdown in the country. For people to make it in the period of pandemic, satisfactory knowledge of the disease that caused the pandemic is required. Such information can assist with containing the pandemic by receiving right careful steps, which will constantly support both the physical and psychological well-being of the people.

In this present study, females participated more compared to the males. This finding differs from the study conducted by Olapega *et al.*, <sup>7</sup> who showed males to participate more in their study. The reason for the difference may be as a result of the adopted sample size by the authors.

We found that majority of the respondents in this present study were within the ages 30-40 years; as the study tries to show the relationship between the age of the participants and the questions raised on COVID-19.

It was reported from this present study that most of the respondents had a sound and basic knowledge of the meaning of COVID-19, which has helped in the control of this virus in the country. Two recent studies in Nigeria showed that Nigerians had a

Table 5: Chi-square test of association between age of participants and questions raised on COVID-19

Age	Viral infection (%)	Bacterial infection (%)	Genetic Disease (%)	Autoimmune (%)	P-Value
20-30years	357(100.0)	0(0.00)	0 (0.00)	0 (0.0)	
30-40years 40-50years Above 50years	479(100.0) 75(70.1) 0 (0.0)	0 (0.0) 0 (0.0) 0 (0.0)	0 (0.00) 0 (0.0) 0 (0.0)	0(0.00) 0 (0.0) 0 (0.0)	<0.001

sound and foreknowledge of the virus.<sup>7,1</sup>

It is clearly seen that majority of the respondents agreed that shaking of hands with infected persons, touching objects touched by infected persons, and sneezing or coughing by infected persons are major ways in which the virus can be spread. This finding was supported by previous studies by Bao-Liang et al., <sup>3</sup>, Olapegea et al., <sup>7</sup> and Ikpama et al. <sup>1</sup> This examination indicated that most residents avoided potential risk to forestall disease by COVID-19 by-: not going to crowded places and wearing face masks while they were not home. These exacting preventive practices could be principally ascribed to the extremely severe avoidance and control measures executed by the Federal Governments, for example, forbidding open social occasions. Second, they additionally could be the aftereffect of the inhabitants' acceptable information with respect to the high infectivity of the COVID-19 infection, which can be effectively transmitted between individuals by means of imperceptible respiratory droplets.

It was deduced that most of the respondents, admitted that the incubation period of COVID-19 is 2-14days and also that COVID-19 can be prevented by simply frequent washing of hands with running water and sanitizers, wearing of face mask when outside, and coughing and sneezing in the elbow. These findings are in agreement with a study by Ikpama *et al.*, <sup>1</sup> among Nigerians.

The present study also showed that most of the respondents do check social media, television, or print media, every day for updates. This finding

concurs with a study conducted during the SARS epidemic in Hong Kong. <sup>8</sup>

The present study also showed that there was a significant relationship that existed between the participants' age and questions raised on COVID-19 (<0.001). As a result of the anxiousness of everyone about COVID-19; this examination was critical in light of the fact that it considered knowledge and attitudes of Nigerians towards COVID-19. The information territories incorporate source, transmission, wellsprings of data, and preventive conduct toward COVID-19. The discoveries probably certified that Nigerians are exceptionally educated in issues of COVID-19 and their head wellsprings of data about the pandemic are the web-based life, TV, or print media.

#### Recommendations

It is in this way suggested all partners ought to heighten their exertion in sharpening the overall population just as network base refinement program be done in other for the residents to comprehend and conform to every single prudent step to control the spread of the virus.

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