



# **Knowledge And Perception Of Covid-19 Pandemic Among Residents Of Eleme, Rivers State, Nigeria**

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## **ABSTRACT**

COVID-19 is an emerging infection of public health importance. This study examined knowledge and perception of COVID-19 pandemic among residents of Eleme, Rivers State, Nigeria. The descriptive cross-sectional design was adopted for the study. The population of the study consisted of residents of Eleme Local Government Area. A simple random sampling technique was used to select a sample of two hundred participants for the study. Data was collected using a semi-structured questionnaire and analyzed using simple frequencies and percentages. The finding of the study revealed that all the respondents (100%) have heard about COVID-19. 52% had the information from news media, 28% social media, 6% Government, and 14% family/friends. 28% agreed that COVID-19 is thought to originate from bats, 71% agreed that COVID-19 is transmitted through air, contact, feecal-oral routes, 90% agreed that headache, fever, cough, sore throat, and flu are symptoms of COVID-19, 92% agreed that the incubation period of COVID-19 (2-14 days), 90% agreed that COVID-19 leads to pneumonia, respiratory failure, and death, 82% agreed that supportive care is the current treatment for COVID-19, while 93% agreed that hand hygiene, covering nose and mouth while coughing, and avoiding sick contacts can help in the prevention of COVID-19 transmission. The finding of the study 92% agreed that Covid-19 is dangerous, 63% agreed that Covid-19 does not exist in Nigeria, 58% agreed that Covid-19 is a political scam, 63% agreed that they are concerned about the possibility that they or another family member can get infected with this virus, 78% agreed that infection with the virus is associated with stigma (for example: the infected persons feel ashamed because people are afraid of and avoid them, 65% agreed that the media coverage about this disease is exaggerated, while 60% agreed that this virus was initially designed as a biological weapon.

The study concluded that respondents had good knowledge of COVID-19 with some forms of misconceptions and recommended that Government should adopt a healthy risk communication strategy by converting information about COVID-19 into meaningful and indigenous languages to aid easy understanding and compliance

**Keywords:** Knowledge, perception, covid-19, pandemic, residents, Eleme

## **INTRODUCTION**

Coronavirus disease 2019 (COVID-19) is an illness caused by a novel coronavirus, now called Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2; formerly called 2019-nCoV). It is an emerging

respiratory infection that was first discovered in December 2019, in Wuhan city, Hubei Province, China (WHO, 2019). SARS-CoV-2 belongs to the larger family of ribonucleic acid (RNA) viruses, leading to infections, from the common cold, to more serious diseases, such as Middle East Respiratory Syndrome (MERS-CoV) and Severe Acute Respiratory Syndrome (SARS-CoV) (Zhou et al, 2020). Hence, Public Health Emergency of International Concern (PHEIC) was declared on 30<sup>th</sup> January by the World Health Organization (WHO) for the coronavirus outbreak (Mahtani Berger, O'Grady & Iati, 2020) and a pandemic on 11 March 2020 (WHO, 2020)

There are 26.1million confirmed cases, 17.3 million recoveries from the illness and 864,000 deaths worldwide as at September 3<sup>rd</sup>, 2020 (Worldometers, 2020). On February 27, 2020, an Italian citizen became the index case for COVID-19 in Nigeria and as at September 3<sup>rd</sup>, 2020, there were 54,463 laboratory-confirmed cases of COVID-19 in Nigeria with 42,439 discharged and 1,027 deaths and Rivers State having 2,168 cases, 2,003 discharged and 57 deaths (Nigeria Centre for Disease Control, 2020).

SARS-COV-2 is transmitted from person-to-person especially through inhalation of aerosols from an infected individual and close contact (Li et al, 2020). Global concerns about the virus have risen due to its high transmission capability, which may be coupled with morbidity and mortality (Lu, Stratton & Tang, 2020). The clinical symptoms of COVID-19 include fever, which is the most common symptom, cough, anosmia (loss of the sense of smell) fatigue, malaise, and shortness of breath. Old age and patients with pre-existing illnesses (like hypertension, cardiac disease, lung disease, cancer, or diabetes) have been identified as potential risk factors for severe disease and mortality (Tian et al, 2020). To date, there is no antiviral curative treatment or vaccine that has been recommended for COVID-19 (Sahin et al, 2020), however, there are serious researches for a vaccine and cure. More information about its distribution, transmission, pathophysiology, treatment, and prevention are being studied. World Health Organization (WHO) recommends prevention of human-to-human transmission by protecting close contacts and health care workers from being infected and stopping infections from animal sources (WHO, 2019). Primary preventive measures include regular hand washing, social distancing, and respiratory hygiene (covering mouth and nose while coughing or sneezing) (WHO, 2020).

To contain the virus and prevent its spread, the World Health Organization, Government agencies, non-governmental organizations and civil societies embarked on a campaign to enlighten the public on the need to maintain social distancing and appropriate good hygiene. However, Radio Nigeria (2020) announced that the Rivers State government started temperature screening at airports and those returning from countries that have history of confirmed covid-19 and encouraged them to self-isolate.

On March 26, 2020, the Rivers State government announced complete lockdown of the state. Similarly, the Federal government of Nigeria, on March 30, 2020 introduced various containment strategies such as closing of the national borders and airspace, schools, worship centres and other public places, cancelling of mass gathering events and placing the Federal Capital Territory, Lagos and Ogun States on lock down for an initial period of fourteen days (Radio Nigeria, 2020). On May 10<sup>th</sup>, NCDC set up Covid-19 testing laboratories at University of Port Harcourt Teaching Hospital and Rivers State University Teaching Hospital to increase the testing capacity of the state and the country.

However, most Nigerians are aware of the existence of COVID-19 but some still hold a misconception about it (Olapegba et al, 2020). They think it is a political propaganda to extort money from the Government and convert it to personal use. Most people think that if truly it exists, why is it impossible to identify someone with COVID-19. They are not aware that the law of confidentiality exists where it is unethical for a health practitioner to reveal the identity of a COVID-19 patient to avoid stigmatization.

Some Nigerians due to superstitions and ignorance of the science behind the infection prefer only to pray (even violating the social distancing rule by attending churches or mosques during the lockdown) and use anointing oils, talisman, herbs or rituals to prevent contracting and spreading the virus (Abati, 2020). Some also use 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 highly infected zones, incite panic buying, proffer fake cures and undermine medical advice, deliberately or ignorantly (Hassan, 2020). They opined that lockdown, self-isolation and social distancing are un-African solutions to the pandemic (Abati,

2020). They believe that since most Nigerians make their living daily, lockdown is not necessary. This is part of the reason the Nigerian Government eased the lockdown to allow people make daily living with emphasis on practicing social distancing, hand hygiene and use of face masks.

Knowledge is power and given the importance of knowledge of precautionary measures in reducing spread of infectious diseases like COVID-19, it is important to assess the knowledge and perception of people living in Eleme at this time of pandemic. Evidence shows that public knowledge is important in tackling pandemics (Chirwa 2019). Richards (2017) reported that knowledge among ordinary people about how to eliminate risks of contracting Ebola virus led to a rapid drop in mid-2015 in the number of cases of infection. However, researchers will use this study as a reference point on addressing and planning better strategies to offer counselling and quality information and communication services to residents and strengthen their practice of preventive measures to curtail the virus. Therefore, this study aims to ascertain the level of knowledge and perception of COVID-19 Pandemic among residents of Eleme Rivers State, Nigeria.

### RESEARCH METHODS

The study adopted a descriptive research design. The population of the study consisted of residents in Eleme Local Government Area of Rivers State. A sample size of two hundred and fifty was determined using a random sampling method. A self-developed and structured questionnaire was composed to extract information on the variables of the study. The researcher personally administered the questionnaire to respondents. The questionnaire was designed to obtain responses using alternative response pattern. Data collected were entered into the computer using Statistical Package for Social Science (SPSS 20.0) software for analysis and results were presented using frequency tables, charts and percentages.

### RESULTS

**Table 4.1: Socio-demographic Characteristics of Respondents**

Socio-demographic characteristics*	Frequency (F)	Percentage (%)
<b>Age</b>		
18-20	46	23
21-30	64	32
31-40	46	23
41-50	36	18
50 and above	8	4
<b>Total</b>	<b>200</b>	<b>100.0</b>
<b>Gender</b>		
Male	94	47
Female	106	53
<b>Total</b>	<b>200</b>	<b>100.0</b>
<b>Level of Education</b>		
Primary	6	3
Secondary	92	46
Tertiary	102	51
<b>Total</b>	<b>200</b>	<b>100.0</b>

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\*Non responses excluded.

Table 4.1 shows the socio-demographic characteristics of respondents. The table revealed that 23% of the respondents were within the ages of 18-20 years, 32% 21-30 years, 23% 31-40years, 18% 41-50 years and 4% 50 and above. 47% were males while 53% were females. 3% of the respondents attained primary educational level, 46% secondary level and 51% tertiary level.

**Knowledge of Covid-19**

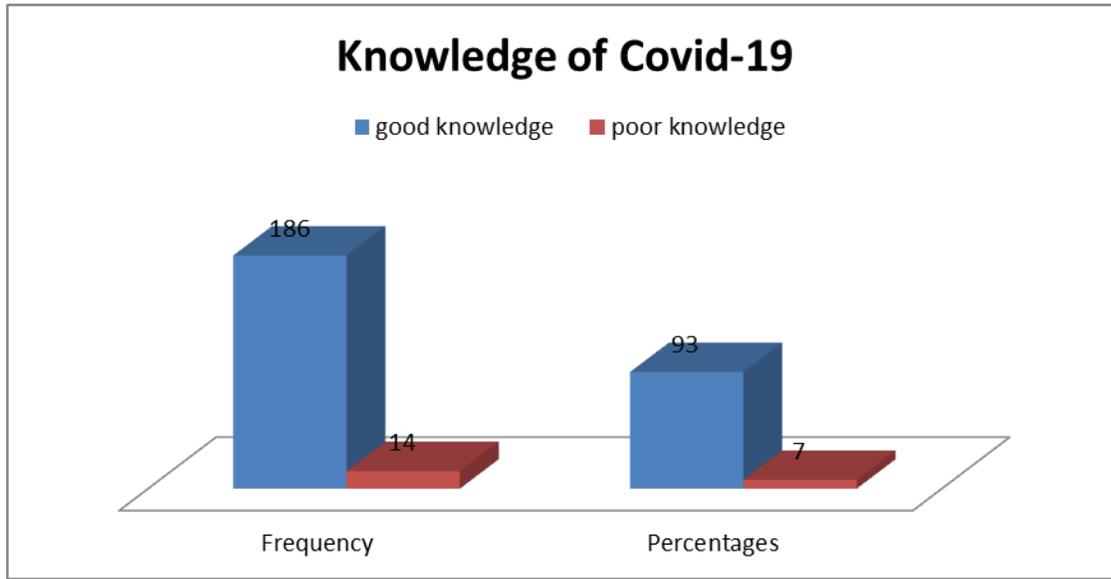


Figure 1 shows the knowledge of Covid-19. The result revealed that 186(93%) of the respondents had good knowledge of Covid-19 while 14(7%) had poor knowledge of Covid-19.

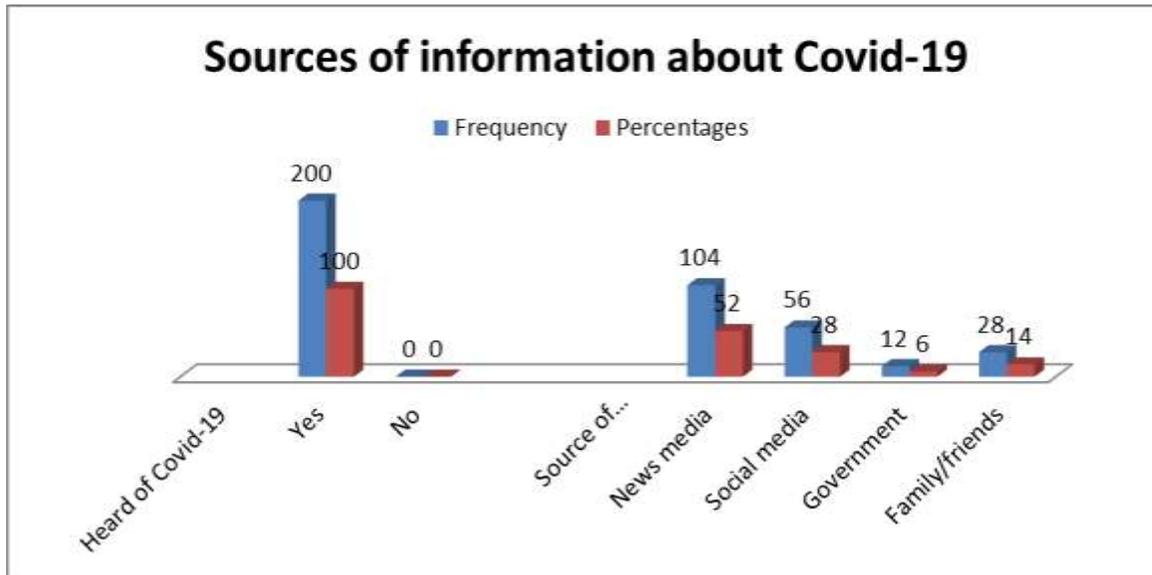


Figure 2 shows the sources of information about Covid-19 among respondents. The result showed that all the respondents 200(100%) have heard about Covid-19. Among the respondents 104(52%) got their information from the news media, 56(28%) social media, 12(6%) Government while 28(14%) got theirs from family/friends.

**Table 4.2: Perception of Covid-19**

How did you hear about breast cancer	Frequency (F)	Percentage (%)
<b>I think that Covid-19 is dangerous</b>		
True	184	92
False	16	8
<b>Total</b>	<b>200</b>	<b>100.0</b>
<b>I think this Covid-19 does not exist in Nigeria</b>		
True	74	37
False	126	63
<b>Total</b>	<b>200</b>	<b>100.0</b>
<b>I think Covid-19 is a political scam</b>		
True	116	58
False	84	42
<b>Total</b>	<b>200</b>	<b>100.0</b>
<b>I am concerned about the possibility that I or another family member can get infected with this virus</b>		
True	126	63
False	74	37
<b>Total</b>	<b>200</b>	<b>100.0</b>
<b>Infection with the virus is associated with stigma (for example: the infected persons feel ashamed because people are afraid of and avoid them</b>		
True	156	78
False	44	22
<b>Total</b>	<b>200</b>	<b>100.0</b>
<b>I think the media coverage about this disease is exaggerated</b>		
True	130	65
False	70	35
<b>Total</b>	<b>200</b>	<b>100.0</b>
<b>I think this virus was initially designed as a biological weapon</b>		
True	120	60
False	80	40
<b>Total</b>	<b>200</b>	<b>100.0</b>

\*Multiple responses excluded

Table 4.2 investigated the perception of covid-19 among respondents. It revealed that 92% agreed that Covid-19 is dangerous, 63% agreed that Covid-19 does not exist in Nigeria, 58% agreed that Covid-19 is a political scam, 63% agreed that they are concerned about the possibility that they or another family member can get infected with this virus, 78% agreed that infection with the virus is associated with stigma (for example: the infected persons feel ashamed because people are afraid of and avoid them, 65% agreed that the media coverage about this disease is exaggerated, while 60% agreed that this virus was initially designed as a biological weapon.

## DISCUSSION

The finding of the study revealed that 186(93%) of the respondents had good knowledge of Covid-19 while 14(7%) had poor knowledge of Covid-19. It showed that all the respondents 200(100%) have heard about

Covid-19. Among the respondents 104(52%) got their information from the news media, 56(28%) social media, 12(6%) Government while 28(14%) got theirs from family/friends. This shows that majority of the respondents have good knowledge of COVID-19. The findings of the study corroborates with that of Azlan et al (2020) whose study found out that participants had good knowledge of COVID-19. The studies of Serwaa et al (2020), Olapegba et al (2020), Adenubi et al (2020) and Al-Hanawi et al (2020) all confirms the findings of this study. This is to show how COVID-19 has affected the world. However, the similarities between these studies may be attributed to the fact that the Government and health agencies such as the World Health Organization and other relevant agencies of the world has put in more effort in making sure that people have the basic knowledge about the deadly virus and its preventive measures.

The finding of the study revealed that 92% of the respondents agreed that Covid-19 is dangerous, 63% agreed that Covid-19 does not exist in Nigeria, 58% agreed that Covid-19 is a political scam. This shows that there is a complication about COVID-19 in Nigeria. The finding of the study also showed that 63% agreed that they are concerned about the possibility that they or another family member can get infected with this virus, 78% agreed that infection with the virus is associated with stigma (for example: the infected persons feel ashamed because people are afraid of and avoid them, 65% agreed that the media coverage about this disease is exaggerated, while 60% agreed that this virus was initially designed as a biological weapon indicating that perception about COVID-19 varies even when they know that it is dangerous. The findings of the study corroborates with that of Serwaa et al (2020) whose study discovered that respondents had high risk perceptions. The study also confirms the findings of Olapegba et al (2020) who discovered in another population in Nigeria that COVID-19 has a lot of misconceptions. The reason for this misconception around the world and in the study area may not be far-fetched as there are several misleading news about COVID-19 from different angles coupled with recent political attachments. This has made a lot of persons believe that COVID-19 is a mere scam even when they have knowledge and have seen that it is actually killing. Hence, there is need for the Government to take responsibility in ensuring they clear all doubts about the disease.

## CONCLUSION

Based on the data and findings, it was concluded that respondents had good knowledge of COVID-19. However, it was also discovered that there exist some form of misconceptions about the virus as a result of doubt.

## RECOMMENDATIONS

Based on the result of the finding, the following recommendations were made:

1. Government should adopt a healthy risk communication strategy by converting information about COVID-19 into meaningful and indigenous languages to aid easy understanding and compliance
2. The Government and health agencies should be transparent in the way they handle infectious diseases in order to create trust among the public
3. Hand washing instruments should be mounted at strategic points at all times to remind people on the need to always wash their hands
4. People tend to believe the first information they hear about a thing, the government and relevant health agencies should always be quick to give accurate information about an infectious diseases before a false rumour is spread

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