

Contents lists available at ScienceDirect

# Data in Brief





## Data Article

# Survey data on the knowledge, attitudes and practices of Nigerians towards the prevention and spread of COVID-19 during the lockdown period in Nigeria



Oluwatobi Banjo<sup>a</sup>, Kazeem A. Adeleke<sup>b</sup>, Peter I. Ogunyinka<sup>a,1,\*</sup>, Dawud Adebayo Agunbiade<sup>a</sup>

# ARTICLE INFO

Article history: Received 12 February 2021 Revised 3 April 2021 Accepted 14 April 2021 Available online 21 April 2021

Keywords: Attitudes COVID-19 Knowledge Nigeria Practices

### ABSTRACT

There had been an urgent call for the collection of standardized data describing clinical presentations, severity, outcomes, and epidemiology of COVID-19 by the World Health Organization (WHO). These data were expected to compliment the national pandemic data collated from countries by the World Health Organization (WHO). Nigeria, among other countries, is not an exception. This survey collected data on the respondent's knowledge on COVID-19, their attitude and practices towards the control of the spread of COVID-19 amongst Nigerians. The data were collected through an online survey. There were 1320 respondents from Nigeria that answered the survey questions. The survey was conducted between March 31 and April 28, 2020 which were within the lockdown period in the country. These data could serve as auxiliary information and/or research data for other researchers in Nigeria. It could also serve as guide or reference data to other researchers outside Nigeria who may be interested in carrying out similar research in another country.

<sup>&</sup>lt;sup>a</sup> Department of Mathematical Sciences, Olabisi Onabanjo University, Ago-Iwoye, Ogun State, Nigeria

<sup>&</sup>lt;sup>b</sup> Department of Mathematics, Obafemi Awolowo University, Ile-Ife, Osun State, Nigeria

<sup>\*</sup> Corresponding author.

E-mail address: ogunyinka.peter@gmail.com (P.I. Ogunyinka).

Social media: (O. Banjo), (P.I. Ogunyinka)

<sup>1</sup> ORCID: 0000-0002-4811-7203

© 2021 The Authors. Published by Elsevier Inc. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/)

# **Specifications Table**

Subject	Public Health and Health Policy
Specific subject area	Public safety, health risk communication, health crisis
Type of data	Primary data
How data were acquired	The structured questionnaire was used to collect the data through the online survey.
Data format	Raw
	Data are stored in CSV format
Parameters for data collection	The survey was conducted amongst Nigerians living in the rural and the urban through the online survey system. It was conducted during the national lockdown for the control of the spread of COVID-19 pandemic in Nigeria.
Description of data collection	The data were collected during the national lockdown in Nigeria against the spread of COVID-19 in the country. This period was considered the right time to know the characteristics of Nigerians towards the obedience or violation of the lockdown and the use of non-pharmaceutical preventive measures in the states.
Data source location	City/Town/Region: the 36 states in Nigeria and the Federal Capital Territory (FCT) Country: Nigeria
Data accessibility	Repository name: Mendeley
	Data identification number: N/a
	Direct URL to data: https://data.mendeley.com/datasets/cpvj7tvgx4/2
Related research article	N/A

### Value of the Data

- The dataset provides insight into Nigerians' awareness level on the knowledge about COVID-19 and its spread in the country. It also provides insight into the government awareness campaign about COVID-19 among Nigerians. Finally, the dataset provides information on how Nigerians have been using the non-pharmaceutical preventive measures in the public, especially in places where the government had restricted gathering during the national lockdown period.
- The dataset is useful to the Nigerian government, the World Health Organization (WHO), and Non-Governmental Organizations (NGOs) whose research or investigation activities are related to COVID-19 research, researchers, and public health policy makers.
- The dataset can be used to establish the relationship and its strength among the factors that are used to measure the COVID-19 awareness level, government sensitization characteristics and the prevention practices among Nigerians.
- The dataset captures responses from survey participants within the 36 states and the Federal Capital Territory (FCT) of Nigeria. Since all the states in Nigeria are represented in the survey, hence, the dataset would be valuable to conduct research that can be compared with any COVID-19 research conducted in any of the 37 states (including the FCT) in the country.

## 1. Data Description

The World Health Organization, on January 30, 2020 declared the China originated Severe Acute Respiratory Syndrome Coronavirus (SARS-CoV-2) as a Public Health Emergency of International Concern (PHEIC) [1]. SARS-CoV-2 was also named COVID-19 (meaning Coronavirus 2019). This declaration had led to the creation of the non-pharmaceutical measures against the spread

of the virus. Many countries, including Nigeria, had implemented the use of these preventive measures. Other internal control measures introduced by Nigerian Government included shut down of COVID-19 hotspot states (Ogun, Lagos, Kano states and the Federal Capital Territory), shut-down of inter-state movement, indefinite suspension of schools, closing of places of worship, market, relevant national programs, airports and land borders. Social distancing, promotion of hand washing with soap and running water, the use of face mask and hand sanitizer and good hygiene among the populace were also promoted by the Nigerian government [2,3]. However, [4] had reported that the level of knowledge and attitude of the populace towards an infectious/contagious virus is related to the level of emotional response among the same populace. Following the clarion's call by WHO for COVID-19 pooling data bank [5], hence, this dataset provides insight to the public understanding and practices of the non-pharmaceutical preventive measures against the contraction of COVID-19 in the country. It also provides insight on the Nigerians' perception on the government awareness programmes about COVID-19.

A lockdown order was enforced by the federal government of Nigeria in March 30, 2020 in three most vulnerable states. The states were Lagos state, Ogun state and Abuja (the Federal Capital Territory, FCT). The first phase of the gradual lifting of the lockdown order started in May 4, 2020. However, this national online survey was conducted between March 31 and April 28, 2020, inclusively. The data were collected from 1322 respondents using Google online form. The survey used snowball sampling method with wide broadcast of the survey form link. An e-poster was designed to show the brief survey description, objective, procedures, voluntary nature of participation, declaration of anonymity and confidentiality on the survey form. These summaries with the form link were broadcast on WhatsApp platforms (both individual and group), Twitter, Instagram and individual Facebook pages. Similarly, the e-poster was advertised on the official Facebook advertisement campaign system in order to gain the attention of residence in the 36 Nigerian states including Federal capital Territory. However, there was no survey inducement for any respondent.

The survey adopted and modified the COVID-19 preparedness and response questionnaire released by International Federation of the Red Cross and Red Crescent Societies (IFRC), UNICEF and World Health Organization [6]. The questionnaire comprised three sections namely the demographic section, the Knowledge, Attitudes, and Practices (KAP) sections (Table 1). There were six knowledge-based questions which were tagged/coded from K1 to K6 (Table 1) with either boolean or multiple choice options. There were also five attitude-based questions which were coded from A1 to A5 (Table 1) with only likert scale option. There were five practice-based questions which were tagged from P1 to P5 (Table 1) with either multiple choice options or likert type option. Fig. 1 shows the distribution of the data collection between March 31 and April 28, 2020 when the data were collected. Finally, the associated research manuscript for this dataset had been submitted for review and publication [7].

# 2. Experimental Design, Materials and Methods

This dataset was collected through an online survey that took place between March 31 and April 28, 2020, inclusively. This survey period was within the period federal government of Nigeria declared lockdown in Ogun state, Lagos state and Abuja (FCT) when the non-pharmaceutical preventive measures were introduced in Nigeria. This period is considered a critical period in containing the virus in the country. Hence, we decided to use the period to know the perception of Nigerians about the government sensitization programmes and their attitudes and practices about the use of the measures against the spread of the virus.

The residence in Nigeria as at the time the government declared measures were the respondents to the survey. The standardized questionnaire released by IFRC, UNICEF and WHO was used for the survey. The free Google form was used to host the questionnaire. The Google form link was broadcasted on WhatsApp platforms (both individual and group), Twitter, Instagram and individual Facebook pages. Respondents were requested to broadcast the link after completing the form. Hence, the snowball sampling method was used for the survey. The questionnaire

 Table 1

 Survey questionnaire for the assessment of Knowledge, Attitude and Practice towards COVID-19.

Questions	Tag	LT	ВО	MC
How can you rate Nigerian Government awareness programme on COVID-19?	A1	06	NA	NA
Which channel/who do you trust the most to receive information related to coronavirus?	A2	17	NA	NA
What is your reaction to the news that some Nigerian Political leaders have contacted COVID-19?	A3	04	NA	NA
Do you agree to the Sit-down at home instruction issued by the Federal Government of Nigeria?	A4	03	NA	NA
Are you afraid that contact with Coronavirus is a DEATH SENTENCE?	A5	03	NA	NA
Have you ever heard about the new Coronavirus disease (COVID-19)?	K1	NA	2	NA
What kind of information have you received about the disease?	K2	NA	NA	05
Where did you hear about the new coronavirus from? What channels or sources?	К3	NA	NA	17
How does the coronavirus spread?	K4	NA	NA	11
What are the main symptoms?	K5	NA	NA	08
Do you know how to prevent it?	K6	NA	NA	09
What have you and your family done to prevent becoming sick with coronavirus in the recent days?	P1	NA	NA	07
What to do if you or someone from your family has symptoms of this disease?	P2	NA	NA	07
Which group is being discriminated in your community because of coronavirus?	Р3	NA	NA	05
In recent days, do you go to religious worship in the church/mosque/others	P4	04	NA	NA
In recent days, do you organize or attend social parties?	P5	04	NA	NA

Notes: LT: Number of Likert-type scale options; BO: Boolean question; MC: Multiple Choice Options; NA: Not Applicable.

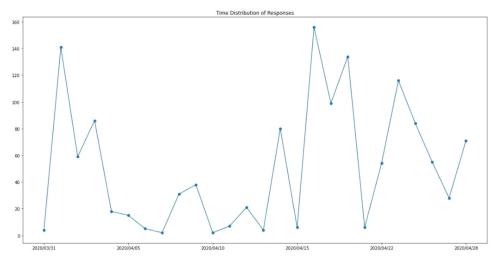


Fig. 1. Time plot for the data collection based on the date of questionnaire submission.

is saved in supplementary file. Total respondents number of 1322 completed the survey form. Two respondents were removed from the sample during the data cleaning exercise for providing incomplete responses. The python code used for the data cleaning is presented in the mendely repository. The remaining sample contained 1320 respondents. The following information were included in the sample.

Demographic data: Several socioeconomic questions were asked from the respondents. These include gender, age group, marital status, occupation, state of resisdence,

**Table 2**Summary of the selected few questions in the Attitude and Practices of the non-pharmaceutical preventive measure against COVID-19.

	Responses							
Question	YS N(%)	NO N (%)	IDN N (%)	NR N (%)	CP1 N (%)	CP2 N (%)	CP3 N (%)	CP4 N (%)
A4	217 (16.4%)	1064 (81.6%)	31 (2.3%)	08 (0.6%)	NA	NA	NA	NA
A5	1012 (76.7%)	253 (19.2%)	53 (4%)	2 (0.2%)	NA	NA	NA	NA
P4	NA	NA	NA	NA	31 (2.3%)	535 (40.5%)	734 (55.6%)	20 (4.9%)
P5	NA	NA	NA	NA	11 (0.8%)	85 (6.4%)	1159 (87.8%)	65 (4.9%)

Note: A4: Do you agree to the Sit-down at home instruction issued by the Federal Government of Nigeria?

A5: Are you afraid that contact with Coronavirus is a DEATH SENTENCE?

P4: In recent days, do you go to religious worship in the church/mosque/others

P5: In recent days, do you organize or attend social parties?

CP1: I go to party/worship even if we are more than 30 persons in the venue.

CP2: I go to party/worship but we are less than 30 persons in the venue

CP3: I do not go to party/worship

CP4: I do not go to party/worship at all

YS: Yes NO: No

IDN: I Don't Know NR: No Response NA: Not Applicable

religion, education level, and geo-political zone of the respondents. Responses were collected from some respondents in the 36 states and Abuja (the federal capital territory of Nigeria).

- **COVID-19 knowledge based questions:** There were six knowledge-based questions in the questionnaire. The first question in this section was to know if the respondents have heard about the virus with a Boolean option. The remaining five questions collected the participants' knownledge on the kind of COVID-19 information, source of COVID-19 information, COVID-19 symptons, how the virus spread and how to prevent contracting the virus. These five questions had multiple choice options.
- **COVID-19 attitude based questions:** There were five questions in this section. The questions made insight to respondents' trusted sources of COVID-19 information and their attitude to the lock-down order of the federal government of Nigeria. The section also investigated into the respondents' fear to contracting the virus. The fives questions have likert scale options. Responses to questions A4 and A5 are summarized in Table 2.
- **COVID-19 practice based questions:** There were also five questions in this section. The first three questions were multiple choice questions. They investigated into what the respondents had done to prevent being sick of COVID-19 and what would they do if they were sick of the virus. It also investigated the discrimination of tribe/people based on COVID-19 information. The remaining two questions were likert scale option. It investigated to know the respondents practice of going to party, religious places and public gathering. Responses to questions P4 and P5 are summarized in Table 2.

Future research could reuse this dataset or develop a similar research in order to conduct a comparative analysis between this Nigeria and another country.

### **Ethics Statement**

- Originality and plagiarism: This work had been original work of the authors. Other authors had been cited accordingly in this manuscript.
- *Multiple, redundant, or concurrent publication:* We declare that this manuscript contents had not been under consideration for publication, nor had it been published somewhere.
- Acknowledgement of sources: This manuscript properly acknowledged the reviewed works.
- Fundamental errors in published works: The authors would claim responsibility for inaccuracy in the published work. We shall take swift action to notify the editor and make the necessary corrections.
- *Informed consent:* The authors confirm that this online survey requested for the respondents consent before the questionnaire page was displayed to the respondent. None of the respondents was compelled in any form nor given survey inducement to complete the online survey questionnaire. The authors also declared that all the respondents were fully anonymous.

### **CRediT Author Statement**

• Authorship of the paper: All the authors confirmed that this data article had been read and certified by all the authors whose names appear on this article. We also confirmed that there is/are no person(s) whose status is an author but was not included in this article. We further confirmed that the order of arrangement of the author names is approved by all the authors. The following are the contributions of the authors to this article.

**Oluwatobi Banjo:** Data curation, Formal analysis, Methodology, Resources, Software, Validation, Visualization, Roles/Writing - original draft and Writing - review & editing; **Kazeem A. Adeleke:** Data curation, Formal analysis, Methodology, Resources, Software, Validation, Visualization, Roles/Writing - original draft and Writing - review and editing; **Peter I. Ogunyinka:** Conceptualization, Data curation, Formal analysis, Methodology, Resources, Visualization, Roles/Writing - original draft and Writing - review and editing; **Dawud Adebayo Agunbiade:** Conceptualization, Formal analysis, Methodology, Project administration, Supervision, Validation, Visualization, and Writing - review and editing.

### **Supplementary Materials**

The survey questionnaire and the Python code used for the data cleaning/processing are stored in the Mendely repository.

# **Declaration of Competing Interest**

We declare that there was no known competing financial interest and/or relationship with the respondents, any financial body or governmental or non-governmental agency that might have influenced the data collection process or the dataset.

# Acknowledgments

The authors appreciate all the participants who took part in this online survey.

# **Funding**

We declare that this survey was not funded by any research agency. The authors did not receive any fund from any governmental nor non-governmental organization.

### References

- [1] World Health Organization (WHO), Naming the Coronavirus disease (COVID-19) and the virus that causes it, World Health Organization. Retrieved on <a href="https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/naming-the-coronavirus-disease-(covid-2019)-and-the-virus-that-causes-it, 2020, Accessed April 29, 2020.
- [2] P. Adepoju, Nigeria response 2 COVID-19; first case detected in sub-Saharan Africa, Nature, News Feature on March 11 1-7 (2020) 2020.
- [3] E. Bassey and O. Akaninyene, Can Nigeria contain the COVID-19 outbreak using lessons from recent epidemic, Lancet (2020). doi:10.1016/s0140/6736(20)30411-6.
- [4] B. Zhong, W. Luo, H. Li, Q. Zhang, X. Liu, W. Li, Y. Li, Knowledge, attitudes and practices towards COVID-19 among Chinese residents during the rapid rise period of COVID-19 outbreak: a quick online cross-sectional survey, Int. J. Biol. Sci. 16 (10) (2020) 1745–1752, doi:10.7150/ijbs.45221.
- [5] World Health Organization (WHO), Multisystem inflammatory syndrome in children and adolescents temporally related to COVID-19. Retrieved on <a href="https://www.who.int/news-room/commentaries/detail/multisystem-inflammatory-syndrome-in-children-and-adolescents-with-covid-19">https://www.who.int/news-room/commentaries/detail/multisystem-inflammatory-syndrome-in-children-and-adolescents-with-covid-19</a>, 2020. Accessed January 8, 2021.
- [6] International Federation of the Red Cross and Red Crescent Societies (IFRC), UNICEF and World Health Organization (2020). RCCE Action Plan guidance: COVID-19 preparedness and response 26 (2020).
- [7] Ogunyinka P.I., Adeleke K.A., Banjo O., Agunbiade D.A., A Cross-sectional survey of knowledge, attitudes and practices towards COVID-19 pandemic during the lockdown period in Nigeria. Manuscript submitted for publication with, Nigeria., Africa Journal of Sustainable Development (AJSD) http://africajsd.com, Submitted for publication.