

Original Research Article

COVID-19 pandemic: Nigerians' perception about the National health system and socio-political rights

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Received: 17 September 2020

Accepted: 13 October 2020

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ABSTRACT

Background: The study investigated the knowledge of Nigerian youths on COVID-19 and their perception about COVID-19, National health system and socio-political right.

Methods: A descriptive study designed was adopted using an online survey method. Google form was used to elicit responses from 225 Nigerian youths across the six geo-political zones of Nigeria. A 12-point knowledge scale was used to assess knowledge, while a 12-point perception scale was used to determine respondents' perception. Descriptive statistics was used for data analysis.

Results: The respondents' mean age was 28.2±6.1 years. Majority (58.0%) were from the Southern part of Nigeria while 42.0% were from the Northern part of Nigeria. Also, 63.0% of the respondents had at least a first degree and majority (60.4%) were female. Almost all (87.2%) the respondent had good knowledge on the novel COVID-19, with mean knowledge score of 9.5±2.6. About one-third (31.6%) of the respondent reported the Nigeria health system is too weak and they desired to leave the country, 84.9% believed the federal Government of Nigeria is not doing enough in handling the COVID-19 and 45.5% felt Nigeria is not a safe place during a pandemic.

Conclusions: The general perception of Nigerian's youth about the health system and Government handling of the COVID-19 was poor. A good knowledge of COVID-19 was documented. There is therefore the need for Government to scale up and strengthen the health system capacity to handle health emergencies such as the COVID-19.

Keywords: COVID-19, Knowledge, Perception, National health system, Nigeria

INTRODUCTION

Coronavirus infections are emerging respiratory viruses and are known to cause illness ranging from the common cold to severe acute respiratory syndrome (SARS).¹ On 30 January 2020, the world health organization (WHO) declared COVID-19 a public health emergency of international concern. COVID-19 is a disease that spread by human-to-human transmission through droplet, feco-

oral, and direct contact and has an incubation period of 2-14 days.² To date, no antiviral treatment or vaccine has been explicitly recommended for COVID-19. Therefore, applying preventive measures to control COVID-19 infection is the most critical intervention.

The fight against COVID-19 is still on-going all over the world. To guarantee the final success, adherence to control measures by people are essential, which is largely

affected by their knowledge and other factors like perception, attitudes and practices towards COVID-19 in accordance with KAP theory.³ The SARS outbreak in 2003 left us with lessons that suggest that knowledge and attitudes towards infectious diseases has association with level of panic emotion among the population, which can further exacerbate attempts to prevent the spread of the disease.⁴

The presence of the COVID-19 pandemic in low and middle-income countries (LMICs) is raising urgent concerns about the preparedness of these countries health systems to address the disease as the transmission continues. It is not feasible to adopt the measures employed by high income countries considering the fact that the health care facilities were already overburdened before the pandemic in LMICs.⁵ The current recommendations however focus heavily on hospital based interventions, but in the context of severe resource limitations, addressing shortages of hospital beds, oxygen, ventilators and personal protective equipment as primary response initiatives may not be realistic.

However, strengthening health systems has become a guiding principle for many in the global health community. While the past few years have seen various developing countries and funding agencies increase their commitment, resources, and interventions to strengthening health systems; there are many competing concepts and approaches, and many ambiguities around what health systems strengthening really means and what it entails.⁶ The migration of health care personnel to other countries in search of greener pastures has produced a medical brain drain across most developing countries especially Nigeria. Were it not so, why would a staggering 2,392 Nigerian doctors be practicing in the United States alone and 1,529 in the UK as far back as 2005. And only recently precisely in 2010 another research showed that the figure has risen to over 5000 doctors in the United States, nurses of course not included. The crux here is that there seems to be no end in view. And unless our Government determines and arrests factors responsible for this migration, she cannot hope to stem this tide, which has currently translated to a national emergency.⁷

A journal identified the following among others as the factors affecting the overall performance of the Nigerian healthcare system: inadequate health facilities/structure, shortage of essential drugs and supplies, inadequate supervision of the healthcare system, poor human resources, management, remuneration and motivation, lack of fair and sustainable health care financing with very low per capita health spending, unequal economic and political relations, the neo-liberal economic policies of the Nigerian state and corruption, high out-of-pocket expenditure in health by citizens and absence of community based integrated system for disease prevention, surveillance and treatment.⁸ All of which has

impacted the nation capacity to manage the ravaging COVID-19 pandemic.

Healthcare workers (HCWs) are the primary sector in contact with patients and are an important source of exposure to infected cases in healthcare settings; thus, HCWs are expected to be at high risk of infection. Understanding public perceptions and their responses to COVID-19 is therefore critical in the ongoing planning and implementation of effective pandemic responses in LMICs, particularly by evaluating the knowledge of Nigerians on COVID-19 and determine their perception about COVID-19, National health system and socio-political right.

METHODS

Study design

This study was a descriptive survey using a validated structured questionnaire designed with google form for online access by respondents.

Study population

The population chosen for the study were young adults (youths ages 18 and 40 years) across the six-geopolitical zone of Nigeria.

Inclusion and exclusion criteria

Young adults who have mobile phone and can participate in the online survey and those who gave informed consent were included in the study. Children, the elderly and those who did not give informed consent were excluded from the study.

Sample size and sampling technique

A sample of 250 was calculated using sample size determination formula.⁹ Convenient sampling procedure was used due to the fact that, when this study was on going, there was a national lock down to prevent the spread of COVID-19 infections. So, only those who could be reached and are willing to participating in the study were recruited and a total of 225 persons participate in the study

Reliability and validity of study instrument

Face, content and construct validity were ensured by subjecting the instrument to peer and experts review to ascertain that the variables in the instrument could significantly measure the objectives of interest. Reliability was ensured by pre-testing the study instrument on 20 young adult in Ibadan Metropolis and a Cronbach alpha measure of 0.81 was gotten which was accepted to be reliable. However, after the reliability test, the instrument was also re-structured and ambiguous questions were either reframed or removed.

Method of data collection

Data collection was done via the online survey medium. The responses were filled through the designed google form by the respondents.

Data analysis procedure

The responses from the google form were exported into excel format to get the summary statistics. Descriptive statistics was used to describe the demographic characteristics of respondents, their knowledge and perception about COVID-19.

RESULTS

Socio-demographic characteristics of the respondents

Table 1 presents the socio-demographic characteristics of the respondents. All the respondents were aware of COVID-19 and the sources of information were; television (73.3%), whatsapp (65.3%), radio (53.8%), friends (52.4%), newspaper (48.4%), twitter (46.7%) and instagram (39.6%). The mean age of the respondents was 28.2±6.1 years.

Table 1: Socio-demographics of respondent.

Variables	Responses	Frequency	%
Age as at last birthday* (years)	Less than 20	10	4.4
	20-24	50	22.3
	25-29	81	36.0
	30-34	59	26.2
	35-40	25	11.1
Religion	Christianity	216	96.0
	Islam	9	4.0
Location	North	95	42.0
	South	130	58.0
Highest level of education	Ordinary level	9	4.0
	First degree	143	63.6
	Masters	69	30.7
	PhD	4	1.8
Gender	Male	89	39.6
	Female	136	60.4
Marital status	Single	174	77.3
	Married	50	22.2
	Separated	1	0.5
Occupation	Health workers	122	54.2
	Students	41	18.2
	Civil servants	17	7.6
	Business owners	21	9.3
	work with private establishment	24	10.7
Average personal income (Naira)	Less than 10,000	37	16.4
	11,000 - 30,000	40	17.8
	31,000- 50,000	38	16.9
	51,000- 100,000	59	26.2
	100,000 and above	51	22.7

*Mean age 28.2±6.1 years

Knowledge of respondents on COVID-19

All the respondents reported that COVID-19 is a pandemic disease that has become a serious public health concern globally. Also, 99.6% of the respondent reported that the symptoms of COVID-19 include cough and shortness of breath while 98.7% also reported fever and difficulty in breathing as part of symptoms of COVID-19. 99.6% reported that suspected cases of COVID-19 must go for self-isolation for a minimum of 14 days. It is

evident that almost all (87.2%) the respondent had good knowledge on the novel COVID-19 with mean knowledge score of 9.5±2.6 (Table 2).

Respondents' perception about COVID-19, National health system and socio-political right

The general perception about the health system and Government ways of handling of the COVID-19 was poor. About one-third (31.6%) of the respondent reported the Nigerian health system is too weak and they desire to

leave Nigeria. Also, 84.9% believe the federal Government of Nigeria is not doing enough in handling the COVID-19 and 45.5% felt Nigeria is not a safe place during a pandemic. Some (48.9%) of the respondents

reported that, the after effect of the COVID-19 pandemic will make business to slow down, 12.4% reported they may lose their job, 22.2% didn't have food and 16.4% didn't know what effect it will have on them (Table 3).

Table 2: Knowledge of COVID-19.

Knowledge questions	Responses		
	True N (%)	False N (%)	I don't know N (%)
COVID-19 is a pandemic disease that has become a serious public health concern globally?	225 (100.0)	0 (0.0)	0 (0.0)
The virus cannot be prevented by personal hygiene and ensuring social distancing?	22 (9.8)	197 (87.6)	6 (2.6)
The corona virus survives outside the body for several hours to days?	166 (73.8)	41(18.2)	18 (8.0)
Symptoms of COVID-19 include cough and shortness of breath?	224 (99.6)	0 (0.0)	1 (0.4)
Fever and difficulty in breathing are also symptoms of COVID-19?	222 (98.7)	0 (0.0)	3 (1.3)
Patients with mild symptoms of COVID-19 can recover after one week of isolation and appropriate treatment?	167 (74.2)	29 (12.9)	29 (12.9)
All suspected cases of COVID-19 must go for self-isolation for a minimum of 14 days?	224 (99.6)	0 (0.0)	1 (0.4)
People with underlining health condition are at higher risk of COVID-19?	154 (68.4)	0 (0.0)	71 (31.6)
Older adults are at higher risk of COVID-19?	144 (64.0)	0 (0.0)	81(36.0)
Handshakes, body contacts, touching infected metal object and air droplets of infected persons are the means of transmission of COVID-19?	203 (90.2)	0 (0.0)	22 (9.8)
At least 6-feet interval is a safe distance to stay apart from someone who's sick?	180 (80.0)	45 (20.0)	0 (0.0)
There is a specific treatment and vaccine for Coronavirus?	8 (3.5)	188 (83.6)	29 (12.9)

Table 3: Perception about COVID-19, National health system and socio-political right.

Perception	Agree N (%)	Disagree N (%)	Undecided N (%)
I feel COVID-19 is the disease of the rich. I am not bothered.	9 (3.6)	216 (96.4)	0 (0.0)
The Nigeria health system is too weak to manage this pandemic.	165 (73.3)	43 (19.1)	17 (7.6)
The Government has invested so much in Nigeria health sector and I believe we can handle COVID-19 appropriately.	39 (17.3)	162 (72.0)	24 (10.7)
There's no COVID-19 in Nigeria. Our political leaders just want to steal money.	0 (0.0)	199 (88.4)	17.1 (7.6)
Because Nigeria has poor capacity to manage this kind of disease, I will like to relocate to another country like the USA.	45 (20.0)	158 (70.2)	22 (9.8)
Since the Nigeria health system is too weak, as a Nigerian, I want to leave this country for a better country.	71 (31.6)	132 (58.7)	22 (9.8)
I believe the federal government could have handled the COVID-19 better.	191 (84.9)	21 (9.3)	13 (5.8)
I feel I cannot contact the disease whether I practice safety precaution or not.	35 (15.6)	185 (82.2)	5 (2.2)
Nigeria is a safe place to live during this type of pandemic.	72 (32.0)	102 (45.3)	51 (22.7)
I believe the Government is responsible for me during this pandemic to provide me relief materials.	138 (61.3)	65 (28.9)	22 (9.8)
I feel the total lockdown in some State is not necessary.	60 (26.7)	158 (70.2)	7 (3.1)
Do you see the lockdown affecting your business and standard of living?	203 (90.2)	22 (9.8)	0 (0.0)

DISCUSSION

Coronavirus (COVID-19) has been declared a pandemic, and it has become one of the largest pandemics in the world affecting more than 200 countries.¹⁰ The current rising in COVID-19 transmission has elevated tensions among everyone, including health officials and the health systems. A pertinent question now arises on how we perceive COVID-19, National health system and socio-political right in times of public health crisis. Consequently, we investigated the knowledge of Nigerians on COVID-19 and determine their perception about COVID-19, National health system and socio-political right.

A greater proportion of the study participants were females, aged 25-29 years and well educated population. Findings from this study showed that all the study participants are were aware of COVID-19 with the major source of information being the mass media such as television, radio and newspaper which is similar to the findings of a study conducted during the SARS epidemic in Hong Kong.¹¹ Also, a study opined that the traditional media provide vital information during outbreaks compared to other sources of information.¹² Other sources of information were the social media such as WhatsApp, twitter and instagram; friends and families which is in tandem with what was reported in a similar study.¹² However, there could be risk of reading misleading and unverified information especially from social media platforms which could misguide the public bringing about unnecessary tension. Therefore, an accurate source of information on this pandemic is pertinent in ensuring the fight against COVID-19.

Results obtained from the research questions regarding knowledge of COVID-19 in relation to respondents' knowledge of the source, transmission, symptoms, preventive behaviours, fatality rate among Nigerians, were significantly high. Our finding showed that the overall knowledge on COVID-19 was 87.2% which could be adduced to the fact that about 96% of the study participants have minimum of first degree certificate and the level of awareness campaign done by Government and non Governmental agencies to sensitize the masses. Our finding is similar to the study conducted in Nigeria with overall knowledge score of 83.9% and among Chinese residents with overall knowledge score of 90%.^{13,14} However, similar studies among adults in Ghana shows an overall knowledge of 61.7% and in Bangladesh where the overall correct knowledge is 63.3%; which are lower than what we found in our study.^{15,16}

The pandemic is expected to place huge and unprecedented pressure on the country's under invested healthcare system. Estimates have shown that around 20% of COVID-19 cases require hospitalization and another 7.5 % require intensive care.¹⁷ We found that the general perception of Nigerians about the health system and government way of handling of the COVID-19 is

poor, hence about a third of the respondents desire to leave the country for a country where the health system is better. This finding could be adduced to an earlier communiqué at the Nigerian National health conference in 2009 where it was stated that the health system remains weak as evidenced by the lack of coordination, fragmentation of services, dearth of resources, including drug and supplies, inadequate and decaying infrastructure, inequity in resource distribution, and access to care and very deplorable quality of care. The communiqué further outlined the lack of clarity of roles and responsibilities among the different levels of government to have compounded the situation.¹⁸

WHO (2020) stated that in a bid to strengthening the health system of countries during community transmission, countries will need to find ways to create increased capacity to treat COVID-19 patients while maintaining essential services. This requires a comprehensive and well aligned set of policies to reorient the complex machinery of health systems. The extent to which health systems need to be reoriented depends on the success of public health measures (including social distancing) to slow transmission and spread incidence over a longer time period (flattening the curve). These approaches are critical to reduce sudden increased capacity needs during the outbreak, ensure that health systems can cope, and prevent hospital care units and ICUs from becoming overwhelmed.¹⁹ However, our findings show that respondents perceived that the Nigeria health system is weak as the health facilities lacks equipment and personnel.

Older people (those above 65 years), and those with underlying health conditions who require care and support from others, have been cited as being particularly susceptible to severe infection by COVID-19.¹⁹ However, our respondents are young adult (youth), it could be inferred that they fear for their own lives and that of their parents who are more susceptible to the disease due to age and other underlying morbidities. More so, African countries are known to have fragile health systems and this remains a source of concern, especially in the event of a surge in outbreaks. If the cases continue to increase, it was estimated that between 9-11% of infected patients will eventually need critical care and require intensive care (ICU).²⁰

Majority of the respondents perceived that businesses will be affected as a result of the lockdown and this is consistent with the report of the economist which projected that Africa will have its fair share of the worst effects of this disease by the end of the pandemic.²¹ United Nations development programme stated that as the outbreak intensifies, Nigeria's services, trade and financial sectors would suffer significant disruptions. This could be a severe blow and could be a threat to instability as youth unemployment/underemployment is already high at 55%.

CONCLUSION

Good knowledge of COVID-19 and poor perception about the capacity of the Nigeria health system to handle the pandemic has been documented in this study. There is therefore the need for Government to strengthen and scale up the health system capacity to handle health emergencies such as the COVID-19 in order to ensure that the Nation is not badly hit beyond the bearable limit.

Funding: No funding sources

Conflict of interest: None declared

Ethical approval: The study was approved by the Institutional Ethics Committee

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Cite this article as: Dada SO, Oniya OA, Hussain OJ. COVID-19 pandemic: Nigerian's perception about the National health system and socio-political rights. *Int J Res Med Sci* 2020;8:4174-9.