

Knowledge, Attitude of Health-Care Workers and Effect on Patients-Seeking Health-care Services in Ado, Ekiti State, during Coronavirus Disease-2019 Pandemic: A Pilot Cross-sectional Survey

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Abstract

Aims: This study was aimed to assess the knowledge of coronavirus disease-2019 (COVID-19) pandemic and document its effect on accessing health-care services among individuals living in Ado, Ekiti State, Nigeria. **Materials and Methods:** The study was a cross-sectional pilot survey. Respondents consisted of 100 randomly selected individuals of different socioeconomic, educational, and age groups. The questionnaire consisted of 10 questions. It was distributed online. The survey lasted from June 10 to 28, 2020. **Results:** Sixty percent (60%) of respondents were males and 40% females. Knowledge and belief that COVID-19 was real were high (94%). Fifty-seven percent (57%) of respondents had need for healthcare, but did not visit health-care facility (HCF), 17 (17%) visited and 26 (26%) had no need to visit. Of the 57 (57%) who did not visit HCF, they attributed it to various reasons-health care workers (HCW) would think they have COVID-19, 8 (19%); HCW would not be at the facility 16 (37%) and lockdown 19 (44%). The 12 (48%) who visited HCF reported that HCWs attended to them, 9 (36%) were neither attended to nor referred and 4 (16%) referred. Forty-six percent (46%) reported many have died at home due to inability to access HCF and others had varying opinions. **Conclusion:** This study has shown that knowledge and belief on COVID-19 among residents in Ado was high. However, limitation due to the lockdown could have great effects on access to health-care services and the disposition of HCWs to attend to those who may be in need of health care.

Keywords: Attitude, coronavirus disease-2019, effects, knowledge, morbidity, mortality, pandemic, patients, Severe Acute Respiratory Syndrome-novel coronavirus 2, survey

INTRODUCTION

Coronavirus disease 2019 (COVID-19), a major global pandemic, has significantly impacted on health-care services (HCSs) globally and overwhelmed health-care systems in resource-rich countries.^[1-4] The Severe Acute Respiratory Syndrome – novel Coronavirus 2 (SARS-nCoV-2), the virus that causes the disease was first reported in Wuhan, Hubei Province, China in December, 2019^[5,6] and has spread

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to over 204 different countries.^[7] As at the time of writing this manuscript 10,922,324 confirmed cases of COVID 19 and 523,011 mortalities have been reported globally.^[7]

COVID 19 pandemic has affected the social, economic, and health sectors across different countries including the low and middle income countries (LMICs).^[3,4,7] However, fragile health systems in LMICs seem to feel the impact more than those in developed countries.^[8,9] The reasons for this are clear-poor funding for health care, out-of-pocket expenditures for health care, poor preparedness for disease outbreaks, poorly motivated health-care workers (HCWs), and lack of basic personal protective equipment (PPEs) among others.^[6,8-10]

A recent World Health Organization (WHO) published survey report^[11] on the effects of COVID-19 on HCSs globally showed that HCSs had partially or completely been disrupted in more than 53% for hypertension, 49% for diabetes and diabetes-related complications; 42% for cancer treatment, and 31% for cardiovascular emergencies among all the countries surveyed. The COVID-19 pandemic has added additional disease burden to a country already burdened with many communicable and noncommunicable diseases.^[11] With limited resources in budgetary allocations for health care, out-of-pocket expenditures for accessing health-care services, there is no doubt that disruption in HCSs could have huge effects on the individual's desire to access HCSs.

The first COVID-19 case in Nigeria was reported in February, 2020, through an Italian who imported the disease into the country.^[12] However, after the reportage of this index case, community transmission has been prevalent.^[12] The disease has spread to 35 states of the federation, including Abuja, the federal capital territory. Till date, the virus has caused 40,532 infections and 858 mortalities across the country,^[12,13] resulting in a case mortality rate of 2.1%. Lagos, the commercial nerve of the country, has the highest number of infected individuals in the country and this might be attributed to its cosmopolitan status [Figure 1].

Ekiti State, one of the states in the South-West region of Nigeria reported its COVID-19 index case on March 18,

2020.^[14] The disease was imported into the state through an indigene of the state who resided outside the state.^[14] In a proactive measure to limit the spread of the virus across the state, the government declared total locked down throughout the state.^[15] All public and private schools, including tertiary institutions, were shut down from Monday, March 23, 2020 till the time of documenting this study.^[15] Other measures implemented were: prohibition of public gathering of more than 20 people, closure of all forms of religious, political, and social gatherings, closure of markets, night clubs, burial ceremonies, and restrictions of intra and interstate movement and travelling, respectively. However, this lockdown excluded all institutions providing essential services within the state; and this includes all health-care institutions and her workforce, caregivers, social welfare officers, fire service officers, emergency response officers, and security guards.^[14-16] Till date, Ekiti state has reported the lowest number of COVID-19 infections when compared with other states within the South-west region of the country [Figure 2].

In spite of the information and educational materials which are available on COVID-19 and are circulated using different media-local radio and television stations, many individuals within the state still believe that the COVID-19 is a hoax.^[16] Many have verbally expressed that the government created the disease with a view to enriching themselves.

Knowledge does influence how individuals respond to situations around them. Adequate knowledge about COVID-19 and all the necessary preventive measures put in place to curtail its spread will not just enable individuals to keep to the stipulated disease preventive measures, but will also help them to encourage and educate others to do so. Report documenting the knowledge and effect of COVID-19 pandemic on accessing HCSs among individuals living in Ado Ekiti is deplete. Premised on this, this study was designed to assess the knowledge, attitude of HCWs and effects on patients seeking HCSs in Ado, Ekiti state during COVID-19 pandemic.

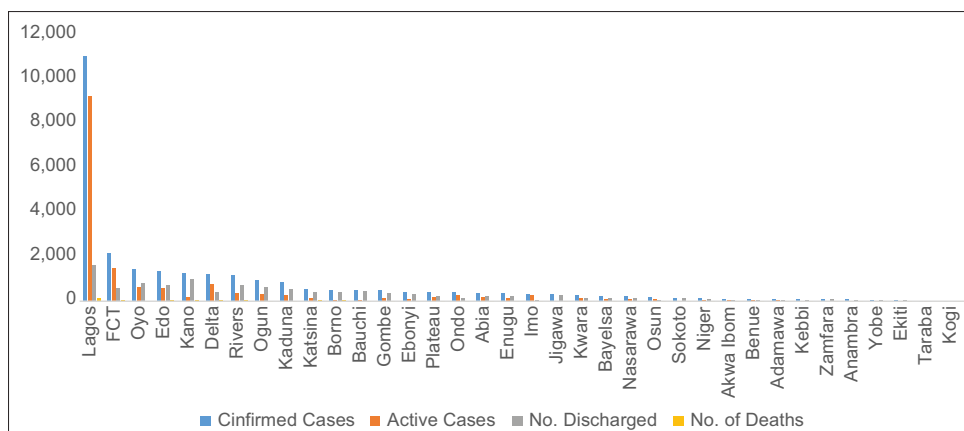


Figure 1: Coronavirus disease 2019 status in Nigeria as at July 4, 2020

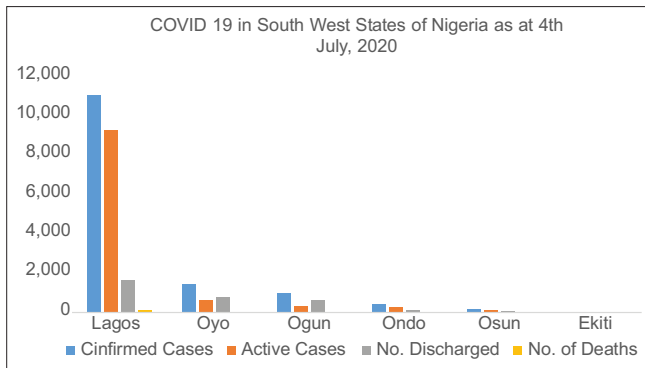


Figure 2: Coronavirus disease 2019 status in South-West Region of Nigeria

MATERIALS AND METHODS

This study was a cross-sectional survey conducted among individuals of different socioeconomic and age groups who have lived in Ado Ekiti for at least a minimum of 1 year including the period of COVID-19 pandemic. A questionnaire comprising 10 items addressing the objectives of the study was developed using the survey monkey. The survey questions aside demographics included knowledge about COVID-19, believe on the reality of COVID-19, visit to hospital during COVID-19, reasons for not accessing the hospital during the pandemic, response of health-care workers to those who visited health-care facilities and deaths at home due to inability to access health-care facility (HCF) because of the pandemic. The survey was conducted from June 10 to 28, 2020.

In a process to ensure the validity and reliability of the survey instrument, the questionnaire was pretested using randomly selected individuals. Observed gaps were corrected until satisfactory endpoints were obtained. Thereafter, the survey was deployed for the study. Informed consent was received from all participants; ethical approval was not obtained due to the fact that the study did not involve any minimal risk. The questionnaire was shared online using different social media platforms. Respondents were also advised to submit their responses using an online platform. The survey was closed after 100 responses were received. This decision to close after receiving 100 responses was based on the current 0.11 prevalent rate of COVID in Nigeria as at the time of writing this report. We believed that using this figure, at standard normal variant of 5% and allowable error of 5%, responses from 100 participants would be enough to make a generalizable conclusion.

RESULTS

A total of 100 responses were received. Survey response rate was 100%. Details of survey responses, including the demographics of respondents, are shown in Table 1. Data showed that responses were received from people of various age groups. Majority of the respondents were males 60 (60%) and 40 (40%) were females. Many of the respondents had tertiary education. Knowledge of and belief about COVID-19 were high among respondents.

Table 1: Demographics, knowledge, and belief in coronavirus disease-2019 and responses on other study variables among respondents

Demographics	Frequency (%)
Age (years)	
10-14	1 (1.0)
15-20	15 (15)
21-30	16 (16)
31-40	10 (10)
41-50	27 (27)
51-60	22 (22)
60 and above	9 (9)
Sex	
Male	60 (60)
Female	40 (40)
Marital status (n=100)	
Married	65 (65)
Single	32 (32)
Divorced	0
Widowed	2 (2.0)
Can't say	0
Highest level of education (n=100)	
Primary	1 (1.0)
Secondary	11 (11)
Tertiary	86 (86)
Can't say	2 (2.0)
Knowledge of COVID-19 (n=100)	
Yes	94 (94)
No	6 (6)
Believe in COVID-19 (n=100)	
Yes	95 (95)
No	2 (2)
Can't say	3 (3)
Visit to hospital during COVID-19 (n=100)	
Yes	17 (17)
No	57 (57)
Did not have any need to visit the hospital	26 (26)
Can't say	0
Reasons for not visiting the hospital (n=43)	
Health worker will think I have COVID-19	8 (18.6)
Afraid of contacting COVID-19 at the hospital	16 (37.2)
Because of the lockdown	19 (44.2)
Outcome following visit to the hospital (n=25)	
Attended to by health-care workers	12 (48)
Neither attended to nor referred	9 (16)
Not attended to, but was referred	4 (25)
Belief that people have died at home due to inability to access HCF (n=100)	
Yes	46 (46)
No	11 (11)
Do not know	23 (20)
Can't say	20 (20)

COVID 19: Coronavirus disease 2019, HCF: Health-care facility

Many of the respondents reported they have not visited any HCF since the first COVID 19 case was reported in Ekiti and implementation of lockdown. While 57 (57%) of the

respondents reported they have not visited any HCF, 17 (17%) reported they have visited health-care facility and 26 (26%) reported that they had no need to visit any health-care facility during the period.

Of the 57% of the respondents who did not access HCF, 8 (19%) reported that the HCWs would not attend to them because they would think they had COVID 19. Sixteen (37%) of the respondents did not go to the hospital because they thought the HCWs would not be in the facility and 19 (44%) of the respondents did not access the HCF because of the lockdown.

Those who accessed HCF received different responses from HCWs. Twelve (48%) of the respondents reported the HCWs attended to them, 9 (36%) reported they were neither attended to nor referred and 4 (16%) reported they were not attended to at the HCF of their first call, but were referred to a tertiary hospital (University Teaching Hospital) within the state.

On mortality and inability to access HCF, 46 (46%) believed that many people had died at home due to their inability to access HCF, 11 (11%) had a different opinion, 23 (23%) reported they did not know, and 20 (20%) reported they were not sure [Table 1].

DISCUSSION

Knowledge, attitude, and perception of individuals about any disease are critical to curtailing disease outbreak. The knowledge and belief about COVID-19 among respondents were high. This could be responsible for the low number of COVID-19 cases reported in the state [Figure 2].

A good number of respondents reported that they did not visit any health facility even though they had need for health care. Prior to COVID-19 pandemic, different individuals accessed health-care facilities to receive treatment for different ailments. This includes malaria, typhoid fever, immunization, consultations for different types of noncommunicable diseases among others. Ekiti State has been on both total and partial lockdown since the first index case was reported in the state. The lockdown limited free movement of individuals, and this may be responsible for increased number of individuals who reported that they had not accessed health-care facility. Limited physical access of individuals to HCSs has been reported to reduce the engagement in hospital-based care.^[11,17] Inability of individuals to access needed care could result in both direct mortality and indirect mortality from disease which can be prevented or treated.^[17] Based on this and in spite of the challenges presented by COVID-19, adequate dissemination of information to populations that normal HCSs are not restricted will instill confidence among those who have need for urgent and regular HCSs.

Respondents gave various reasons for not accessing health-care facility in spite of their need for same [Table 1]. During lockdown, movement was restricted which affected different individuals in different walks of life including

those in health-care industry. The finding from this study supports a recent survey from the WHO^[17] which reported that discontinuation and reduced access to health-care facilities were precipitated by the cancellation of planned treatments due to COVID-19 pandemic, decrease in public transport secondary to lockdown and reduction in the number of HCWs as a result of social distancing which were implemented to curtail the spread of the virus.

Respondents who visited health-care facility got various responses from HCWs [Table 1]. Fear of HCWs from being infected with COVID-19 might be responsible for their disposition to those seeking health care. Recent reports from the Nigeria Center for Disease Control and WHO^[11-13] showed that a good number of HCWs have been infected with COVID-19. Limited supply of PPEs in many resource limited environments could limit HCWs from attending to patients seeking health care.^[8,18-20]

A good number of respondents believed many people have died at home due to inability to access health care. Aside COVID-19, Nigeria is a country already burdened with different communicable and noncommunicable diseases.^[21-25] Lockdown and limited access to health care could have pronounced effects on individuals with comorbidities including the aged. This finding supports the earlier report from WHO distortion in medical supplies and medications^[19,20] coupled with lockdown implemented might have had pronounced effects on individuals seeking maternal and child care, mental health, older people with underlying medical conditions, and other noncommunicable diseases, including cancer, hypertension, and diabetes.^[11,17]

CONCLUSION

Emerging and re-emerging infectious diseases appear unannounced. This study has shown that the knowledge of COVID-19 among residents in Ado Ekiti was high. However, limitation due to various policies implemented to curtail the spread of the disease and high infectious risk environment occasioned by the disease could have great effects on individuals to access health care services and disposition of HCWs to attend to those who may be in need of health care. Premised on the fact that COVID-19 is just one of the diseases out of many confronting populations, the WHO has recommended that health-care needs be prioritized based on the changing context presented by COVID-19. Based on this, we recommend that during outbreaks, measures that should improve patients flow, optimize the use of available HCWs, maintain uninterrupted supply of essential medications, and use technology to strengthen communication should be implemented.

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Conflicts of interest

There are no conflicts of interest.

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