

## Knowledge and Attitude of People Living in Ogbomosho on COVID-19

<sup>1</sup>Adeyemo Florence O PhD, MSc, BSc, RN, RNT, RM, RPHN, FWACN, <sup>2</sup>Okpala Pat U PhD, MSc, BSc, RN, RM, RPHN, <sup>3</sup>Olajide Adetunmise Oluseyi MSc, BNSc, RN, RM, RPHN and <sup>1</sup>Fawole Isreal Opeyemi BNSc, RN

<sup>1</sup>Department of Community/Public Health, Faculty of Nursing Sciences, Ladoke Akintola University of Technology, Osogbo, Nigeria.

<sup>2</sup>Department of Nursing Sciences, Evangel University, Akaeze, Ebonyi State, Nigeria.

<sup>3</sup>Department of Maternal and Child Health, Faculty of Nursing Sciences, Ladoke Akintola University of Technology, Osogbo, Nigeria.

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### \*Correspondence:

Adeyemo Florence O, Department of Community/Public Health, Faculty of Nursing Sciences, Ladoke Akintola University of Technology, Osogbo.

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### ABSTRACT

Coronavirus disease (COVID-19) is an infectious disease caused by a newly discovered coronavirus. Nigeria has taken preventive and precautionary measures to control its spread. The knowledge and attitude of people towards covid-19 infections will determine their level of adherence. This study therefore determines the knowledge and attitude of people living in Ogbomosho towards COVID-19 infection. Descriptive design was used for this study and the target population includes all men and women between ages 19 and above living in Ogbomosho. Simple random sampling technique was used to select 520 participants. A self-structured questionnaire with five sections was developed. The Content, construct and face validity was ensured and reliability was also established by using Cronbach alfa with a co-efficient score of 0.87. The data were entered using Epidata software (version 3.1) and exported into statistical package for social sciences (SPSS) 25.0 version for analysis. Descriptive statistics like percentages, frequencies, means and standard deviation were computed. Relationships between variables were determined using bivariate and multivariate logistic regression. The findings of this study observed that participants level of knowledge about COVID-19 was high and the source of information are friends, radio, television and relatives. Further findings revealed that the attitude of the participants was positive and the major factors influencing the participants' attitude towards COVID-19 are; educational background, awareness-raising by health workers and psycho-social support. Two hypotheses were tested and the result showed that only educational status has significant relationship with attitude of respondents towards COVID-19 and there was no significant association between knowledge of participants and their attitude towards COVID-19. It was therefore recommended that government should take tight actions, control and precautionary measures against COVID-19, to safeguard citizens and ensure their well-being, this will increase positive attitudes of the community.

### Keywords

Knowledge, Attitude, Covid-19.

### Introduction

COVID-19 virus is a new virus that is infectious and spreads from person to person through droplets generated from saliva, sneezing and coughing. [1] said that Coronaviruses (CoV) have been identified according to history as human pathogens since the

1960's. Coronaviruses infect humans and many other vertebrates. Majority of the people infected with the COVID-19 virus may experience mild to moderate respiratory illness and recover without requiring special treatment but older people, and those with underlying medical problems such as chronic respiratory disease, cardiovascular disease, diabetes, and cancer are more likely to develop serious illness. NCDC (2020) explained that many infected people will develop the following symptom: - Fever,

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tiredness, dry cough while other people may experience aches, pains, nasal congestion, runny nose, sore throat and diarrhoea. The manifestation of signs and symptoms may take 5-6 days from the time the person is infected with the virus however the period may take 14 days. People with mild symptoms who are healthy should self-isolate but if there is fever, cough, and difficulty breathing it is advisable to seek medical attention. There is no treatment for corona virus. NCDC (2020) Stated that covid -19 can be prevented by Frequent washing of hands or use of alcohol base sanitizer, avoid touching your nose, mouth and eyes, sneeze on a piece of tissue or coughing into a flexed elbow and dispose tissue in a dust bin Always keep social distance, avoid crowded areas, stay at home when you feel sick, Consult your doctor when you need help, put on mask when going out. It was also posited that individuals should gargle with warm saline solution when coming from outside, if a person feel sick he/she should rest, drink plenty of fluid, and eat nutritious food, stay in a separate room from other family members, and use a dedicated bathroom if possible [2]. Other measures to prevent Covid-19 infection include cleaning and disinfecting frequently touched surfaces, avoiding going out during this period except when it is necessary. Also, it is important not to shake hands nor embrace people and lastly, the best way of preventing and slowing down transmission of Covid-19 virus is by been well informed about the diseases,its causes and how it's spread.

Everyone should keep a healthy lifestyle at home. Maintain a healthy diet, sleep, stay active, and make social contact with loved ones through the phone or internet. Children need extra love and attention from adults during difficult times like this [2]. Keep to regular routines and schedules as much as possible [1]. Another measure for curbing the disease was lockdown measures because the spread of the virus in human-to-human transmission occur rapidly and much about the virus is unknown [4]. There has been a lot of confusion and misunderstanding about this novel virus itself, how it spread and precautions to prevent the infection. Thus, causing a lot of challenges resulting to vast misinformation and disinformation shared on social media which is clouding people's understanding of COVID-19 [3]. When the initial announcement of the infection was made in Nigeria, there was a lot of panic, confusion and panic buying. The measures taken to prevent spread of this pandemic in Nigeria include the lockdown, and the suspension of all domestic and international flights, prayer at mosques, schools and universities, and the national curfew imposed on citizens.

The knowledge and attitudes of people towards COVID-19 play an integral role in determining the people's readiness to accept behavioural change measures advised by the health authorities. This study will provide baseline information to determine the type of intervention that may be required to change misconceptions about the virus. Assessing the knowledge and attitude of people towards COVID-19 will be helpful in providing a better insight thus, addressing the poor knowledge of the people about the disease and also in developing preventive strategies can better prepare. It will also assist the government to address future health

crises involving infectious diseases. The results of this study will inform how the people will be ready to comply with pandemic control measures in the future. This study therefore determines the knowledge and attitude of people living in Ogbomoso towards COVID-19 infection.

### **Objectives**

- To assess the level of knowledge of the people living in Ogbomoso towards COVID-19 infection.
- To identify sources of information about knowledge of COVID-19 infection among the people living in Ogbomoso.
- To determine the attitude people of living in Ogbomoso towards COVID-19 infection.
- To identify the factors influencing the attitude of people living in Ogbomoso towards COVID-19 infection.

### **Methodology**

#### **Research Design**

Descriptive design was used for this study.

#### **Research Setting**

Ogbomoso is a city in Oyo State, south-western Nigeria between Oyo town and Ilorin with an approximate population of 245,000 in 2006 census. The people speak Yoruba language and their major occupation is farming. The town has three higher institution of learning, LAUTECH, Nigerian Baptist Theological Seminary and Bowen University Teaching Hospital. Other industries include trading, banking, small-scale manufacturing and constructions. There are two radio stations namely Parrot FM and Ajilete FM, and a television station, NTA Ogbomoso. It has five local governments namely: Ogbomoso South, Ogbomoso North, Oriire local government, Surulere local government and Ogo-Oluwa local government.

#### **Population**

The target population includes all men and women between ages 19 and above living in Ogbomoso.

#### **Sample Size Determination**

The sample size was determined using Slovan's formula,  $(n) = \frac{N \cdot e}{1 + (N \cdot e)}$  where  $(n)$  = sample size,  $(N)$  = population size and  $(e)$  = the desired margin error or error tolerance which is taken at 95% confidence Interval (0.05).

#### **Sampling Techniques**

Simple random sampling technique was used to select 520 participants.

#### **Instrument**

A self-structured questionnaire was developed. The questionnaire was divided into five sections, A to section E. Section A was used to collect data on socio-demographic characteristics, Section B on the level the knowledge on s COVID-19 infection, Section C Source of knowledge, section D on the attitude towards COVID-19

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infection and section E on factors influencing the attitude of participants towards COVID-19 infection.

### Validity of The Instrument

The questions were elicited for necessary information in accordance with the objectives of the study. Content, construct and face validity was ensured by giving the questionnaire to a statistician and experts to examine and appraise and to ensure that all the component elements of the variables were measured.

### Reliability of The Instrument

The questionnaire was administered and re-administered to 40 respondents after a 2-weeks test-retest interval. Reliability was also established during the pre-testing of the instrument. The reliability co-efficient score of 8.7 was determined using Cronbach alfa.

### Data Collection

Data collection was conducted using a structured, pre-coded, self-administered questionnaire. Copies of the questionnaire were administered to participants with the assistance of two trained field personnel.

### Data Analysis

The data were entered using Epidata software (version 3.1) and exported into statistical package for social sciences (SPSS) 25.0 version for analysis. Descriptive statistics of percentages, frequencies, means and standard deviation were computed. Relationships between variables were determined using bivariate and multivariate logistic regression. In the multivariate model, confounding variables adjusted includes: Educational status or knowledge as applicable. Variables with  $P < .05$  in the bivariate analysis were included in the multivariate models and considered significant at  $P < .05$ . The study objectives analyzed includes knowledge of COVID-19, attitudes towards COVID-19 among the respondents. The knowledge of respondents was determined based on knowledge-based questions with correct responses attracting a score of 1 and incorrect 0, respondents with scores less than the 80% knowledge score were adjudged to have poor knowledge, otherwise good knowledge. The attitude of the respondents towards COVID-19 was scored on a Likert-scale with Strongly agreed-4, agreed-3, disagreed-2 and strongly disagreed-1, respondents with scores lesser than the mean attitude score were adjudged to have poor attitude towards COVID-19, otherwise, good attitude.

### Presentation of Result

A total of 520 respondents were recruited and 505 respondents completed the questionnaires and had adequate data for analysis. This translates to a response rate of 97.3%.

From Table 1 the result revealed that 3.4% of the respondents were between the age of 19-30 years, 19% were between the age of 31-40 years, 59% were within the age of 41-50 years, 18% were within the age of 51-60 while 0.6% were 60 and above. The average age of the respondents was 27.5 with standard deviation of 11.4 years showing moderate variation in the age of the respondents. Majority 401 (79.4%) were from Ogbomosho North local Government;

while the rest 104 (20.6%) were from Ogbomosho South Local Government; 255 (50.5%) of the respondents were females while 250 (49.5%) were males. 251 (49.7%) of the respondents were single, 65 (12.9%) were engaged while 189 (37.4%) were married; majority 427 (84.6%) were Christians, 61 (12.1%) were Muslims while 17 (3.4%) were traditional worshippers. Majority 453 (89.7%) were Yoruba, 4.8% were Hausa, 4.8% were Igbo while 0.8% were from other ethnicity; one-third 168 (33.3%) of the respondents had high school education with SSCE certificate, 121 (24%) had NCE/OND, 99 (19.6%) had HND/BSc, 60 (11.9%) had completed Junior secondary school education with JSSCE Certificate, 9 (1.8%) had MBA/MSc., 40 (7.9%) had primary school leaving certificate while few 8 (1.6%) had PhD. About half 250 (49.5%) of the respondents were civil servants, 75 (14.9%) were Artisans, 72 (14.3%) were students, 85 (16.8%) were Traders, 14 (2.8%) were health workers, 5 (1%) were into private practice while 4 (0.8%) were Farmers. 27.9% of the respondents had 1-9 years of experience on their job, 15.2% had 10-19 years of experience, 6.1% had 20-29 years of experience while 1.2% had 30 and above years of experience; the average working years on their present job was  $10.4 \pm 7.5$  years ranging from 1 to 35 years working experience. This study showed that majority of the respondents are within 41 to 50 years, living in Ogbomosho North, were both males and females. Majority of the respondents are married, Christians and Yoruba by tribe. Lastly, majority of the respondents are OND/ NCE and Secondary School certificate holders. Also, majority of the respondents are civil servants with 1 to 9 yrs experience.

From Table 2, the result shows the knowledge of respondents on Covid-19. Majority of respondents 459 (90.9%) knew that COVID-19 is a new virus that is infectious while 46 (9.1%) did not know; majority of the respondents 484 (95.8%) agreed that COVID-19 virus spreads from one person to another while 21 (4.5%) disagreed; majority 488 (96.6%) agreed that COVID-19 could be contracted through saliva, sneezing and coughing while 17 (3.4%) disagreed. About 255 (50.5%) of the respondents agreed that it may take 5-6 days for the manifestation of signs and symptoms of COVID-19 while 245 (49.5%); majority 468 (92.7%) agreed that manifestation of COVID-19 may take 14 days while 37 (7.3%) of the respondents agreed; majority 438 (86.7%) agreed that people infected with the COVID-19 virus may experience mild to moderate respiratory illness while 67 (13.3%) of the respondents disagreed; majority 446 (88.3%) agreed that older people infected with the COVID-19 virus with underlying medical problem such as chronic respiratory disease, cardiovascular disease, diabetes, and cancer, are more likely to develop serious illness while 59 (11.3%) of the respondents disagreed. Majority 448 (88.7%) of respondents knew that people with mild symptom who are healthy should self-isolate while 57 (11.3%) of the respondents disagreed; majority 467 (92.5%) knew that people with fever, cough, and difficulty breathing it is advisable to seek medical attention while 38 (7.5%) of the respondents disagreed; majority 309 (61.2%) knew that there is no treatment for COVID-19 while 196 (38.2%) of the respondents disagreed. From the result, this study showed that participants level of knowledge about COVID-19 is high.

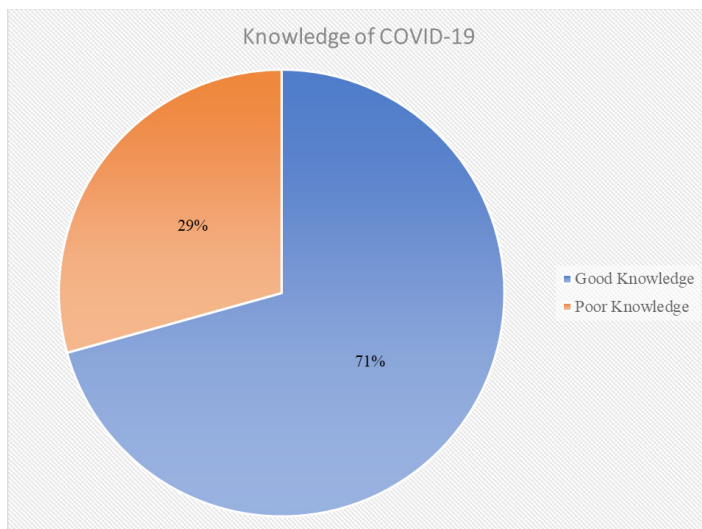
Variables	Categories	Frequency (n=505)	Percent (%)	Mean ± SD	Range
Age (years)	19-30	17	3.4	27.5±11.4	7 – 80
	31-40	96	19.0		
	41 – 50	298	59.0		
	51- 60	91	18.0		
	61and above	3	0.6		
Location	Ogbomosho North local government	401	79.4		
	Ogbomosho South local government	104	20.6		
Gender	Male	250	49.5		
	Female	255	50.5		
Marital status	Single	189	49.7		
	Engaged	65	12.9		
	Married	251	37.4		
Religion	Islam	61	12.1		
	Christianity	427	84.6		
	Traditional	17	3.4		
Ethnicity	Hausa	24	4.8		
	Igbo	24	4.8		
	Yoruba	453	89.7		
	Others	4	0.8		
Educational status	PhD	8	1.6		
	MBA/MSc	9	1.8		
	HND/BSc	99	19.6		
	NCE/OND	121	24.0		
	SSCE CERT	168	33.3		
	JSSCE CERT	60	11.9		
Occupation	Primary School Leaving Certificate	40	7.9		
	Student	72	14.3		
	Artisan	75	14.9		
	civil servants	250	49.5		
	health workers	14	2.8		
	Farmers	4	0.8		
	private practice	5	1.0		
	Trader	85	16.8		
Years of experience on job	1-9	141	27.9	10.4 ± 7.5	1 – 35
	10-19	77	15.2		
(n=255)	20-29	31	6.1		
	30 and above	6	1.2		

**Table 1:** Sociodemographic Characteristics.

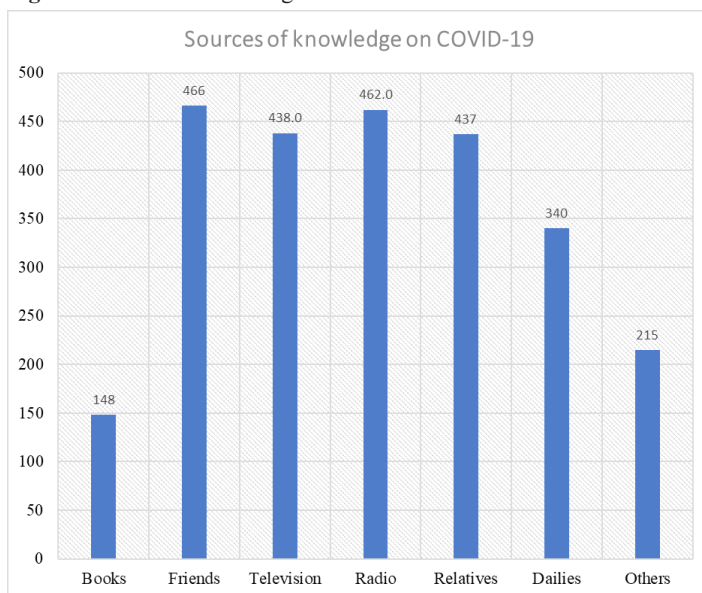
Variables	Yes n (%)	No n (%)
COVID-19 virus is a new virus that is infectious	459 (90.9)	46 (9.1)
COVID-19 virus is a new virus that spreads from one person to another	484 (95.8)	21 (4.2)
COVID-19 can be contracted through saliva, sneezing and coughing	488 (96.6)	17 (3.4)
Manifestation of signs and symptoms may take 5-6 days	255 (50.5)	250 (49.5)
Manifestation of signs and symptoms may take 14days	468 (92.7)	37 (7.3)
People infected with the COVID-19 virus may experience mild to moderate respiratory illness	438 (86.7)	67 (13.3)
People infected with the COVID-19 virus may recover without requiring special treatment	351 (69.5)	154 (30.5)
Older people infected with the COVID-19 virus with underlying medical problem such as chronic respiratory disease, cardiovascular disease, diabetes, and cancer, are more likely to develop serious illness	446 (88.3)	59 (11.7)
People with mild symptom who are healthy should self-isolate	448 (88.7)	57 (11.3)
People with fever, cough, and difficulty breathing it is advisable to seek medical attention	467 (92.5)	38 (7.5)
There is no treatment for COVID-19	309 (61.2)	196 (38.8)
Total n (%)	505 (100)	

**Table 2:** Knowledge of COVID-19.

From Figure 1 on the knowledge of respondents on COVID-19, majority 357 (71%) had good knowledge of COVID-19 while 148 (29%) had poor knowledge of COVID-19.



**Figure 1:** Level of Knowledge of COVID-19.



**Figure 2:** Sources of Knowledge of COVID-19.

From Figure 2, prevalent source of health information on COVID-19 includes friends 466 (92.3%), radio 462 (91.5%), television 438 (86.7%), relatives 437 (86.7%), dailies 340 (67.3%) and books 148 (29.3%). This study implies that the source of health information on COVID-19 are friends, radio, television and relatives.

From Table 3, on the attitude of the respondents towards COVID-19, majority 304 (60.2%) strongly agreed, that they frequently washed their hands or used alcohol based sanitizer and 172 (34.1%) agreed while 18 (3.6%) disagreed and 11 (2.2%) strongly disagreed; majority 256 (50.7%) strongly agreed that they avoided touching nose, mouth and eyes and 203 (40.2%)

agreed while 36 (7.1%) disagreed and 10 (2%) strongly disagreed; majority 253 (50.1%) strongly agreed that they sneeze on a piece of tissue or coughing into flexed elbow and dispose tissue in a dust bin and 204 (40.4%) agreed while 34 (6.7%) disagreed and 14 (2.8%) strongly disagreed; majority 265 (52.5%) strongly agreed they always keep social distancing and 202 (40%) agreed while 25 (5%) disagreed and 13 (2.6%) strongly disagreed; majority 278 (55%) strongly agreed that they avoided crowded areas and 194 (38.4%) agreed while 20 (4%) disagreed and 13 (2.6%) strongly disagreed; majority 277 (54.9%) strongly agreed that they stay at home when feeling sick and 179 (35.4%) agreed while 29 (5.7%) of the respondents disagreed and 20 (4%) strongly disagreed; majority 265 (52.2%) strongly agreed that they would consult doctor when help is needed and 205 (40.6%) agreed while 19 (3.8%) of the respondents disagreed while 16 (3.2%) strongly disagreed; majority 256 (50.7%) strongly agreed that they do put on mask when going out and 201 (39.8%) agreed while 36 (7.1%) of the respondents disagreed and 12 (2.4%) strongly disagreed; majority 185 (36.6%) strongly agreed that they gargle with warm saline solution when coming from outside and 190 (37.6%) agreed while 60 (11.9%) of the respondents disagreed and 70 (13.9%) strongly disagreed; majority 260 (51.5%) strongly agreed that they would take rest, drink plenty of fluid and eat nutritious food when feeling sick and 213 (42.2%) agreed while 19 (3.8%) of the respondents disagreed and 13 (2.6%) strongly disagreed; majority 236 (46.7) strongly agreed that they will need to stay in a separate room from other family members, and use a dedicated bathroom if possible when sick and 197 (39) agreed while 58 (11.5%) of the respondents disagreed and 14 (2.8%) strongly disagreed; majority 262 (52.2) strongly agreed that it is of necessity for them to clean and disinfect frequently touched surfaces and 204 (40.4) agreed while 17 (3.4%) of the respondents disagreed and 22 (4.4%) strongly disagreed; majority 267 (52.9) strongly agreed that they must avoid going out during this period, except it is necessary and 193 (38.2) agreed while 28 (5.5%) of the respondents agreed and 17 (3.4%) strongly disagreed; majority 283 (56) strongly agreed that the best way of preventing and slowing down transmission of COVID-19 virus, is by being informed about the disease, its causes and how it spreads and 194 (38.4) agreed while 18 (3.6%) disagreed and 10 (2%) strongly disagreed; majority 274 (54.3) strongly agreed that they do not embrace people as before and 190 (37.6) agreed while 24 (4.8%) disagreed and 17 (3.4%) strongly disagreed; majority 269 (53.3) strongly agreed that they do not shake people's hand as before and 179 (35.4) agreed while 17 (3.4%) disagreed and 40 (7.9%) strongly disagreed. Conclusively, the result gotten from this study revealed that the attitude of the participants is positive.

From Table 4, 380 (75.2%) of the respondents agreed that educational background is a factor influencing their attitude towards COVID-19 while 125 (24.8%) disagreed, more than half 278 (55%) agreed that religious belief is a factor influencing their attitude towards COVID-19 while 227 (45%) disagreed, majority 148 (29.3%) agreed that culture is a factor influencing their attitude towards COVID-19 while 375 (70.7%) disagreed; majority 307 (60.8%) agreed that awareness-raising by health workers about

Variables	Strongly agreed n (%)	Agreed n (%)	Disagreed n (%)	Strongly disagreed n (%)
Frequently washes hands or use alcohol-based sanitizer	304 (60.2)	172 (34.1)	18 (3.6)	11 (2.2)
Avoids touching nose, mouth and eyes	256 (50.7)	203 (40.2)	36 (7.1)	10 (2)
Sneezes on a piece of tissue or cough into flexed elbow and dispose tissue in a dust bin	253 (50.1)	204 (40.4)	34 (6.7)	14 (2.8)
keeps social distance	265 (52.5)	202 (40)	25 (5)	13 (2.6)
Avoids crowded areas	278 (55)	194 (38.4)	20 (4)	13 (2.6)
Stays at home when feeling sick	277 (54.9)	179 (35.4)	29 (5.7)	20 (4)
Will consult doctor when help is needed	265 (52.5)	205 (40.6)	19 (3.8)	16 (3.2)
Puts on mask when going out	256 (50.7)	201 (39.8)	36 (7.1)	12 (2.4)
Gargles with warm saline solution when coming from outside	185 (36.6)	190 (37.6)	60 (11.9)	70 (13.9)
Could take rest, drink plenty of fluid and eat nutritious food when feeling sick	260 (51.5)	213 (42.2)	19 (3.8)	13 (2.6)
Need to stay in a separate room from other family members, and use a dedicated bathroom if possible when sick	236 (46.7)	197 (39)	58 (11.5)	14 (2.8)
Necessity to clean and disinfect frequently touched surfaces	262 (51.9)	204 (40.4)	17 (3.4)	22 (4.4)
Necessity to avoid going out during this period, except it is necessary	267 (52.9)	193 (38.2)	28 (5.5)	17 (3.4)
The best way of preventing and slowing down transmission of COVID-19 virus, is by been informed about the disease if causes and how it spreads.	283 (56)	194 (38.4)	18 (3.6)	10 (2)
Does not embrace people as before	274 (54.3)	190 (37.6)	24 (4.8)	17 (3.4)
Does not shake people's hand	269 (53.3)	179 (35.4)	17 (3.4)	40 (7.9)
Total n (%)	505 (100)			
Mean ± SD attitude score	52.3 ± 7.4			

**Table 3:** Attitude towards COVID-19.

Variables	Yes n (%)	No n (%)
Educational background	380 (75.2%) *	125 (24.8%)
Religious belief	278 (55%)	227 (45%)
Culture	148 (29.3%)	375 (70.7%)
Awareness-raising by health workers	307 (60.8%) *	198 (39.2%)
Deeper insight on the use mask and sanitizer	292 (57.8%)	213 (42.2%)
Health education	283 (56%)	222 (44%)
Psycho-social support	345 (68.3%)*	160 (31.7%)

**Table 4:** Factors influencing attitude towards COVID-19.  
Level of sig 60% and above

COVID-19 is a factor influencing their attitude towards COVID-19 while 198 (39.2%) disagreed; more than half 292 (57.8%) of the respondents agreed that deeper insight on the use mask or sanitizer is a factor influencing their attitude towards COVID-19 while 213 (42.2%) disagreed, more than half 283 (56%) of the respondents agreed that health education is a factor influencing their attitude towards COVID-19 while 222 (44%) disagreed. Majority 345 (68.3%) of the respondents agreed that psycho-social support is a factor influencing their attitude towards COVID-19 while 160 (31.7%) disagreed. The major factors influencing the respondents' attitude towards COVID-19 are; educational background, awareness-raising by health workers and psycho-social support.

### Hypothesis 1

There is no significant relationship between sociodemographic characteristics (age, religion, occupation, educational status) of the respondents and their attitude towards COVID-19.

### Inference

From the bivariate logistic regression model above in table 5, the educational status of the respondents shows statistical significance

to their attitude towards COVID-19 with (P=.002), majority of those with master's degree (87.5%) and Ph.D. (77.8%) had good attitudes towards COVID-19 compared to all others. Adjusting for confounding variable (knowledge) in the multivariate model, the educational status still shows statistical significance to their attitude towards COVID-19 (P=.001), participants with PhD were 5.3 times more likely to have good attitude towards COVID-19 compared to those with primary school living certificate with (AOR=5.334, 95% CI=0.598-47.547, participants with master's degree were 3 times more likely to have good attitude towards COVID-19 compared to those with primary school certificate with (AOR=3.081, 95% CI= 0.564-16.829). Other variables: Age, Religion, Occupation were not significantly related to their attitude towards COVID-19 with P<.05 in each case. This study implies that only educational status has significant relationship with attitude of respondents towards COVID-19.

### Hypothesis 2

There is no significant relationship between knowledge of respondents on COVID-19 and their Attitude towards COVID-19.

Demographic Characteristics	Attitude towards COVID-19		COR (95% CI)	P	AOR (95% CI)	P
	Good Attitude	Poor Attitude				
<b>Age (years)</b>						
7-12	10 (58.8%)	7 (41.2%)	1	0.419	-	-
13-18	43 (44.8%)	53 (55.2%)	0.568 (0.199-1.617)			
19-39	164 (55%)	134 (45%)	0.857 (0.318-2.311)			
40-59	46 (50.5%)	45 (49.5%)	0.716 (0.250-2.044)			
60 and above	1 (33.3%)	2 (66.7%)	0.350 (0.026-4.654)			
<b>Religion</b>						
Islam	29 (47.5%)	32 (52.5%)	1	0.647	-	-
Christianity	225 (52.7%)	202 (47.3%)	1.229 (0.531-4.683)			
Traditional	10 (58.8%)	7 (41.2%)	1.576 (0.531-4.683)			
<b>Educational status</b>						
PhD	7 (87.5%)	1 (12.5%)	5.727 (0.644-50.966)	0.002	5.334 (0.598-47.547)	0.001
MBA/MSC	7 (77.8%)	2 (22.2%)	2.864 (0.528-15.526)		3.081 (0.564-16.829)	
HND/BSC	47 (47.5%)	52 (52.5%)	0.740 (0.354-1.546)		0.743 (0.355-1.557)	
NCE/OND	77 (63.6%)	44 (36.4%)	1.432 (0.694-2.955)		1.557 (0.748-3.238)	
SSCE CERT	72 (42.9%)	96 (57.1%)	0.614 (0.307-1.228)		0.664 (0.330-1.338)	
JSSCE CERT	32 (53.3%)	28 (46.7%)	0.935 (0.419-2.088)		0.932 (0.416-2.085)	
Primary School Leaving Certificate	22 (55%)	18 (45%)	1		1	
<b>Occupation</b>						
Student	141 (56.4%)	109 (43.6%)	1	0.484	-	-
Artisan	34 (45.3%)	41 (54.7%)	0.641 (0.382-1.077)			
Civil servant	38 (52.8%)	34 (47.2%)	0.864 (0.511-1.462)			
Health workers	6 (42.9%)	8 (57.1%)	0.580 (0.195-1.720)			
Farmers	1 (25%)	3 (75%)	0.258 (0.026-2.512)			
Private practice	2 (40%)	3 (60%)	0.515 (0.085-3.138)			
Trader	42 (49.4%)	43 (50.6%)	0.755 (0.461-1.237)			

**Table 5:** Association between Sociodemographic characteristics of respondents and their Attitude towards COVID-19.

Knowledge of COVID-19	Attitude towards COVID-19		COR (95% CI)	P	AOR (95% CI)	P
	Good Attitude	Poor Attitude				
Good Knowledge	197 (55.2%)	160 (44.8%)	1.489 (1.013-2.188)	0.042	1.488 (1.012-2.188)	0.051
Poor Knowledge	67 (45.3%)	81 (54.7%)	1		1	

**Table 6:** Association between knowledge of respondents on COVID-19 and their Attitude towards COVID-19.

### Inference

From the Bivariate model above in table 6, there is significant relationship between knowledge of respondents and their attitude towards COVID-19 with  $P=0.042$  and bivariate logistic regression reveals that participant with good knowledge of COVID-19 were 1.5 times likely to have good attitude towards COVID-19. Furthermore, adjusting for confounding variable (education) in the multivariate model, no significant association was found between knowledge of respondents and their attitude towards COVID-19 with  $P=0.051$  in the multivariate model. This study shows there is no significant association between knowledge of participants and their attitude towards COVID-19.

### Discussion

This study assesses the knowledge and attitude of people living in Ogbomosho towards COVID-19 infection. The sociodemographic characteristics of this study showed that majority of the respondents are within 41 to 50 years, living in Ogbomosho North, are both males and females. Majority of the respondents are married, Christians and Yoruba by tribe. Lastly, majority of the respondents are OND/ NCE and Secondary School certificate holders. Also, majority of the respondents were civil servants with 1 to 9yrs experience.

The result of this study showed that participants level of knowledge about COVID-19 is high. This study in line with a study in Malaysia who reported that the overall knowledge of their participants was high [3]. This study is in support of another study who observed that majority of the participants in China are knowledgeable about COVID-19 [7] and also a study in Saudi Arabia who also indicated that their participants are knowledgeable about COVID-19 [6]. This study does not support a study who reported that the knowledge, the attitude and practices of Bangladeshi people are not impressive [5].

Our study showed that the source of health information on COVID-19 are friends, radio, television and relatives. the writer s posited that all these sources are very familiar and they are the major sources in which COVID-19 can be conveyed as an emerging infectious disease that poses a significant threat to public health. These are the sources that can make the people will know that COVID-19 poses a serious threat and that preventive measures play essential role in the reduction of infection rates and controlling the spread.

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This study observed that the attitude of the participants is positive. This study is in agreement with the study in Malaysia that showed positive attitudes toward the successful control of COVID-19 [3].

This study also concurs to a study in Saudi Arabia that have positive attitude towards COVID-19 [6]. This study is not in line with a study that observed that majority of their participants in China have negative attitude about COVID-19 [7].

Our study revealed that the major factors influencing the respondents' attitude towards COVID-19 are; educational background, awareness-raising by health workers and psychosocial support which is at variance with another study that revealed that the reasons for the mediocre attitude and practices could be the poor knowledge, nonscientific and orthodox religious believe [5].

Our study indicates that only educational status has significant relationship with attitude of respondents towards COVID-19. This study is not in line with a study which showed that the COVID-19 knowledge score was significantly associated with a lower likelihood of negative attitudes and preventive practices towards COVID-2019 [7].

This study shows there is no significant association between knowledge of participants and their attitude towards COVID-19.

### Conclusion

The study gives a general picture of the people of Ogbomoso knowledge and attitude towards COVID-19 prevention. Our findings suggest that Ogbomoso residents have good knowledge and positive attitudes toward COVID-19. When individuals are Knowledgeable about a disease it is considered a stepping stone to health education activity to be implemented. When people are Knowledgeable about the causes and symptoms of a disease, there is a likelihood that people will become more aware of the spread of the disease leading to the utilization of the preventive measures that will slow transmission of the disease.

### Recommendations

- The results of this study show that educational background is very important so it is suggested that emphasis of COVID-19 prevention should be placed on less educated and lower income.
- It is suggested that government should take tight actions, control and precautionary measures against COVID-19, to safeguard citizens and ensure their well-being, this will increase the positive attitudes of the community.
- The findings of this study will help policymakers identify the populations that need COVID-19 prevention and health education.
- The result of this study showed the need for health workers and government to be consistent with health education programs in order to increase levels of knowledge, attitudes of the society towards prevention of COVID -19.

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