Perception, Knowledge and Response to COVID-19 Pandemic among Traders in Three Major Markets in Anambra State, Nigeria

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ABSTRACT

The outbreak of coronavirus disease has been declared a public health emergency of international concern and the virus has spread to many countries and territories. The objective of this study is to assess the knowledge and level of awareness of covid-19 pandemic among traders, To know their perception of covid-19 symptoms, To know if they actually apply the measures put in place by the government to curtail the spread of the virus and to know if the pandemic has actually affected their businesses positively or negatively. The data used for this study was collected from three hundred (n=300) traders in three (3) major markets in Anambra State (Nkwo Nnewi, Eke Awka and Main Market Onitsha) with the aim of understanding their perception, knowledge and response towards Covid19 and its preventive measures as put in place by the government. Majority of the respondents were females (69.50%), married (69.11%) and with FSLC as their highest level of educational qualification (69.60%). From the result it shows that almost all the traders are aware of the existence of covid19 (99.62%). Majority agreed that Covid19 is an infectious disease (58.76%) caused by a virus (89.56%) and its spread through air and droplets (57.78% and 59.83%) respectively. The major sources of information to these traders are television (87.16%), radio (77.52%), Facebook (70.64%), friends (58.76%) WhatsApp (57.80%) and newspaper (55.50%). Majority of the traders believe some symptoms are consistent with covid-19 which are Cough and catarrh (91.06%), fever (80.08%), headache (65.45%) and sore throat (58.54%). They also disagreed to the existence of any Covid19 vaccine (80.56%) or drugs for its treatment (87.11%). A palpable percentage of the respondents don't believe covid-19 is real (29.5%) and 62.55% acknowledged that covid-19 has affected their general behaviour with their reason being that they are compelled by government to do so. (57.89%) believed that the lockdown wasn't necessary their reason being that it wasted people's time (46.5%), increased hunger (73.43%) paralyzed the economy (55.24%),was an unnecessary stress to people (41.26%), increased violence at home (44.06%), a bridge to peoples human right to freedom (36.36%) and it increased vices in the community (48.25%). 91.70% of respondents said that this pandemic has affected their business negatively while to my greatest surprise 8.70% attested that their business have been positively influenced in growth and income with this pandemic.The result reveals that though the traders carry out some behavioral changes such as Hand washing for every 20 minutes, Social distancing, Physical distancing and Use of hand sanitizers, most do so seldomly (55.86%, 55.29%, 57.60%, 57.25%) respectively except for face mask which most testify to wear in public places (51.55%).

Keywords: Corona virus, pandemic, replication, pneumonia.

BACKGROUND

The alarming level of spread of corona virus poses challenges to leaders, economist and policy makers in the world and has disrupted the global workforce. This virus has resisted all known treatment, hence ravaging life of mostly people within the workforce and elderly, but the age group of 15–44 years and children been less affected, with the speed of incubation been estimated 5–6 days[1].

The China Health Authority informed the World Health Organization (WHO) on many cases of pneumonia of unknown aetiology in Wuhan City in Hubei Province in central China On December 31, 2019. The cases of the strange illness had been reported since December 8, 2019, and many patients worked at or lived around the local Hunan Seafood Market although other early cases had no exposure to this market[2]. On January 7, a novel coronavirus, originally abbreviated as 2019-nCoV by WHO, was identified from the throat swab sample of a patient[3]. This organism was renamed as Severe Acute Respiratory syndrome: Coronavirus 2 (SARS-CoV-2) by Corona-virus Study Group[4] and the disease was named coronavirus disease 2019 (COVID-19) by the WHO. 7736 confirmed and 12,167 suspected cases had been reported in China and 82 confirmed cases had been detected in 18 other countries as of January 30, 2020[5]. In the same day, WHO declared the SARS-CoV-2 outbreak as a Public Health emergency of international concern (PHEIC)[5].

The National Health Commission of China declared, the mortality rate among confirmed cased in China was 2.1% as of February 4[6] and the mortality rate was 0.2% among cases outside China[7]. Among patients admitted to hospitals, the mortality rate ranged between 11% and 15% [8,9].

Coronavirus is derived from the Latin word corona, meaning crown or halo, and refers to the characteristic appearance of virions under electron microscopy (E.M) with a fringe of large, bulbous surface projections creating an image reminiscent of a royal crown or of the solar corona. Coronaviruses (CoV) are a large family of viruses that cause illness ranging from the common cold to more severe disease such as Severe Acute Respiratory Syndrome (SARS-CoV) [10].

This novel virus primarily infects the upper respiratory and grastrointestinal tract of mammals and birds. It is believed that corona-virus cause a significant percentage of all common colds in human adults and children. It cause cold with major symptoms e.g. fever, throat congestion and adenoids in human primarily in winter and early spring seasons. Corona viruses can cause pneumonia, either direct viral pneumonia or a secondary bacterial pneumonia, and bronchitis either direct viral bronchitis or a secondary bronchitis.[10]

The Replication of this novel virus begins with entry to the cell which takes place in the cytoplasm in a membrane-protected micro-environment. Upon entry to the cell the virus particle is uncoated and the RNA is deposited into the cytoplasm. However, it also have a protein known as a replicate, encoded in its genome which allows the RNA viral genome to be transcribed into new RNA copies using the host cell's machinery. The replicase is the first protein to be made; once the gene encoding the replicase is translated, the translation is stopped by a stop codon. A corona virus non-structural protein provides extra fidelity to replication because it confers a proof reading function, which is lacking in RNA-dependent enzymes alone. Common signs of the infection include respiratory symptoms such as, fever, cough and breathing difficulties. In more severe cases, infection can cause pneumonia, severe acute respiratory syndrome, kidney failure etc[10].

In conclusion, the spread of the novel viral illness has ignited governments all over the globe to take measures without anyone focusing on the state of the global economy. Hence, the main priority is to keep people as safe as possible. However, this has wrecked the global economic

activities and brought about economic meltdown in all economies of the world as all transactions remains on hold, oil price dropped due to drastic fall in demand triggered by near-zero economic activities. The main focus and concern of nations globally is to secure the health and lives of the people, as health is key for a prosperous productive society. Therefore, it is pertinent to note that if concrete measures are not taken in time to reduce the spread of the virus most countries are going into recession while other most vulnerable nations would tip into depression[11].

MATERIALS AND METHODS
The objective of this study is to assess the knowledge and level of awareness of covid-19 pandemic among traders, To know their perception of covid-19 symptoms, To know if they actually apply the measures put in place by the government to curtail the spread of the virus and to know if the pandemic has actually affected their businesses positively or negatively.

STUDY SETTING
This study was carried out in three major markets in cities of Anambra state, which includes, Nkwo Nnewi, Eke Awka and Main market Onitsha.

STUDY DESIGN
A cross-sectional study among traders in three major markets in Anambra State, Nigeria.

SAMPLING TECHNIQUE AND SAMPLE SIZE
The convenient sampling technique was used in this study, randomly selecting eligible participants from the various markets who will be present within the sampling time and adequate sample size of 300 was used.

RESEARCH INSTRUMENTS
A self administered questionnaire was designed for the collection of participants' socio-demographic characteristics, covid-19 knowledge and awareness, perception of covid-19 and response behaviour towards covid-19.

DATA COLLECTION AND ANALYSIS
The data for this study were collected through self-administered questionnaire which was divided into the following sections: Socio-demographic characteristics, covid-19 knowledge and awareness, perception about covid-19 and response behaviour towards covid-19. Data analysis was done using Statistical Package for Social Sciences (SPSS) version 20.

ETHICAL CONSIDERATIONS
The nature, objectives and process of the study was explained to every respondent, after which a verbal consent was obtained. Confidentiality of the information provided was assured to all respondents. Necessary steps such as avoiding asking for names and secured storage source of data was taken.

RESULTS
The data used for this study was collected from three hundred (n=300) traders in major markets in Anambra State (Nkwo Nnewi, Eke Awka and Main Market Onitsha) with the aim of understanding their perception, knowledge and response towards Covid-19 and its preventive measures as put in place by the government. Majority of the respondents are females (69.50%), married (69.11%) and with FSLCE as their highest level of educational qualification (69.60%). The results of the data collected are shown in tables below.

Results from Table 2 showed that almost all the traders are aware of the existence of covid19 (99.62%). Majority agreed that Covid19 is an infectious disease (58.76%) caused by a virus (89.56%) and its spread through air and droplets (57.78% and 59.83%) respectively. The major sources of information to these traders are television (87.16%), radio (77.52%), Facebook (70.64%), friends (58.76%) WhatsApp (57.80%) and newspaper (55.50%).

Table 1: Sociodemographic distribution of the Traders

Sociodemographic Variable	Frequency	Percentage
Age Group (n=259)		
19-33	198	76.45
34-48	53	20.46
49-64	7	2.70
65-78	1	0.39
Gender(n=259)		
Female	180	69.50
Male	79	30.50
Marital Status(n=259)		
Married	179	69.11
Single	78	30.12
Widowed	2	0.77
HLE(n=250)		
None	3	1.20
FSLCE	174	69.60
NCE	9	3.60
OND	13	5.20
HND	7	2.80
PGD	1	0.40
B.degree	43	17.20
Occupation (n=234)		
Artisan	6	2.56
Barber	2	0.85
Chef	2	0.85
civil servant	5	2.14
Engineer	2	0.85
hair dresser	10	4.27
Nurse	3	1.28
Pharmacist	1	0.43
Plumber	1	0.43
Seamstress	1	0.43
Student	40	17.09
Tailor	3	1.28
Teacher	13	5.56
Trader	145	61.97
Ethnic Group(n=260)		
Edo	1	0.38
EFIK	1	0.38
Idoma	1	0.38
Igala	1	0.38
Igbo	253	97.31
Place of Residence (n=254)		
Asaba	2	0.79
Awka	68	26.77
Nkpor	13	5.12
Nsugbe	1	0.39
Nkwelle	4	1.57
Nnewi	90	35.43
Obosi	2	0.79
Ogidi	1	0.39
Onitsha	69	27.17
Umuogi	4	1.57
State of Origin (n=259)		
Abia	4	1.54
Akwaibom	1	0.39
Anambra	182	70.27
Benue	1	0.39
Cross-river	1	0.39
Delta	1	0.39
Ebonyi	18	6.95
Edo	1	0.39
Enugu	34	13.13
Imo	16	6.18

Table 2: COVID-19 KNOWLEDGE AND AWARENESS

Variable	Frequency	Percentage
Have you ever heard of COVID-19? (n=260)		
No	1	0.39
Yes	259	99.62
It is caused by a virus(n=249)		
No	26	10.44
Yes	223	89.56
It is caused by a bacteria(n=217)		
No	182	83.87
Yes	35	16.13
It is caused by food taken (n=221)		
No	205	92.76
Yes	16	7.24
It is caused by drinks consumed(n=220)		
No	205	93.18
Yes	15	6.82
It is as a result of curse from God(n=225)		
No	184	81.78
Yes	41	18.22
It is an infectious disease(n=235)		
No	97	41.28
Yes	138	58.72
It can spread through the air(n=225)		
No	95	42.22
Yes	130	57.78
It is spread through droplets(n=229)		
No	92	40.17
Yes	137	59.83
It is spread through faeces(n=222)		
No	184	82.88
Yes	38	17.12
It is spread through urine(n=221)		
No	186	84.16
Yes	35	15.84
It is spread through dust(n=222)		
No	171	77.03
Yes	51	22.97
What are your sources of information about covid 19?(n=218)		
Friends	127	58.26
Public talks	107	49.08
Town hall meetings	59	27.06
Newspapers	121	55.50
Radio	169	77.52
Television	190	87.16
Facebook	154	70.64
Whatsapp	126	57.80
Instagram	78	35.78

Table 3: PERCEPTION ABOUT COVID-19

Variable	Frequency	Percentage
Covid 19 symptoms(n=246)		
Headache	161	65.45
Cough and catarrh	224	91.06
Sore throat	144	58.54
Loss of appetite	108	43.90
Loss of sensation of smell and thirst	97	39.43
Fever	197	80.08
Diarrhea	43	17.48
Body ache	60	24.39
Swelling of arms and legs	14	5.69
Body rashes	21	8.54
Body aches	13	5.28
yellowness of the eyes	16	6.50
Others (difficulty in breathing)	1	0.41
Are there vaccines that can cure covid 19? (n=252)		
No	203	80.56
Yes	48	19.05
Are there drugs in Nigeria to cure covid 19?(n=256)		
No	223	87.11
Yes	32	12.50

From table 3 above, the symptoms majority of the traders believe are consistent with covid19 are Cough and catarrh (91.06%), fever 80.08%), headache (65.45%) and sore throat (58.54%). They also disagreed to the existence of any Covid19 vaccine (80.56%) or drugs for its treatment (87.11%).

Table 4b reveals that though the traders carry out some behavioral changes such as Hand washing for every 20 minutes, Social distancing, Physical distancing and Use of hand sanitizers, most do so seldomly (55.86%, 55.29%, 57.60%, 57.25%,) respectively except for face mask which most testify to where in public places (51.55%). Unfortunately, many of the traders said to have participated in social gatherings and social visits sometimes (55.78% and 54.87%) respectively.

Table 4: COVID-19 RESPONSE BEHAVIOUR

Variable	Frequency	Percentage frequency
Is covid-19 real?(n=244)		
No	72	29.51
Yes	169	69.26
Don't know	2	0.82
Not sure	1	0.41
Has covid-19 affected your general behaviour?(n=251)		
No	76	30.28
Yes	157	62.55
I don't know	18	7.17
if no why?(n= 76)		
DO not believe covid-19	33	43.42
is unduly exaggerated	12	15.79
has not killed as much people as the media projects	12	15.79
Others	0	0
If yes why?(n=157)		
Compelled by Government	98	62.42
Compelled By Other People	54	34.39
Others	1	0.64
Do you think total lockdown is necessary?(n=247)		
No	143	57.89
Yes	104	42.11
If no why?(n=143)		
Waste of peoples time	66	46.15
increase hunger	105	73.43
paralyse the economy	79	55.24
unnecessary stress to people	59	41.26
increase violence in the home	63	44.06
a bridge to peoples human right to freedom	52	36.36
increases vices in the community	69	48.25
Others	0	0
If yes why?(n=104)		
prevent community spread of covid-19	90	86.54
enable families stay together	31	29.81
enable people stay in their houses	20	19.23
Others	0	0
Has covid 19 affected your business?(n=253)		
Negatively	232	91.70
Positively	22	8.70

Table 4 B: Behavioural Changes Carried out Consequent upon Covid 19

Variable	Response		
	Always (%)	Sometimes (%)	Never (%)
Wearing of face mask in public places?(n=258)	133(51.55)	122(47.29)	3(1.16)
Hand washing for every 20 minutes?(n=256)	94(36.72)	143(55.86)	19(7.42)
Social distancing?)(n=255)	89(34.90)	141(55.29)	25(9.80)
Physical distancing?(n=250)	71(28.40)	144(57.60)	35(14.00)
Use of hand sanitizers?(n=255)	85(33.33)	146(57.25)	24(9.41)
Participation in social gathering?(n=251)	43(17.13)	140(55.78)	67(26.69)
Engaging in social visits?(n=246)	48(19.51)	135(54.87)	63(25.61)

DISCUSSION

The data used for this study were collected from three hundred (n=300) traders in major markets in Anambra State (Nkwo Nnewi, Eke Awka and Main Market Onitsha) with the aim of understanding their perception, knowledge and response towards Covid-19 and its preventive measures as put in place by the government. Majority of the respondents are females (69.50%), married (69.11%) and with FSLCE as their highest level of educational qualification (69.60%). This also shows that most of the traders in the 3 major markets didn't attend secondary education let alone attending tertiary education and this show how knowledgeable and effective ideas they can be able to contribute towards the growth of their business and the growth of the market in general.

KNOWLEDGE AND AWARENESS OF TRADERS TO COVID-19 PANDEMIC

From the result it shows that almost all the traders are aware of the existence of covid19 (99.62%). Majority agreed that Covid19 is an infectious disease (58.76%) caused by a virus (89.56%) and its spread through air and droplets (57.78% and 59.83%) respectively. The major sources of information to these traders are television (87.16%), radio (77.52%), Facebook (70.64%), friends (58.76%), WhatsApp (57.80%) and newspaper (55.50%). Therefore it shows that the traders are very much aware of the existence of covid-19 and their main source of information was television. This shows that television should be the major source of enlightenment campaign.

PERCEPTION ABOUT COVID-19 SYMPTOMS

From the result, greater percentage of the traders believe some symptoms are consistent with covid-19 which are Cough and catarrh (91.06%), fever(80.08%), headache (65.45%) and sore throat (58.54%) and this shows that the traders have a sound perception on the symptoms of this disease. They also disagreed to the existence of any Covid19 vaccine (80.56%) or drugs for its treatment (87.11%) this also shows that majority of the traders are abreast with the management protocols of this illness and therefore are expected to take the precautionary measures very serious because it doesn't have a definitive treatment rather is been managed conservatively.

Palpable percentage of the respondents don't believe covid-19 is real (29.5%) this is in keeping with a study in abakiliki in a study of perception of covid-19 among pregnant women where 24% believed covid-19 was a scam.62.55% acknowledged that covid-19 has affected their general behaviour with their reason being that they are compelled by government to do so. (57.89%) believed that the lockdown wasn't necessary their reason being that it wasted peoples time (46.5%), increased hunger (73.43%) paralyzed the economy (55.24%),was an unnecessary stress to people (41.26%), increased violence at home (44.06%), a bridge to peoples human right to freedom (36.36%) and it increased vices in the community (48.25%).

91.70% of respondents said that this pandemic has affected their business negatively while to my greatest surprise 8.70% attested that their businesses has been positively influenced in growth and income with this pandemic.

BEHAVIOURAL CHANGE CARRIED OUT CONSEQUENT UPON COVID 19

The result reveals that though the traders carry out some behavioral changes such as Hand washing for every 20 minutes, Social distancing, Physical distancing and Use of hand sanitizers, most do so seldomly (55.86%, 55.29%, 57.60%, 57.25%,) respectively except for face-mask which most testify to where in public places (51.55%). Unfortunately, many of the traders said to have participated in social gatherings and social visits sometimes (55.78% and 54.87%) respectively. From

this it also shows that they practice compelled responses toward prevention and spread of this virus, showing while they do them seldomly.

This depicts danger and therefore more enlightenment campaign should be done in other to dispel the ignorance.

CONCLUSION AND RECOMMENDATION

The status of knowledge and desirable practices were not sufficient enough to combat these rapidly spreading viruses. Communication and public education efforts should focus on building an appropriate level of knowledge while enhancing the adoption of recommended self-care practices with special emphasis on high risk audience segments.

Recommendations

- The state should intensify active surveillance for unusual outbreaks and monitor carefully the evolution of COVID-19 outbreaks, reinforcing epidemiological surveillance.
- The state should continue to enhance awareness through effective risk communication concerning COVID-19 to the general public especially the traders, health professionals, and policy makers, and to avoid actions that promote stigma or discrimination.
- The state should share with WHO all relevant information needed to assess and manage COVID-19 in a timely manner, as required by the International Health Regulations (2005).
- Research using large scale cohort is needed to address the poor response issues towards the pandemic by traders
- Populace should be encouraged on the need to abide and carryout the layout preventive measures to reduce the spread of the virus.

Competing Interests

The authors declared that they have no competing interests and no funding for this research work.

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