
**KNOWLEDGE, BEHAVIOUR AND PERCEPTION OF THE TRADERS TOWARD'S
RECEIVING COVID-19 VACCINE IN LAPAI LOCAL GOVERNMENT AREA OF
NIGER STATE, NIGERIA**

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ABSTRACT: *This study sought to find out the knowledge, behaviour and perception of traders towards receiving Covid-19 vaccine in Lapai local Government Area of Niger State, Nigeria. Descriptive survey research design was adopted for the study. Accidental sampling was used to sample 200 respondents in Lapai daily markets. A self-developed questionnaire was used as research instrument to sample 200 respondents. Descriptive statistics of frequency counts, percentages and mean were used to analyse the research questions. Chi-square goodness-of-fit test was used to test the hypotheses at 0.05 level of significance. The majority of traders had adequate knowledge of Covid-19 ($\chi^2 = 122.280$; $p < 0.05$), and conformed moderately to Covid-19 guideline protocol ($\chi^2 = 18.320$; $p < 0.05$). Findings further revealed that there was negative perception of traders in embracing Covid-19 vaccine ($\chi^2 = 45.880$; $p < 0.05$). The perceptions of traders generally were negative and not conforming with Covid-19 guideline protocols and they were not welcoming the vaccine, as they believed it may have side effect after receiving it. Traders concluded that only same vaccine received by the president of Nigeria will be accepted by them. The study recommends amongst others that traders must be enlightened to have adequate knowledge on the virus in order to change their negative behaviours to conform to COVID-19 guideline protocols. The importance of vaccination to the traders and its long time benefits must be emphasized to have Covid-19 free country.*

KEYWORDS: behaviour, COVID-19, knowledge, perception, vaccine.

INTRODUCTION

The issue of corona virus that started from Wuhan in China and becomes a global health issue that over 200 countries are affected and still spreading like a wild fire that is out of control, posed threat to the whole world. Over 164 Million cases confirmed and over 3.4 Million deaths recorded. The outbreak affected all aspects of human activities globally, especially businesses and others. The effort of the scientists was crowned to get vaccine to combat or reduce the speed of infection.

The pandemic respiratory infection is deadly and declared as Public Health Emergency of International Concern (PHEIC). Over 164 million of people are affected and over three million mortality recorded globally. Nigeria with about 200 million of people started receiving vaccines

on 6th of March like other African countries against the pandemic infection. Currently, one hundred and sixty five thousand, seven hundred and nine (165,709) were confirmed cases of COVID-19 infections. One hundred and fifty six thousands, four hundred and thirteen (156,413) cases treated and discharged, while two thousand and sixty six (2,066) deaths recorded (NCDC. May17, 2021) and (Nigerian Television Authority. NTA. May 17, 2021).

The symptoms may starts from common cold which include fever, sore throat, catarrh or runny nose, dry cough, short breath and difficulties in breathing. The transmission of the disease can be through direct contact with an infected person's droplet when coughing or sneezing touching the eyes, nose and the mouth. In animate objects can also be a vehicle through touching the contaminated surfaces. The control of the disease is with adequate protection, personal hygiene and sanitation. WHO (2020) stated that mild cases typically recovers within two weeks, while those with severe or critical diseases may take three to six weeks to recover. Nigeria Centre for Disease Control (NCDC) 2021 warned that older people are more likely to be affected, especially those with underlined health issues such as cardiovascular diseases diabetes mellitus and chronic respiratory health problems Researchers confirmed that COVID -19 can only survive on surfaces for hours and adequate sanitation should not be compromised. Bhagat and Linden (2020) amplified that social distance and wearing of cloth face masks, surgical masks, respirators or other face coverings are good to control droplet transmission. They further stated that people staying indoors are less in risk of contaminating the virus with good ventilation system while those enjoying outdoors activities are high in risk of contaminating the virus. Observances of the protocol guidelines for COVID-19 prevention are less at high risk of contracting the virus. NCDC (2020) reported that COVID-19 cannot be treated at home but adequate control of the virus by vaccination, social distancing, correct facemask wearing, hygienic lifestyle, healthy nutrition and sanitation.

COVID-19 has no bound as it affects all aspects of life globally ranging from market closure, social gathering, religious worshipping places ,schools, business centers and so on .The pandemic have powerfully changed the lifestyles of the entire world. Hossein (2020) stated that the gradual resumption of normal lifework and production, many people will be moving from one place to another, especially when visiting public facilities and services such as shops, supermarkets, offices, restaurants and many other places to seek funs may be posing a potential risk to risen in the transmission of the virus.

Curve of the pandemic infection can flattened, if people receive the vaccine and correct preventive measures are strictly to, by covering the mouth when coughing and the nose when sneezing. Washing hands often with soap and water, cleaning frequently with disfectants along with immediate disposal of used tissues, safely from people's reach to prevent further contaminations.

There is urgent need of stake holders and health educators to start campaigning and sensitize people on the importance of the vaccine and how the country will be declared COVID-19 free.

Purpose of the Study

The purpose of the study was to investigate the knowledge, behaviour and perception of the traders towards receiving COVID-19 vaccine in Lapai Local Government area of Niger State Nigeria.

Statement of the Problem

Increasing numbers of confirmed diagnoses of COVID-19 globally is alarming and disheartening. It is unfortunate that Nigeria is also experiencing risen cases of the new infected cases daily. Nigeria is a developing country that is battling with COVID-19 infection. The index case was announced on 27th of February 2020, well managed and discharged. The rise in transmission of the pandemic infection internationally and community level that led to many morbidities as well mortalities recorded. It becomes alarming that many cases recorded and discharge with over one thousand deaths recorded as deaths affected people in many ways the nation, neighbours, children, parents close friends and associates in different ways. Some are engrossed in shock and depression, while others feel physically incapacitate and disoriented. Therefore, this sought to find out the Knowledge, Behaviour and Perception of the Traders towards receiving COVID-19 vaccine in Lapai Local Government Area of Niger State, Nigeria

Research Questions

The study will attempt to answer the following specific question.

1. Were the traders having the knowledge of COVID-19 in Lapai local government of Niger State?
2. Were the behaviours of the trades conform to COVID-19 guideline protocol in curbing the spread of the infection in Lapai Local government area of Niger State?
3. What are the perceptions of the traders in embracing COVID-19 vaccine in Lapai Local Government Area of Niger State?

Hypotheses

The following Hypothesis was tested in the study.

1. Traders in Lapai Local Government Area of Niger State will not have adequate knowledge of COVID-19.
2. Traders' behaviours in Lapai Local Government Area of Niger State will not conform to observing COVID-19 protocol.
3. Traders in Lapai Local Government area of Niger State will not embrace COVID-19 vaccination

METHODOLOGY

The researcher adopted descriptive research design for this study which was deliberate survey. The population for this study consisted of all the traders in the market in Lapai Local government. A self-structured instrument was used for data collection of Two hundred (200) traders were purposely sampled and distributed to them in the market and collected immediately

to ensured 100% retrieved of the instruments in the market. To obtain the reliability of the instrument, the researcher administered the validated instrument on 15 traders at Tuganmallam market along Minna road who were not part of the actual study. The instrument showed reliability coefficient of 0.82 from test-retest measure. Descriptive statistics of frequency counts, percentages and mean were used to analyse the research questions. Chi-square goodness-of-fit test was used to test the hypotheses at 0.05 level of significance.

RESULTS AND DISCUSSION OF FINDINGS

Research Question 1: Were the traders having the knowledge of Covid-19 in Lapai local government of Niger State?

Table 1

Traders' Knowledge of Covid-19

	SA	A	D	SD	Mean Response
Knowledge of Covid-19					
Covid-19 is a disease that is affecting the reparatory system and is caused by new strain of corona virus that linked to some types of common cold.	165 (82.5)	15 (7.5)	11 (5.5)	9 (4.5)	3.68
Covid-19 has no regards for anybody as it affects people every day and needs to be eradicated from the world.	80 (40.0)	13 (6.5)	101 (50.5)	6 (3.0)	2.93
Covid-19 mostly affects rich people	128 (64.0)	52 (26.0)	11 (5.5)	9 (4.5)	3.49
Covid-19 has respect for poor people.	170 (85.0)	11 (5.5)	10 (5.0)	9 (4.5)	3.71
Covid-19 virus is already in Lapai and should be eradicated from the community.	0 (0.0)	0 (0.0)	180 (90.0)	20 (10.0)	2.00
Covid-19 can be contracted from exposure to an infected person anywhere and in world.	120 (60.0)	20 (10.0)	19 (9.5)	41 (20.5)	3.10

Figures in parentheses are in percentages

Mean knowledge score was 3.15 ± 0.646

SA = Strongly Agree; A= Agree; D = Disagree; SD = Strongly Disagree

Respondents' knowledge of Covid-19 in Lapai local government of Niger State is shown in Table 1. Many (90.0%) of the respondents strongly agreed or agreed that Covid-19 is a disease that is affecting the reparatory system. Many (70.0%) of the respondents also felt that Covid-19 can be contracted from exposure to an infected person anywhere in the world. Respondents (40.0%) also strongly agreed that Covid-19 has no regards for anybody as it affects people every day and needs to be eradicated from the world. The mean knowledge score for the respondents was 3.15 implying that majority of the traders had adequate knowledge of Covid-19.

Research Question 2: Were the behaviours of traders conform to Covid-19 guideline protocol in curbing the spread of the infection in Lapai Local government area of Niger State?

Table 2

Behaviours of Traders Towards Covid-19 Guideline Protocol

	SA	A	D	SD	Mean Response
Prevention is better than cure. All the Covid-19 protocols must be constantly observed	50 (25.0)	42 (21.0)	76 (38.0)	32 (16.0)	2.55
I promote cleanliness and sanitization in my vicinity to avoid spreading of Covid-19 virus.	95 (47.5)	37 (18.5)	43 (21.5)	25 (12.5)	3.01
I still maintain social distance (MSD) or physical distance (PD) to avoid exposure to Covid-19 virus.	54 (27.0)	20 (10.0)	71 (35.5)	55 (27.5)	2.37

Figures in parentheses are in percentages

Mean knowledge score was 2.64±0.330

SA = Strongly Agree; A = Agree; D = Disagree; SD = Strongly Disagree

Respondents' behaviours towards Covid-19 guideline protocol in curbing the spread of the infection in Lapai local government of Niger State is shown in Table 2. Many (66.0%) of the respondents strongly agreed or agreed that they promoted cleanliness and sanitization in my vicinity to avoid spreading of Covid-19 virus. However, majority of the respondents (63.0%) did not maintain social distance (MSD) or physical distance (PD) to avoid exposure to Covid-19 virus. The mean score for the respondents' behaviour was 2.64 implying that traders conformed moderately to Covid-19 guideline protocol.

Research Question 3: What are the perceptions of the traders in embracing Covid-19 vaccine in Lapai Local Government Area of Niger State?

Table 3

Perception of Traders Towards Covid-19 Vaccination

	SA	A	D	SD	Mean Response
I will support Covid-19 vaccine campaign when arrived in Lapai Local Government	60 (30.0)	22 (11.0)	100 (50.0)	18 (9.0)	2.62
I will encourage my families to take the vaccine.	35 (17.5)	24 (12.0)	96 (48.0)	45 (22.5)	2.25
I will believe only on the type of Covid-19 vaccine taking by the President and other very important people (VIP) in the country.	90 (45.0)	50 (25.0)	50 (25.0)	10 (5.0)	3.10
I will lead by example by taking the vaccine to encourage others.	30 (15.0)	22 (11.0)	96 (48.0)	52 (26.0)	2.15
Covid-19 vaccine has no side effect on the receivers' health.	22 (11.0)	24 (12.0)	123 (61.5)	31 (15.5)	2.19

Figures in parentheses are in percentages

Mean knowledge score was 2.46±0.402

SA = Strongly Agree; A = Agree; D = Disagree; SD = Strongly Disagree

The perceptions of traders in embracing Covid-19 vaccine in Lapai Local Government Area of Niger State are shown in Table 3. Many (70.0%) of the respondents strongly agreed or agreed that they will believe only on the type of Covid-19 vaccine taking by the President and other very important people (VIP) in the country. However, the majority of the respondents (59.0%) strongly disagreed or disagreed that they will support Covid-19 vaccine campaign whenever it arrived in Lapai Local Government. Respondents (70.5%) also strongly disagreed or disagreed to the statement that they will encourage families to take the vaccine. The mean perception score of 2.46 indicated that the perception of traders in embracing Covid-19 vaccine was negative.

Hypothesis 1: Traders in Lapai Local Government Area of Niger State will not have adequate knowledge of COVID-19.

Table 4

Chi-square Test for Traders' Adequate Knowledge of Covid-19

	Observed Frequency (f)	Percentage (%)	Expected Frequency (f)	df	$\chi^2_{cal.}$	$\chi^2_{tab.}$	Remark
Strongly Agree	111	55.5	50.0	3	122.280	7.815	Significant
Agree	20	10.0	50.0				
Disagree	57	28.5	50.0				
Strongly Disagree	12	6.0	50.0				
Total	200	100.0					

Note: 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 50.0.

Table 4 indicated that 55.5% representing majority of the respondents strongly agreed, 10.0% agreed, 28.5% disagreed, and 6.0% strongly disagreed to having adequate knowledge of Covid-19. A chi-square test at 3 degrees of freedom showed that respondents' adequate knowledge of Covid-19 was not equally distributed. Since χ^2 calculated value of 122.280 was greater than the tabulated χ^2 value of 7.815, it implied that traders in Lapai Local Government Area of Niger State had adequate knowledge of Covid-19. Therefore, the null hypothesis one was rejected.

Hypothesis 2: Traders' behaviour in Lapai Local Government Area of Niger State will not conform to observing COVID-19 protocol.

Table 5

Chi-Square Test for Traders' Behaviour Conforming to Covid-19 Protocol

	Observed Frequency (f)	Percentage (%)	Expected Frequency (f)	df	χ^2 cal.	χ^2 tab.	Remark
Strongly Agree	67	33.5	50.0	3	18.320	7.815	Significant
Agree	33	16.5	50.0				
Disagree	63	31.5	50.0				
Strongly Disagree	37	18.5	50.0				
Total	200	100.0					

Note: 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 50.0.

Table 5 indicated that 33.5% representing majority of the respondents strongly agreed, 16.5% agreed, 31.5% disagreed, and 18.5% strongly disagreed that traders' behaviours conformed to observing Covid-19 protocol. A chi-square test at 3 degrees of freedom showed that these responses were not equally distributed. Since χ^2 calculated value of 18.320 was greater than the tabulated χ^2 value of 7.815, it implied that traders' behaviour in Lapai Local Government Area of Niger State conformed to observing Covid-19 protocol. Therefore, the null hypothesis two was rejected.

Hypothesis 3: Traders in Lapai Local Government area of Niger State will not embrace COVID-19 vaccination

Table 6

Chi-Square Test for Traders Embracing Covid-19 Vaccination

	Observed Frequency (f)	Percentage (%)	Expected Frequency (f)	df	χ^2 cal.	χ^2 tab.	Remark
Strongly Agree	57	28.5	50.0	3	45.880	7.815	Significant
Agree	32	16.0	50.0				
Disagree	86	43.0	50.0				
Strongly Disagree	25	12.5	50.0				
Total	200	100.0					

Note: 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 50.0.

Table 6 indicated that 28.5% of the respondents strongly agreed, 16.0% agreed, 43.0% representing the majority disagreed, and 12.5% strongly disagreed that traders embraced Covid-19 vaccination. A chi-square test at 3 degrees of freedom confirmed that these responses were not equally distributed. Since χ^2 calculated value of 45.880 was greater than the tabulated χ^2

value of 7.815, it implied that traders in Lapai Local Government area of Niger State will not embrace Covid-19 vaccination. Therefore, the null hypothesis three was not rejected.

DISCUSSION OF FINDING

The finding from the analysis of the data revealed that majority of the respondents (180) representing 90% of whole population were knowledgeable about the pandemic infection that, the disease is affecting the respiratory system and linked to some types of common cold. Few of the traders (20) representing 10% of the population were not knowledgeable of the cause of the new strain. It is unfortunate that (107) of the population, representing 53.5% of the population didn't believe that corona virus has no regards for anybody. Only (93) representing 46.5% believed that the virus can attack or infect anybody..It is unfortunate that majority of the traders (180) representing 90% of the population believed that corona virus mostly affects rich people, while (20) representing 10% of the total population were of contrary opinion. Majority of the traders (181) representing 90.5% were of the opinion that corona virus has respect for poor people and only affects rich men..Only few (19) representing 9.5% of the whole population were of contrary. (180) representing 90% of the population believed that the virus can never enter the local government due to the hot weather in the state. Only few (20) representing 10 % claimed that they have no idea if the disease have entered the town or the local government.(140)respondents representing 70% of the whole population believed that one can be infected if exposed to an infected person. While (60) representing 30% of the total population was contrary.

From the respondents behaviour on the awareness of corona virus in the country and after the second wave of the pandemic (108) representing 54% of the traders did not believe on COVID-19 protocols in other to prevent the disease from spreading. (92) Representing 46% still believe that prevention is better than cure. 132 representing 66% of the traders believed in hygienic environment to avoid contracting any disease., while only few were contrary (68) representing 34% .In the aspect of maintaining social distance or physical distance it was disheartening that majority of the traders (126) representing 63% did not believe in social distance or physical distance ,only few of the traders (74) representing 37% were observing the guideline protocols for COVID-19.

The perception of the traders on issue of vaccination was not encouraging. (118) representing 59% responded that they will not welcome COVID-19 vaccine in the local government, while (82) representing 41% claimed that the vaccine will be embraced. Majority of the traders (141) representing 70.5 said they will not encourage their families to receive COVID-19 vaccine, only few (59) representing 29.5% will allow their family to receive the vaccine. (140) respondents representing 70% gave assurance that if the president of Nigeria receive the vaccine and noting happens to him, same will be received from the government, while .(60) representing 30% of the population were not ready to be vaccinated In taking the vaccine to encourage others, minority of respondents (52) representing 26% of the whole population were ready to be vaccinated

while,(148) representing 74% of the total population decline of taking the vaccine to encourage others. It was worrisome that (133) of the respondents representing 66.5% believed that the COVID-19 vaccine will have side effect after receiving it, only(46) representing 23% shun the side effect of the vaccine on the health if received it, while few respondents claimed no idea of any likely side effects.

CONCLUSION

Conclusively, the study confirmed that the traders were aware of the pandemic, but they needed to be informed the mode of transmission of the virus that it spare nobody either rich or poor; their behaviours were not conforming with COVID-19 protocol guidelines to prevent further spread of the infection in the community. Their perception on vaccine to control the pandemic is negative. Urgent campaign and enlightenment to the entire population in the community on the benefits of receiving the vaccine is a serious issue that must be tackled.

Recommendations

Based on the finding of the study, the following recommendations are put forward.

1. All hands must be on deck to update the knowledge of the traders on COVID-19, especially mode of transmission.
2. COVID-19 guidelines protocol must be emphasize in the local government.
3. The erroneous believe that disease only affects rich people and spare poor people must be corrected in the local government.
4. There must be mass campaign and enlightenment programmes on the importance of receiving COVID-19vaccine to the entire community.
5. There must be enforcement of using protective devices like correct wearing of face mask and embracing personal hygiene
6. All worshipping centers must stick to COVID-19 guiding protocols and law enforcement agents must be available to check the offenders.
7. Health must be promoted in the community by all by showcasing good demonstration of correct use and wearing of face mask, maintaining social and physical distance where necessary along with regular hands washing and positive health behaviours.

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