INNOVATIONS

Content available on Google Scholar

Homepage : www.journal-innovations.com

Evaluating the Factors Influencing the Level of Compliance to COVID-19s' Preventive Measures Between City and Lesser City Dwellers in Osun State, Nigeria

Sanni, Kamorudeen Taiwo Ph. D
Department of Guidance and Counselling,
Faculty of Education,
Federal University Oye-Ekiti,
Ekiti State, Nigeria

Received: 01.03.2021
Revised: 05.02.2021
Accepted: 10.03.2021

Abstract
The study's broad objective was to evaluate factors influencing the level of compliance to COVID-19s' preventive measures between city and lesser city dwellers in Osun State, Nigeria. In the light of this, four specific objectives were deduced for achievement coupled with four research questions respectively. Descriptive survey research design was employed. Purposive sampling technique was used to select the study location, while simple random sampling technique was employed to select one-thousand and one hundred (1,100) respondents across the sampled cities. A face and content validated structured research instrument tagged 'Level of Compliance to Preventive Measures of COVID-19Questionnaire (LCPM-COVID-19) having reliability coefficient of 0.71 obtained from Split-half technique was applied to obtain information from the respondents. The administration of the research instrument which was carried out by four trained research assistants took place immediately after the Osun state government gave directive towards relaxing the lockdown of the residents within the state. The raw data obtained from the field were analysed with the aid of inferential and descriptive statistical tools. The empirical outcomes revealed that the compliance level with regards to enforcement of social distancing, usage of cloth face mask, avoidance of social gathering and abeyance of the lockdown directive among cities and lesser cities residents was highly encouraging, while residents of cities exhibited high degree of compliance with frequent hand washing under running water and use of hand sanitizer compared with their lesser cities counterparts. It is also discovered that gender traits of the residents has nothing to do with their compliance level to COVID-19s' preventive measures, while, there wassignificant difference in the level of compliance towards COVID-19preventive measures when educational status of the respondents was taking into cognisance but in favour of residents having formal education beyond secondary school status. Recommendations comprising attitudinal changes on the side of lesser city dwellers, provision of necessary devices towards observation of preventive measures by relevant stakeholders and putting a check on visiting relative or business associate residing in cities during the pandemic.

Keywords: 1. Compliance Level, 2. COVID-19, 3. Preventive Measure, 4. Urban Residents, 5. Rural Dwellers.

Introduction

The outbreaks and spread of any infectious disease has always been a threat to the lives of the people, young or old, rural and urban residents, city or lesser city dwellers living in the affected area irrespective of their gender and educational status. If this is so for the whole world, it may not be an overstatement to say that, the impact of any pandemic may be more felt by people in the developing nations when compared with their counterpart in the developed countries where there is efficient health care delivery,modern medical facilities,free health care service,high standard of living, and high level of education.

However, the outbreak and spread of any infectious diseases bear with it, the ability and capacity of any nation to put such diseases under proper control through the exhibition of adequate preventives and treatment strategies and practices. But, lack of good healthcare delivery, high level of poverty and high illiteracy rate that characterised most of the developing nations has always be a bottle neck when it comes to ability and capability to put any pandemic under a serious control.Also, more often than not people that may become more vulnerable to any pandemic are rural or lesser city dwellers because they are faced with health disparities due to multiple barriers such as lack of healthcare resources (e.g transportation, health insurance, providers, and facilities), geographic distance and lower economic status (Thomas, Diclemente and Snell, 2014). This indicates that lesser city residents in developing nations like Nigeria may be at a disadvantage when there is outbreak and spread of any infectious diseases. Therefore lesser city dwellers may need to give quality attention to exhibition of preventive behavioural measures against any pandemic.

Over the years the world had passed through a lot of health challenges which were brought about by the outbreaks and spread of infectious diseases such as: HIV /AID, 1981 –present ; SARS, 2002 -2003; Ebola, 2014 –2016; Ebola, 2018-presnt; COVID -19, 2019 –present (WHO, 2020).The outbreak and spread of COVID- 19 has become a serious health issues and it is currently causing global public health crisis (Xuewel and Hongliang, 2020). According to WHO (2020) the first case of COVID-19was reported to the world health organisation on 31 December, 2019 from Wuham, China and the outbreak was declared a Public Health Emergency of International concern on January 30, 2020.In May 2020 there were more than 4.2 million confirmed cases worldwide (Johns, 2020).

Since COVID- 2019 is not country specific, thus, it has become a serious health issue in Nigeria as well. The first case of COVID- 19 was confirmed in Nigeria on 27 February 2020 in Lagos state through an Italian who travelled from Italy to Nigeria (MacLean and Dahir, 2020).Thus, Nigeria became the first Sub-Sahara Africa to record a case of COVID-19. The virus later spread from Lagos to Ogun and Abuja territory from where it spread to about 33 states in Nigeria. As from the date the first case of COVID- 19 was confirmed in Nigeria up till 13 January 2021 Nigeria has recorded 101,331 confirmed cases and confirmed deaths (NCDC, 2021). Osun state has equally faced a health challenge created by this deadly disease,COVID-19. The Nigeria Centre for Disease and Control announced on Wednesday March 25, 2020 that Osun state recorded her first case of COVID- 19. As from this time up till 13 Jan, 2021 .Osun state has recorded 1,110 confirmed cases and 24 confirmed death (NCDC, 2021)

Putting into consideration that there is no treatment or vaccine currently available against the disease (Ahamad,2020). What appears to be the only scientific evidence available to combat the high spread and high death rate associated with the disease is adherence to preventive measures advised by WHO. These preventive measures are regular hand washing with soap and water, the use of alcohol–base sanitizer, wearing of face mask in public places, avoiding crowded places, and maintaining social distancing (Chu et al, 2020).Nigeria government introduced a nationwide lockdown in April, 2020 and included a 24-hour curfew (except for essential services providers) (NCDC, 2020) in order to enhance compliance with the preventive measures and curtail the spread of the virus.

However, lockdown order was gradually relaxed and later suspended. Now that people are free to move around, amidst COVID-19, there may be serious need for every individual to comply to the recommended preventive or safety measure against COVID -19. NCDC (2020) Stresses that currently, there is no specific

antiviral treatment or vaccine for COVID -19, therefore, the only way to prevent the spread of the virus is total adherence to the recommended preventives measures which include: washing your hand with soap, covering the mouth when coughing, maintaining 1-meter distance from other people and monitoring and self- isolation for fourteen days for people who suspect they are infected. Therefore, student at all levels especially public university students who resume at school on 18 January, 2021 after staying out of school since March, 2020 due to ASUU strike and COVID-19crises may equally need to adhere strictly to the preventive and safety measure against COVID-19. In the same vain, university management may need to provide some essential materials such as water, soap and hand sanitizer at strategies places in the campus. This may facilitate students' compliance with the recommended preventive measures against COVID -19.

However, location, gender characteristics and educational status may be predictors to the level by which people may like to comply with the preventive and safety measures against COVID-19. Xueweiand Hongliang,(2020) concurred that lesser cities residents are more likely to hold a negative attitude toward the effectiveness of performing preventive behaviours, and more likely to have lower levels of information appraisal skills than their counterparts living in cities.Omole and Suberu (2010) stressed that peoples' exposure to basic education could be an effective tools towards patients' compliance level with anti-hypertensive medication. Breierova and Duflo (2004) corroborate this by arguing that an increase in the average number of years of education among the household reduces child mortality rate. More so, demographic variables such as gender and educational level have a great effect on people's knowledge, behavioural response and compliance toward the necessary preventive measures against a disease outbreak (Ahamed et. al, 2020;Al-hazim et. al, 2018; Ayinde et. al, 2020; Ertani et. al, 2020; Zhong et.al, 2020). It is on the above premise,the research work is designed to evaluate factors influencing the level of compliance to COVID-19s' preventive measure between city and lesser city dwellers in Osun state, Nigeria.

Objective of the Study

The broad objective is to evaluate the level of compliance to the COVID-19s' preventive measures between people living in city and lesser city dwellers in Osun State, Nigeria. While, specific objectives are to;

i. assess the degree of compliance to the COVID-19preventive measures among residents in Osun State, Nigeria;
ii. evaluate the influence of cities of residence on peoples' level of compliance to the COVID-19preventive measures in Osun State, Nigeria;
iii. examine the impact of gender traits on the level of compliance to the COVID-19preventive measures in Osun State, Nigeria; and
iv. evaluatethe extent to which educational status influence the level of compliance to the COVID-19preventive measures in Osun State, Nigeria.

Research Questions

The following research questions are raised to guide the study.

i. What is the degree of compliance to the COVID-19preventive measures among residents in Osun State, Nigeria?
ii. To what extent docities of residence influence peoples' level of compliance to the COVID-19preventive measures in Osun State, Nigeria?
iii. To what extent does gender traits impact the level of compliance to the COVID-19preventive measures in Osun State, Nigeria?
iv. To what extent does educational status influence the level of compliance to the COVID-19preventive measures in Osun State, Nigeria?

Methodology

Research Design

The study employed descriptive survey researchdesign. The design wasconsidered adequate for this research work not only due to the fact that it aimed at describing and interpreting what is concernedwith issues, conditions and practices as related to COVID-19preventive measures among the people living in cities and lesser cities, but also involve largenumbers of people and describe populationcharacteristics by the selection of unbiased samplemost especially from both cities and lesser cities areas of Osun State, Nigeria.

Target Population

All adults residing in cities and lesser cities in Osun State as at time the state government ease the lockdown order are the target population for this study.

Sample and Sampling Techniques

Purposivesampling technique was used to select two prominent cities within the state-Osogbo and Ife and two lesser cities-Ikire and Apomu respectively. Besides, simple random sampling technique was employed to selectone-thousand and one-hundred (1,100) respondents across the sampled cities. Three-hundred (300) participants were selected per cities while two-hundred and fifty (250) respondents were chosen per lesser cities used in the research work.

Instrumentation

A self-designed research instrument tagged 'Level of Compliance to Preventive Measures of COVID-19questionnaire (LCPM-COVID-19)' was used to obtain relevant information from the respondents. There were two sections to this instrument, first section aimed at eliciting information on the respondents' demographic characteristic, which second section was planned to obtain information on peoples' level of compliance with COVID-19preventives measures which were accompanied with Likert rating scales ranging from VTOM-Very True of Me, TOM-True of Me to NTOM-Not True of Me.

Validity and Reliability of the Instrument

The researcher ensures face and content validity of the instrument by ensuring that each of the items embedded in the research instrument are in tandem with the attainment of research objectives and questions as well as neatly worded with simple English language for the respondents to understand. The instrument was pilot tested using forty (40) participants, the reliability test was done with the aid of Split-half technique and produced reliability coefficient of 0.71. This buttressed that the research instrument was consistent, suitable and appropriate for the work.

Administration of the Research Instrument

The administration of the instrument was embarked upon immediately after the Osun state government gave directive towards relaxing the lockdown of the residents within the state which encouraged intra-sate movement of the people across the cities and lesser cities. Four trained research assistants were recruited and the administration of the instrument was lasted one week.

Method of Data Analysis

Tools from descriptive and inferential statistics were used to analyse the generated data. Descriptive statistics comprised pie, bar charts, mean and standard deviation were used to analyse the demographic characteristics and for the attainment of research specific objectives number oneand tworespectively. While, T-test was employed to attain research question number three

Results

Analysis Based on Demographic Characteristics

Table 1: A Pie-Chart Showing Distribution of Respondents by Gender

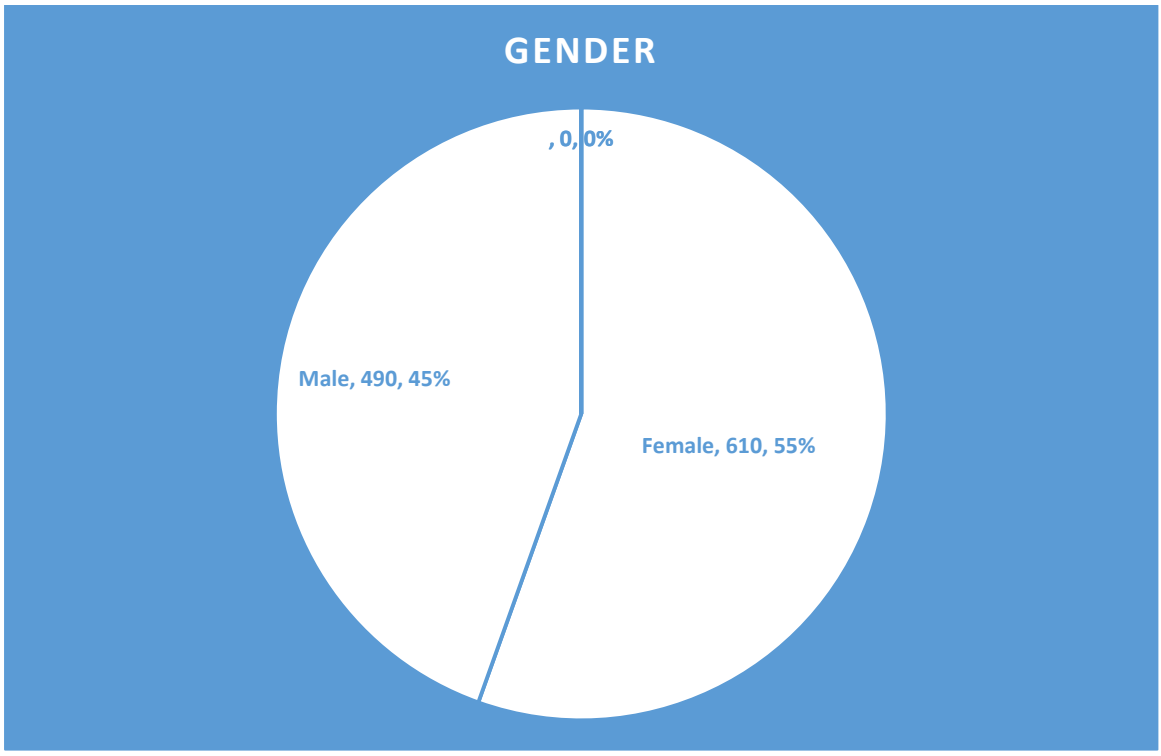


Table 1, that is, pie-chart is expressed in percentage form. It revealed that six-hundred and ten(610) of the respondents which represented 55% of the total participants are female going by their gender, while the remaining for-hundred and ninety(490) of the participants which accounted for 45%, were male. It is therefore infer that female respondents are greater than their male counterparts during the administration of the research instrument at both cities and lesser cities.

Table 2:A Pie-Chart Showing the Distribution of Respondents with Respect to Age Range

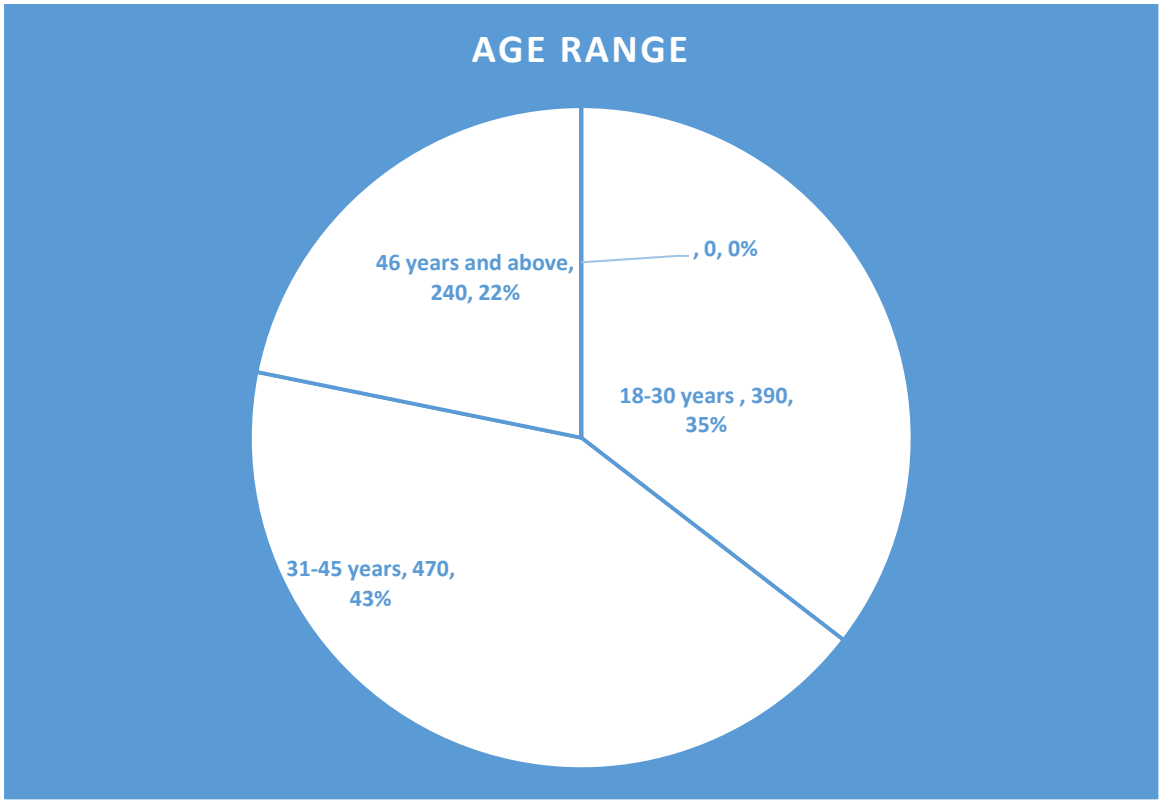
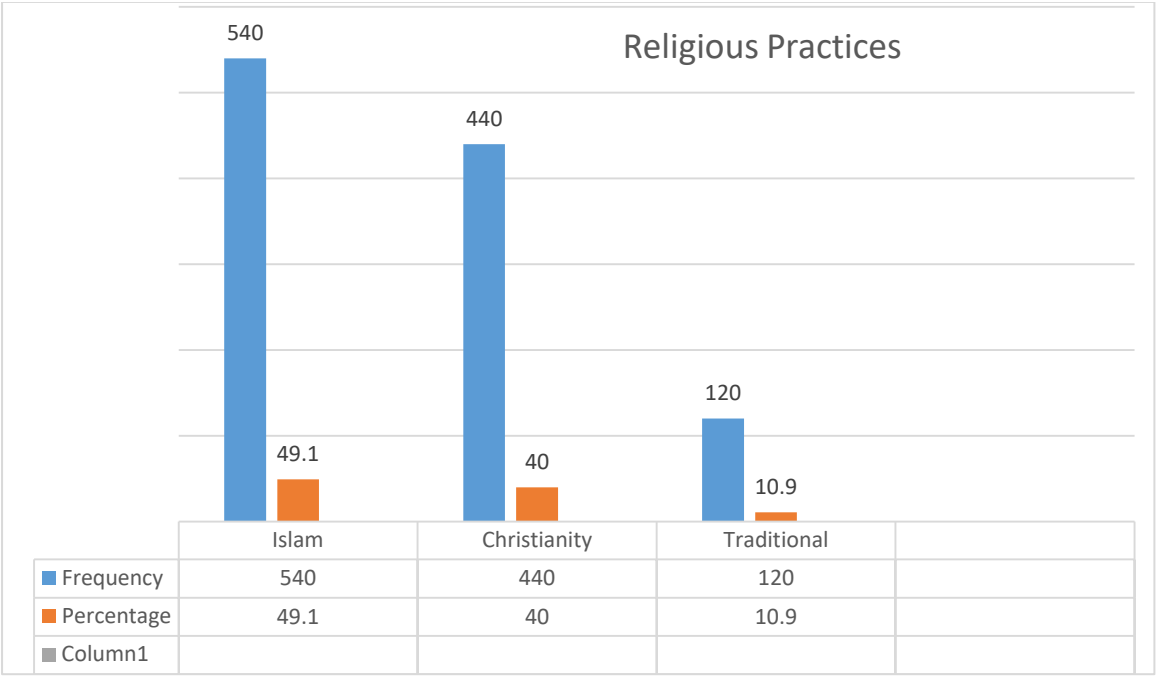


Table 2, that is, pie-chart is expressed in percentage, it indicated that 35% of the respondents are between 18-30 years of age, 43% of them are between 31-45 years of age, while 22% which is the least are within46 years above. It is revealed that majority of the respondents were within their youthful age of 31-45 years of age range as having 43% of the total respondents.

Table 3: Bar-Chart Showing the Distribution of Respondents by Religion Practice



	Islam	Christianity	Traditional	
Frequency	540	440	120	
Percentage	49.1	40	10.9	
Column1				

Table 3, that is bar charts showed the distribution of respondents on the basis of their religious practice. It displayed that five-hundred and forty (540) of the participants which represented49.1% claimed to be Muslim. Four-hundred and forty (440) which amounted to 40% of them are Christianity by their claim,

whileone-hundred and twenty (120) which accounted for 10.9% of the total participants are Traditional worshipers. Hence, majority of the participants involved in the research are Muslim as having 49.1% of the overall respondents, followed by Christian while the least participants are Traditional worshippers.

Analysis Based on Research Questions

Research Question I: What is the degree of compliance to the COVID-19preventive measures among residents in Osun State, Nigeria?

Table 4: Respondents' View Towards the degree of compliance to the COVID-19preventive measures among residents in Osun State, Nigeria

Statements	VTOM	TOM	NTOM
Frequent hand washing	282(25.6%)	296(26.9%)	522(47.5%)
Observation of social distancing requirement	380(34.5%)	426(38.8%)	294(26.7%)
Wearing of cloth face mask	396(36%)	486(44.2%)	218(19.8%)
Use of hand sanitizer	350(31.8%)	438(39.8%)	312(28.4%)
Avoiding social gathering	604(54.9%)	496(45.1%)	00(0.0%)
Obey lockdown order	396(36%)	432(39.3%)	272(24.7%)

Rating Scales Interpretations: VTOM-Very True of Me, TOM-True of Me and NTOM-Not True of Me

On the aggregate, table 4 contains respondents' opinion towards the degree of compliance to the COVID-19preventive measures. The empirical outcomes reveal that two-hundred and eighty two (282), two-hundred and ninety six (296) and five-hundred and twenty two(522) representing twenty-five point six per cent (25.6%), twenty-six point nine per cent (26.9%) and forty-seven point five per cent (47.5%) concur that constant and frequent washing of hands was very true of them, true of them and not true of them respectively. Hence, it is inferred that majority of them were not used to the practice of frequent hand washing as having five-hundred and twenty twoparticipants. With respect to social distancing requirement, eight-hundred and six(806) of the entire respondents which is majority said that practice of social distancing requirement as one of the preventive measures to curtail the spread of COVID-19was very true and true of them. While, the remaining two-hundred and ninety four (294) agreed that the statement was not true of them.

Besides, thirty-six percent (36%) and forty-four point two per cent (44.2%) of the total respondents were of the view that they are gradually getting adapted to the use of cloth face mask whenever they had reasons tocheck out during the pandemic, on the other hand, nineteen point eight per cent (19.8%) found the wearing of cloth face mask irritated themand preferred to stay indoors. Moreover, three-hundred and fifty (350) and four-hundred and thirty eight (438) of the sampled participants which amounted to thirty-one point eight (31.8%) and thirty-nine point eight per cents (39.8%) said that the use of hand sanitizer was very true and true and they seldom use hand sanitizer and didn't wait to exhaust the available one before getting another one, while, three-hundred and twelve (312) of the respondents which representedtwenty-eight point four per cent (28.4%)of the participants opined that the use of hand sanitizer was not true of them as they cannot afford and that the odour of the said hand sanitizer usually irritate them.

On the part of avoidance of social gathering, the findings indicated that all the participants avoided social gathering by staying away from religious services for the main time. And finally, three-hundred and ninety six (396) and four-hundred and thirty two(432) agreed that it was very true and true of them and they did not go out during the period of lockdown within the state, while the remaining two-hundred and seventy two (272) participants said that it was not true of them.

Research Question II: To what extent does city of residents influence the level of compliance to the COVID-19preventive measures in Osun State, Nigeria?

Table 5: Descriptive statistics showing the degree of compliance to the COVID-19preventive measures between people living in cities and lesser cities in Osun State, Nigeria.

Items	**Cities**		**Lesser Cities**	
	Mean	**S.D**	**Mean**	**S.D**
Frequent Hand Washing	2.03	0.71	0.77	0.29
Social Distancing	2.44	0.79	2.36	0.75
Wearing of Cloth Face Mask	2.05	0.73	2.00	0.70
Use of sanitizer	2.54	0.81	0.92	0.33
Avoid Social Gathering	2.44	0.79	2.36	0.75
Obey Lockdown Government Directive	2.44	0.79	2.36	0.75

Note: N=1,100.VTOM-Very True of Me=3, TOM-True of Me=2 and NTOM-Not True of Me=1Decision Value: High =1.1-3.0 Low= 0.1-1.0

Table 5 contained empirical analysis of thedegree of compliance level between cities and lesser cities residents towards COVID-19preventive measures in Osun State, Nigeria. The empirical outcomes revealed that the compliance levels of the residents in cities and lesser cities was highly encouraging in the area of enforcing social distancing, usage of cloth face mask, avoidance of social gathering and obeying the lockdown directive of the government. However, it is empirically discovered that the residents of cities had high level of compliance with frequent hand washing and use of sanitizer as components of COVID-19preventive measures than their counterparts residing in lesser cities.

Research Question III: To what extent does gender traits impact the level of compliance to the COVID-19preventive measures in Osun State, Nigeria?

Table 6: T-test showing the degree of compliance to the COVID-19preventive measures on the basis of gender qualities in Osun State, Nigeria.

Variable	Gender	Number	Mean	S.D	D.F	T-tab	T-cal	Remark
Covid-19Preventive Measures	Male	490	25.05	5.23	1,098	1.96	-0.26	Insig
	Female	610	25.25	5.24				

Table 6 contained the analysis of the respondents' view towards the level of compliance to the COVID-19preventive measures on the basis of gender qualities in Osun Sate, Nigeria.

The outcomes revealed that there was no significance difference in the level of compliance towards COVID-19preventive measures when gender of the respondents was taking into consideration. This is evidenced from the t-calculated value of-0.26 which was less than the t-tabulated value of 1.96 at 5% level of significance. This indicatedthat peoples' compliance with Covid-19preventive measures such as frequent hand washing, social distancing, wearing of cloth face mask, use of sanitizer, avoidance of social gathering and compliance with government lockdown order among the residents of cities and lesser cities was insignificant of their gender qualities.

Research Question IV: To what extent does educational statusinfluence the level of compliance to the COVID-19preventive measures in Osun State, Nigeria?

Table 7: T-test showing the degree of compliance to the COVID-19preventive measures on the basis of educational status in Osun State, Nigeria.

Variable	Educational Status	Number	Mean	S.D	D.F	T-tab	T-cal	Remark
Covid-19Preventive	≤O'level	364	23.03	5.23	548	1,098	4.64	Sig
	> O'level	736	25.23	5.24				

Measures								

≤ Implies number of respondents possessed less than or exactly equal to Secondary School Education. >represents those respondents having NCE, OND, HND, Degrees etc.

Table 7 contained the analysis of the influence educational status on the level of compliance to the COVID-19preventive measures in Osun Sate, Nigeria. The respondents were disaggregated into two strata comprised those having less than or exactly equal to secondary school education certificates while the other group encompassed those participants holding beyond secondary school certificates-Nigeria Certificate in Education, Ordinary National Diploma, Higher National Diploma, First Degree, Second Degree, to mention a few. The outcomes revealed that there wassignificant difference in the level of compliance towards COVID-19preventive measures when educational status of the respondents was taking into cognisance. This is evidenced from the t-calculated value of4.46 which wasgreater than the t-tabulated value of 1.96 at 5% level of significance. This indicatedthat peoples' compliance with Covid-19preventive measures such as frequent hand washing, social distancing, wearing of cloth face mask, use of sanitizer, avoidance of social gathering and compliance with government lockdown order among the residents of cities and lesser cities was a function of their educational status, such that, people with formal education beyond secondary school phase have slightly higher mean compare to their counterparts having less than or exactly equal to secondary school education background only.

Discussion of Findings

The empirical outcomes reveal that two-hundred and eighty two (282), two-hundred and ninety six (296) and five-hundred and twenty two (522) representing twenty-five point six per cent (25.6%), twenty-six point nine per cent (26.9%) and forty-seven point five per cent (47.5%) concur that constant and frequent washing of hands was very true of them, true of them and not true of them respectively. Hence, it is inferred that majority of them were not used to the practice of frequent hand washing as having five-hundred and twenty two participants. With respect to social distancing requirement, eight-hundred and six (806) of the entire respondents which is majority said that practice of social distancing requirement as one of the preventive measures to curtail the spread of COVID-19was very true and true of them. While, the remaining two-hundred and ninety four (294) agreed that the statement was not true of them. Besides, thirty-six percent (36%) and forty-four point two per cent (44.2%) of the total respondents were of the view that they are gradually getting adapted to the use of cloth face mask whenever they had reasons to check out during the pandemic, on the other hand, nineteen point eight per cent (19.8%) found the wearing of cloth face mask irritated themand preferred to stay indoors. Moreover, three-hundred and fifty (350) and four-hundred and thirty eight (438) of the sampled participants which amounted to thirty-one point eight (31.8%) and thirty-nine point eight per cents (39.8%) said that the use of hand sanitizer was very true and true and they seldom use hand sanitizer and didn't wait to exhaust the available one before getting another one, while, three-hundred and twelve (312) of the respondents which represented twenty-eight point four per cent (28.4%) of the participants opined that the use of hand sanitizer was not true of them as they cannot afford and that the odour of the said hand sanitizer usually irritate them.

On the part of avoidance of social gathering, the findings indicated that all the participants avoided social gathering by staying away from religious services for the main time. And finally, three-hundred and ninety six (396) and four-hundred and thirty two (432) agreed that it was very true and true of them and they did not go out during the period of lockdown within the state, while the remaining two-hundred and seventy two (272) participants said that it was not true of them.

With respect to thedegree of compliance between cities and lesser cities residents towards COVID-19preventive measures. The empirical outcomes revealed that the compliance levels of the residents in cities and lesser cities was highly encouraging in the area of enforcing social distancing, usage of cloth

face mask, avoidance of social gathering and obeying the lockdown directive of the government. However, it is empirically discovered that the residents of cities had high level of compliance with frequent hand washing and use of sanitizer as components of COVID-19preventive measures than their counterparts residing in lesser cities. Xueweiand Hongliang,(2020) corroborated this by acknowledging that lesser cities residents were less likely to perform preventive behaviours of COVID-19, as they are more likely to hold a negative attitude toward the effectiveness of performing preventive behaviours, and more likely to have lower levels of information appraisal skills than their counterparts living in cities.

The outcomes further indicated that there was no significance difference in the level of peoples' compliance towards COVID-19preventive measures when gender of the respondents was taking into consideration.This indicatedthat peoples' compliance with Covid-19preventive measures such as frequent hand washing, social distancing, wearing of cloth face mask, use of sanitizer, avoidance of social gathering and compliance with government lockdown order among the residents of cities and lesser cities was insignificant of their gender qualities. This could be attributed to the fact that men and women are likely to have similar susceptibilities and vulnerabilities to the infection of the COVID-19virus. This was in tandem with statement contained in the policy brief prepared by World bank (2020) which reiterated that there were no previous infectious disease which had posed a great similar challenge to everyone regardless of gender qualities, as this COVID-19virus required the large-scale confinement measures such as lockdown and school closures which affected residents of cities and lesser cities uniformly.

On the part of educational status influence on the level of compliance with to the COVID-19preventive measures in Osun Sate, Nigeria.Two main strata were created which entailed group with less than or exactly equal to secondary school education and those schooling beyond this point. The outcomes revealed that there wassignificant difference in the level of compliance towards COVID-19preventive measures when educational status of the respondents was taking into cognisance which was in favour of those having educational certificates above secondary school education. This is evidenced from the t-calculated value of4.46 which wasgreater than the t-tabulated value of 1.96 at 5% level of significance. This indicatedthat peoples' compliance with Covid-19preventive measures such as frequent hand washing, social distancing, wearing of cloth face mask, use of sanitizer, avoidance of social gathering and compliance with government lockdown order among the residents of cities and lesser cities was a function of their educational status, such that, people with formal education beyond secondary school phase have slightly higher mean compare to their counterparts having less than or exactly equal to secondary school education background only. This was in tandem with submission made by Omole and Suberu (2010) in which possession of the basic education was considered to be one of the effective tools towards patients' compliance level with anti-hypertensive medication in Nigeria. This implies that education is liable in increasing uptake of preventative care which may in turn result to long-run savings though with short-term increases in health care costs. As those with more education are also more likely to take advantage of health care provision and adhere strictly to some of the preventive measures aimed at avert the spread of COVID-19. A research outcome conducted in Indonesia by Breierova and Duflo (2004) corroborate this by arguingthat an increase in the average number of years of education among the household reduces child mortality by approximately 10 percentage points from a mean level of 22.5%. Similarly, one study finds that for individuals born in the United States between 1914 and 1939, an additional year of schooling reduces the probability of dying in the next 10 years by 3.6 percentage points (Lleras-Muney, 2005).

Conclusion

The study concludes that demographic feature of the residents most especially educational attainment is one the key factors responsible for their level of adherence to health oriented COVID-19s' preventive measures, while genders' contribution was not significant regardless of the residence of the respondents. Besides, both residents exhibited high degree of compliance with some of the recommended preventive measure, but city residents had favourable attitude and practise towards frequent hand washing under running water and use of hand sanitizer as compared with their lesser city counterparts.

Recommendations

Based on the finding emanate from this research work, the following recommendations are suggested for concerned stakeholders.

i. Lesser cities residents are advised to emulate their city dwellers'counterparts attitude and practise as regards observation of some of the preventive measures towards ameliorating the spread of virus within their communities.

ii. Community stakeholders either working individually or in conjunction with leaders in the public offices should as a matter of dutyprovide relevant devices for the residents of the lesser cities to enable themobserve those preventive measures at their respective community levels but not at expense of their counterparts residing in cities.

iii. As majority of the confirmed cases of COVID-19originated among people living within the cities, residents of the lesser city should desist from visiting their relative or business associate residing in cities during this challenging period, and if the need arises, they should abide by and observe all the preventive measures.

References

1. Xuewei,, C.and Hongliang, C. (2020) Differences in Preventive Behaviours of COVID-19between Urban and Rural Residents: Lessons Learned from a Cross-Sectional Study in China, *International Journal Environment Research and Public Health* 17(4437);1-14
2. Omole, M. K and Suberu, A. A. (2010) Effect of Educational Level on Hypertensive Patients' Compliance with Medication Regimen at a Tertiary Hospital in South West Nigeria, *Nigerian Journal of Pharmaceutical Research*, 8 (1):36 – 42.
3. Lleras-Muney, A. (2005), The Relationship between Education and Adult Mortality in the United States", *Review of Economic Studies*, Vol. 72,:189-221.
4. Breierova, L. and E. Duflo (2004), The Impact of Education on Fertility and ChildMortality: Do Father's Really Matter Less Than Mothers?, National Bureau ofEconomic Research (NBER).
5. Chen N , Zhou M, Dong X, et. al , (2020) Epidemological and clinical characteristics of 99 cases of 2019 novel corona virus pneumonia in wuham , china : a descriptive study loncel 2020;395 (10223) ;507-13.
6. ChuD. K.,and Akiea, Duda , et.al (2020) Physical dancing face mask , and eye protection to prevent person- to-person transmission of SARS-COV-2 and COVID 19 : a systemic review and meta- analysis , loncet 2020: 395 (10242):1973-1987
7. Liu, X., Zhang, D., Sun , L. I , X; Zhang , H.(2020) containing COVID 19 in rural and remote area : Experience from china . J. Travel Med 2020
8. World Health organisation (WHO, 2020). Director-General's opening remark at the media briefing on COVID 19-3march 2020- World Health Organisation, March 3, 2020.
9. Centre for Disease Control Prevention (2020).Recommendation regarding the use of cloth face coverings, especially in the area of significant community-based transmission, Retrieved April- 4-2020 .
10. Maclean R and Dahir A-L (2020) . Nigeria responds to first corona virus case in sub- sahara The new York times retrieved 10 March, 2020.
11. CDC- Centre for disease control and prevention strategies to prevent the spread of COVID -19 in long term care facilities (LTCF) .Atlanta: CDC; 2020.