Response to COVID-19 Outbreak: Knowledge, attitude, compliance and implications for rural and urban dwellers in Rivers State

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ABSTRACT

The study investigated the response of urban and rural dwellers to COVID-19 outbreak in Rivers State and the Implication. To achieve the purpose of the study three research questions were formulated to guide the study. The study adopted the comparative survey design. The sample involved 1982 participants drawn through a multi-stage sampling technique from rural, urban, riverine and upland communities. On the whole, twelve ethnic groups from the three senatorial districts of the state were studied. The instrument used for data collection was the knowledge, attitude and compliance issues towards COVID-19 questionnaire (KACITC-19Q). Its face and content validity were ascertained by medical and test experts while its reliability was determined through the internal consistency method with the Cronbach Alpha statistics which yielded an alpha of 0.68. The direct delivery method was used to administer the instrument in various communities. Data obtained was analysed with mean scores and bar charts. Results revealed a significant mean difference between rural and urban dwellers with regards to knowledge, attitude and compliance issues to COVID-19. It was recommended amongst others that, Government should collaborate with professional counselling bodies, non-governmental organizations (NGOs) and well-meaning individuals to intensify awareness in the rural areas to increase knowledge, positive attitude and compliance to COVID-19 prevention protocols.

Keywords: *Attitude, Compliance Issues, Counselling, COVID-19, Knowledge, Rural, Urban.*

INTRODUCTION

Background to the study

The Coronavirus disease popularly called COVID-19 pandemic took the world by storm and kept everyone in shock, putting the economic and educational activities of the entire world at a standstill. This disease is a great concern to every nation of the world. It is not a one man's problem or a problem of China (where the virus originated from) but a problem confronting developed countries, developing and under developed nations of the world making the entire world to fight a common battle, which seems to be overwhelming. Fear mounts each day by the release of the statistics of daily infected persons and death cases by Nigeria Centre for Disease Control (NCDC). COVID-19 has caused much panic and consternation in the lives of people. Their peace, joy and rest of mind have been stolen by this pandemic disease.

In their study Zhong et al (2020) noted that lessons learned from the Severe Acute Respiratory Syndrome (SARS) outbreak in 2003 suggest that knowledge, and attitude towards infectious diseases are associated with level of responsive panic among the population, which can further thwart attempts to prevent the spread of the disease.

The news about the current wave of the pandemic in the United Kingdom and other countries of the world calls for concern. The government of Rivers State made some concerted efforts to create awareness about the existence of the pandemic in various media houses, interpreted in various local languages through community heads. Various departments of government parastatals and private establishments were tasked to create awareness about the existence of the disease and the danger it poses in every community of the state.

Everybody in Rivers State has heard of COVID-19, but most people are still in doubt about its existence, mostly among the rural populace. A chat with some rural dwellers in the study revealed that they are ignorant of the rules of COVID-19 and are narrow-minded and

superstitious about the disease. To some rural dwellers, COVID-19 is a hoax, for this group, it is a disease for the rich and affluent in the society, if at all it exists, for others, it is a disease of the whites, yet others believe it never existed.

The view of the urban dwellers is quite different to an extent, the urban dwellers are very much aware of the existence of the disease and its danger on lives, unlike the rural dwellers who carry on with their lives in a normal way. Life at the urban centres took a new dimension, the disease ushered in new ways of living, everyone is trying to adjust and learn the new style of living as demanded by the COVID-19 protocols, defiling the normal living pattern, but is the story the same everywhere? The results of the study will give us an appropriate answer to this question.

WHO (2020) press briefing on COVID-19 revealed that the disease is real but not a death sentence. The current news about this virus suggest that 80% of infections are mild or asymptomatic,15% are severe infection requiring oxygen and 5% are critical infections requiring ventilators (WHO, 2020). Although for most people COVID-19 causes only mild illness, it can make some people very ill. More rarely, the disease can be fatal. Older people, and those with pre-existing medical conditions (such as high blood pressure, heart problems or diabetes etc), appear to be more vulnerable. Generally, people with COVID-19 develop signs and symptoms such as; mild respiratory symptoms and fever, on an average of 5-6 days after infection, mean incubation period 5-6 days and ranging from 1 -14 days (WHO China Joint Mission on Coronavirus Disease, 2020). The incubation period is the time between exposure to the virus and symptom onset. This period is also known as 'pre-symptomatic'. At this period, some infected persons can be contagious. This means transmission from a pre-symptomatic case can occur before symptom onset. Reports indicated that many people globally have built up immunity to seasonal flu strains. On the contrary, COVID-19 is a new virus to which no one is immune to, this means more people are susceptible to infection, and some will suffer

severe disease (**Source:** WHO Director-General's opening remarks at the media briefing on COVID-19, 3 March 2020).

The index case of the disease was recorded in Rivers State on the 16th of March 2020. To prevent its spread, the State government took a proactive step to curtail the disease by launching awareness campaign to increase knowledge, encourage positive attitude towards the disease and enforcing compliance to COVID-19 protocols, (Daily Post, 2020).

The disease is not a death sentence, thousands of people have recovered from it in Nigeria and around the globe judging from the daily statistics released by NCDC in several media houses on the pandemic. A study conducted by Ogolodom et al (2020) among health workers in south-south Nigeria revealed that, the health care workers in the study are well conscious of the disease, but dread of infection and lack of insurance are factors militating against effective dispensation of statutory responsibilities and improvement, workplace safety will boost health workers willingness to effectively carry out duties in the face of COVID-19 pandemic says the researchers.

Everyone has a vital part to play in curtailing the spread of the disease, because people of all ages, irrespective of location, colour, language or creed can be infected by the pandemic, especially, with the current wave of the pandemic ravaging countries across the globe. It is against this backdrop, that this study spurred to answer some questions such as, what Is the knowledge, attitude and compliance level of Rural and urban dwellers in Rivers State of Nigeria towards this pandemic? And see if the study could provide adequate answers to the questions and many other minds bugging questions that are of interest to the researchers towards this study.

Statement of the problem

The battle against COVID-19 is still on going and there is an outcry of countries around the world about a new/second wave of the pandemic. To facilitate effective outbreak control/ management of COVID-19 in Rivers State, there is a need to have a proper understanding of the public's knowledge, attitude and strict compliance to control measures. These are essential at this critical moment when a new wave of the disease is threatening. The control of the epidemic, prevention and care of patients with COVID-19 are still a dominant task for the entire world. The question now is, what is the knowledge of the existence of coronavirus among rural and urban dwellers in Rivers state? What is their attitude towards the disease? What is their compliance level towards the measures put in place by Government to curtail the spread of the disease? These questions begging for answers, spurred the interest of the researchers to investigate the topic 'Responses to COVID-19 outbreak: knowledge, attitude, compliance issues among rural and urban dwellers in Rivers State and Counselling Implication' this is the problem of the study.

Purpose of the study

The purpose of the study is to investigate the responses to COVID-19 outbreak: Knowledge, attitude and compliance issues among rural and urban dwellers in Rivers State. The objectives of the study include to;

(1) Determine the mean difference in responses to knowledge of COVID-19 among rural and urban dwellers in Rivers State.

(2) Find out the mean difference in responses to COVID-19 with regard to attitude among rural and urban dwellers.

(3) Investigate the mean difference in responses to compliance issues to COVID-19 among rural and urban dwellers.

Theoretical Framework

Reality Therapy

This study is anchored on reality therapy, an approach to counselling propounded by William Glasser in the 60s according to Uwe, (2016). The use of counselling to enhance knowledge, attitude and compliance issues cannot be overemphasised. In her work Nwamuo (2016) stresses that reality therapy maintains that the individual is suffering from a socially common human condition rather than a mental illness. It is in the ineffective attainment of basic needs that a person's behaviour moves away from the norm. Since satisfying essential needs is part of a person's present life, reality therapy does not concern itself with a client's past neither does it concern itself with unconscious mental processes? The focus of reality therapy is directed towards individual's current behaviour. The therapy assumes that the first step in changing behaviour is to find out what behaviour we are trying to correct. In his book Uzoeshi (2013) emphasised that reality therapy focuses its approach to counselling on the here-and-now actions of the client and the ability to create and choose a better future.

Human beings have four psychological needs for survival. The most important need being to love and be loved by another person or group for a feeling of belonging. Other needs are: the need for power through learning, achieving, feeling worthwhile, and winning through being competent; the need for freedom including independence and autonomy, while simultaneously exercising personal responsibility; and the need for fun, pleasure seeking, enjoyment and relaxation which are very important for good psychological health (Nwamuo 2016, p. 7-8). One of the core principles of reality therapy is that, whether people are aware or not, they are always trying to meet essential human needs.

Counsellor's role

In his book Akinade, (2016) stresses that the counsellor as a teacher and a model to the client, creates an atmosphere of acceptance and warmth, helping the client focus on the control of displayed thoughts and actions. The reality counsellor uses 'ing' verb to help client describe their thoughts and actions. The goal is how to change the behaviour in focus in a positive manner. Reality therapy does not generally use formal assessment techniques or diagnostic categories.

Uwe (2016) in her book stated that one of the goals of reality therapy is to help the client to become psychologically strong and rational. A strong and rational person is one that is independent and behaves responsibly towards self and others. This therapy can be conveniently applied to help individuals have good knowledge of COVID-19, safe attitude and compliance to the demands of the pandemic.

Empirical Review

There is paucity of empirical evidence on corona virus pandemic in Rivers State in relation to knowledge, attitude and compliance issues. However, a rigorous search revealed the following studies;

Zhong, et al (2020) in their study of knowledge, attitudes and practices towards COVID-19 among Chinese residents during the rapid rise period of COVID-19 outbreak in a cross-sectional survey involving 6919 participants, a final sample of 6910 with an average age of 33.0 and a standard deviation of 10.7 in Hubei City from January 27 to February 1. A self-constructed questionnaire with 12 items titled 'Questionnaire of knowledge, attitudes and practice towards COVID-19' was the outcome measure. The study revealed that 90% of participants had correct knowledge of COVID-19, scores on knowledge of the virus

significantly varied transversely on gender, age-groups, marital status, and place of current residence.

The attitude towards the final success in controlling COVID-19 significantly differed across genders, education levels, occupation groupings and residence places, educational level, occupational employment and students' vs mental labour were significantly associated with lower knowledge score. On compliance issues vast majority of participants (96.4%) had not visited any crowded place and wore mask when going out (98.0%) in recent days. A small proportion of (3.6) had not worn mask when leaving home (2.0%) recently. The rates of these two practices significantly differed across demographic groups.

An analytical cross-sectional survey conducted in Kano by Habib, et al (2021) on knowledge, attitude and practice on COVID-19 pandemic with 886 participants chosen from urban, peri-urban dwellers and online participants with a mean age of 28.58, most of which were students and civil servants. Results indicated that the overall mean for knowledge, attitude and practice scores expressed in percentage was 65.38%, 71.45% and 65.04% respectively. Out of the respondents 270 representing (30.47%) had good knowledge, 158 representing (17.8%) had good attitude and 230 representing (25.96%) had good practice using cut-off score of 75%, 86.5% and 75% respectively. The overall result shows that participants had a good knowledge, attitude and practice of COVID-19.

Taiwo et all (2020) in a cross-sectional, web-based survey conducted to assess knowledge, attitude and practice of COVID-19 among the general population of Nigeria above 15 years of age involving 4461 participants, 53.7% were female and majority 71.1% of participants had attended tertiary institution. The result revealed that Nigerian population demonstrated good knowledge, positive attitudes and considerable practice towards COVID-19 pandemic. The

correlation analysis result showed a significant correlation between gender, age and educational level with knowledge, attitude and practice.

Oghenekaro et all (2020) in a cross-sectional study conducted among staff of the Niger Delta University Teaching Hospital in Bayelsa State, Nigeria among 124 participants with a mean age of 30.9 + 6.5 on knowledge, attitude and practice towards COVID-19. Results indicated that approximately 90% of them practiced good hand hygiene though a lesser proportion wore face masks (51.6) and crowd avoidance (58.1). Medical doctors had a marginal higher practice score compared with others. About 98 representing (79.0%) of respondents were scared of self-infection and 99 (79.8) were not motivated to work due to inadequate facilities. Knowledge of COVID-19 was positively correlated with the practices of the participants.

Okoro et all (2020) conducted a pre-test and post-test assessment of COVID19 knowledge among correctional officers in Enugu State command to determine the impact of awareness training on their knowledge level and attitude and preventive practices towards the disease. The results indicated the awareness training significantly improved the participants COVID-19 knowledge. Again, a significantly moderate, positive correlation between knowledge, and attitude/practice, and a significantly higher knowledge level among those with higher education qualifications.

Waheed et all (2020) conducted a study to assess the knowledge, perception, and attitude among 407 Egyptian health care workers (HCWs) towards COVID-19 in a descriptive cross-sectional study using a self-administered questionnaire. The result revealed that the overall knowledge level of HCWs was generally good especially among physicians. A positive attitude was detected among allied health professionals more than physicians. Risk perception was high among HCWs.

In a related development Reuben et al (2020) in their study of knowledge, attitude, and practices towards COVID-19 in North-Central Nigeria used a snowball sampling technique to draw a sample size of 589 for the study. Semi-structured questionnaire was used and data was analysed using descriptive statistics, ANOVA and Pearson correlation and regression analysis. Results showed that about 99.5% of the respondents had good knowledge of COVID-19, gained mainly through the internet/social media 55.7% and Television 27.5%. About 79.7% had positive attitude towards the adherence of government IPC measures with 92.7, 96.4 and 82.3% practicing social distancing and isolation, improved personal hygiene and using face mask respectively. However, 52.1% of the respondents perceived that the government is not doing enough to curtail COVID-19 in Nigeria. Pearson correlation showed significant relationship between knowledge of COVID-19 and attitude towards preventive measures (r= 0.177, p=0.004, r= 0.137, p=0.001). Although 51% of respondents have no confidence in the present intervention by Chinese doctors, only 29.0% would accept COVID-19 vaccines when available.

The study of Lau et al (2020) on knowledge, attitudes and practices of COVID-19 among income-poor households used a sample size of 2224 from 166 communities in rural and urban and coastal settings in the Philippines. The study revealed that, 94% of respondents already heard of COVID-19, though it was conducted during the early stages of the disease. Traditional media sources, such as television (85%) and radio (56%) were reported as the main sources of information about the virus. Coughing and sneezing were identified as a transmission route by 89.5% of respondents, while indirect hand contact was the least commonly identified transmission route, recognized by 72.6% of respondents, 82.2% recognized Hand washing as a preventive measure against the virus, 32.4%, 40.6% identified social distancing and avoiding crowds respectively. Hand washing was the most common preventive practice in response to

COVID-19 adopted by 89.9% of respondents. Those with greater knowledge of the disease took more preventive measures to curtail the spread of the disease.

The study of Mohammed et al (2020) on knowledge, attitude and practice toward COVID-19 in Saudi Arabia used a sample size of 3,388 in the study. Data was analysed using univariate and multivariate regression analyses. Results revealed that majority of the study participants were knowledgeable about COVID-19. The mean score for knowledge of COVID-19 was 17.96% indicating a high level of knowledge. The mean score for attitude was 28.23 indicating optimistic attitude. The mean score for practices was 4.34 indicating good practices. The overall results indicated that men have less knowledge, less optimistic attitudes, and less good practices towards COVID-19 than women and older adults were found to have better knowledge and practices than younger people.

Research questions

The following research questions guided the study;

(1)What is the extent to which rural and urban dwellers in Rivers State differ in their response to knowledge of COVID-19?

(2)What is the difference in response of rural and urban dwellers with regard to attitude towards COVID-19?

(3)What is the extent to which rural and urban dwellers in Rivers State differ in response to COVID-19 compliance issues.

Method

The study was a comparative survey research design conducted among rural and urban dwellers in Rivers State of Nigeria from 1st September, to 20th September 2020 after the easing of the lockdown. Participants were drawn from the three senatorial zones of the state, through a multi-stage sampling technique, four ethnic groups were randomly selected from each of the three

senatorial zones. On the whole, twelve ethnic groups involving six rural and six urban communities were involved in the study.

The outcome measure (instrument) was a self-constructed 15 items questionnaire, titled "Knowledge, Attitude and compliance issues towards COVID-19 Questionnaire' (KACITC-19Q). The instrument was a four-point scale structured in a Likert format ranging from 1- 4. Strongly agree=4, Agree=3, Disagree=2 and Strongly Disagree-1. A criterion mean of 2.5 was set to determine positive and negative knowledge, attitude and compliance issues pertaining to COVID-19. This was derived by adding the responses on the scale and dividing it with the number of responses, that is, 4+3+2+1=10/4=2.5. A mean response of 2.5 is rejected and regarded as negative response towards COVID-19. While a mean response above 2.5 is a positive response towards COVID-19. The negatively worded items were scored in the reverse order.

The face and content validity of the instrument was done by medical and test experts to ensure its suitability for the study, while its reliability was carried out through the internal consistency method. The questionnaire was administered to 30 persons within the study population once, and data was analysed using the Cronbach alpha statistics and it yielded an alpha value of 0.68 which was adjudged strong enough for use. A total of 2,100 copies of the questionnaire were distributed by the researchers through the direct delivery method (DDM) in the study areas, and 1,982 were correctly completed and retrieved. Data was analysed using the criterion mean of 2.5 to answer the research questions and pictorial representation of the responses.

Results

Research Question 1: What is the extent to which rural and urban dwellers in Rivers State differ in their response to knowledge of COVID-19?

Table 1: Mean responses of rural and urban dwellers on knowledge towards COVID-19

S/No	ITEMS	RURAL URBAN	SA=4	A=3	D=2	SD=1	MEAN	SD	DECISION
1	I have knowledge about the existence of COVID-19	Rural=980	832	108	22	18	3.8	1.4	Positive
		No. of persons x response	3328	324	44	18			
		Urban=1002	950	52	0	0	3.9	1.5	Positive
		No. of persons x response	3800	156	0	0			
2	COVID-19 symptoms includes, fever, runny nose, sneezing, dry cough, fatigue etc	Rural=980	450	305	129	96	3.1	1.2	Positive
		No. of persons x response	1800	915	258	96			
		Urban=1002	984	12	6	0		2.1	Positive
		No. of persons x response	3936	36	12	0			
3	COVID-19 have no cure but early detection can help patients recover	Rural=980	411	227	301	41	3	1.3	Positive
		No. of persons x response	1644	681	602	41			
		Urban=1002	920	52	30	0			
		No. of persons x response	3680	156	60	0	3.9	1.5	Positive
4	The disease cannot be transmitted by an infected person to another without symptoms	Rural=980	720	142	111	7	1.4	0.9	Negative
		No. of persons x response	2880	426	222	7			
		Urban=1002	15	38	188	761	3.7	1.8	Positive
		No. of persons x response	60	114	376	761			
5	Droplets from infected person to another can spread the disease	Rural=980	260	288	320	112	2.7	1.1	Positive
		No. of persons x response	1040	864	640	112			
		Urban=1002	802	175	17	8	3.8	1.9	Positive
		No. of persons x responses	3208	525	34	8			
	Total	1982					3.4	1.5	Positive

Note: Negatively worded items were scored in the reverse order. Rural mean response =2.8, SD= 1.2, Urban mean response=3.9, SD =1.8.

Table 1 above shows a positive knowledge of COVID-19 by rural and urban dwellers. Rural dwellers had a mean score of 2.8, while the urban dwellers had 3.9. The overall mean for both groups shows, a grand mean response of 3.4 and a standard deviation of 1.5. The grand mean response is much higher than the criterion mean of 2.5. This simply means that both rural and urban dwellers have good knowledge of covid-19. However, they differed in response on item 4, where rural dwellers had a mean score of 1.4 below the criterion mean, while the urban dwellers scored 3.7 above the criterion mean. The rural dwellers believed that COVID-19 can't spread from person to person without symptoms, this is not true because some cases are asymptomatic. Absence of symptoms does not guarantee absence of infection in a carrier, and this can pose so much danger to individuals who get in contact with such person(s). The answer to research question 1 therefore is: Rural and Urban dwellers have a good knowledge of COVID-19 to a large extent.

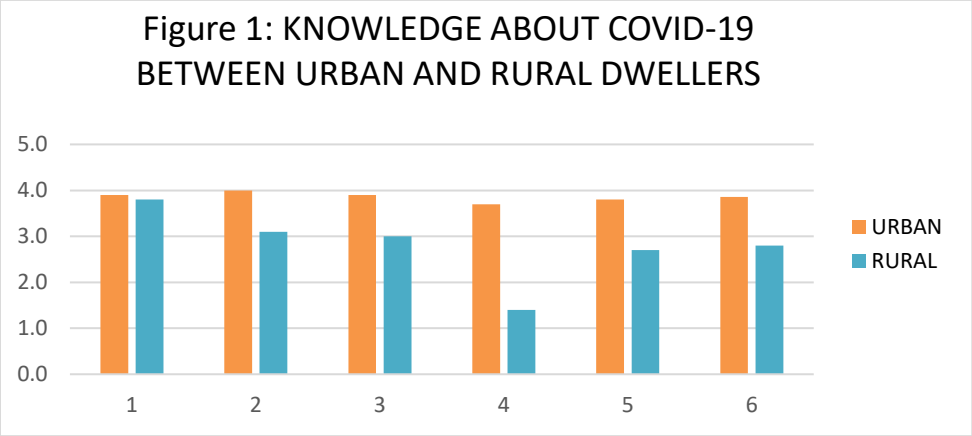

Figure1 is an excellent tool for visualizing knowledge of COVID-19. The blue bar represents rural dwellers while the orange represents the urban dwellers. The bars depicts the difference in knowledge of the disease between rural and urban dwellers.

Research Question 2: What is the difference in response of rural and urban dwellers with regard to attitude towards COVID-19?

Table 2. Mean responses of rural and urban dwellers on attitude towards Covid-19.

S/No		Rural	SA=4	A=3	D=2	SD=1	Mean	SD	Decision
		Urban							
1	I will consult a medical doctor if I have any of the symptoms of COVID-19	Rural=980	108	115	360	397	1.9	0.98	Negative
		No. of persons x response	432	345	720	397			
		Urban=1002	402	367	189	44		1.24	
		No. of persons x response	1608	1101	378	44	3.2		Positive
2	I will use local remedies like ginger, garlic and local herbs to treat symptoms of COVID-19	Rural=980	422	242	205	111	2.0	0.62	Negative
			1688	726	410	111			
		Urban=1002	95	100	402	405			
		No. of persons x response	380	300	804	405	3.1	1.2	Positive
3	I shake hands with people often.	Rural=980	330	271	280	99	2.1	0.72	Negative
		No. of persons x response	1320	813	560	99			
		Urban=1002	22	78	460	442	3.3	1.32	positive
		No. of persons x response	88	234	920	442			
4	I believe COVID-19 can infect me if I don't obey protocols	Rural=980	140	192	305	343	2.1	0.72	Negative
		No. of persons x response	560	576	610	343			
		Urban=1002	541	308	121	32	3.4	1.8	Positive
		No. of persons x response	2164	924	242	32			
5	I always bath and change clothing after each outing.	Rural=980	91	82	451	356	1.9	0.68	Negative
		No. of persons x response	364	246	902	356			
		Urban=1002	315	102	465	120	2.6	1.2	
		No. of persons x response	1260	306	930	120	S		Positive
	Total	1982					2.6	1.1	Positive

Mean response of Rural dwellers= 2.0, SD= 0.7 while that of Urban dwellers =3.1. SD= 1.4

Table 2 indicates that all the mean responses of the rural dwellers on the items were below the criterion mean of 2.5. The overall mean response of rural dwellers was 2.0 with a standard deviation of 0.7. This simply means that, their attitude towards COVID-19 is negative. On the contrary their urban counterparts scored above the criterion mean on all the items. Their overall mean shows 3.1 with a standard deviation of 1.4. This simply means rural dwellers have a positive attitude towards COVID-19. However, the grand mean of both groups shows a slight increase above the criterion mean. This is not withstanding, the answer to research question 2 therefore is: The Urban dwellers have a good attitude towards COVID-19 more than their rural counterparts.

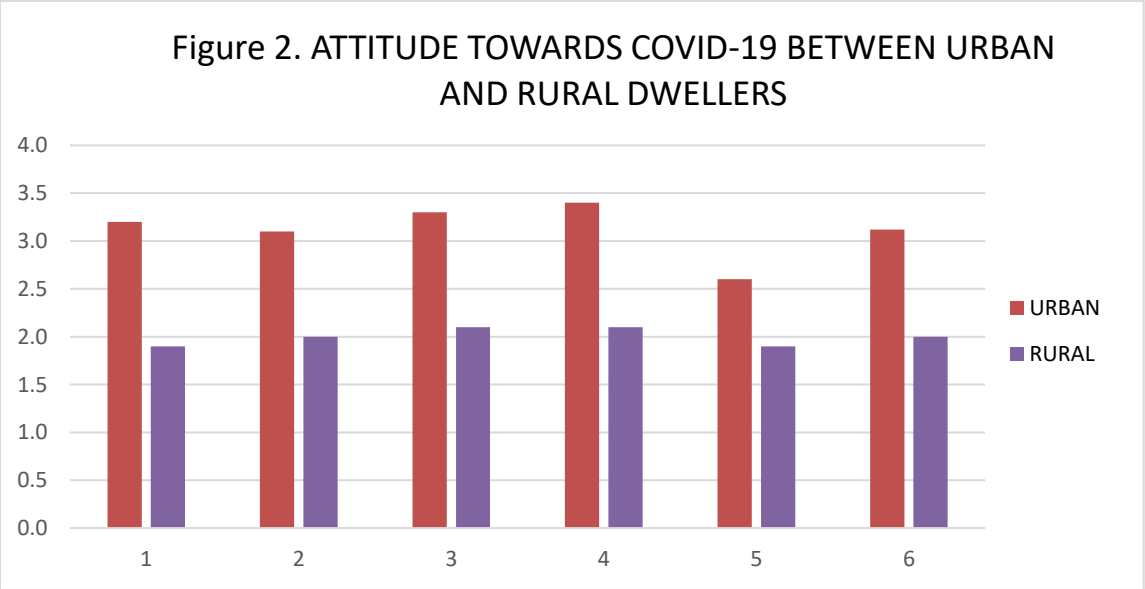

Figure 2 explains the data on table 2 pictorially depicting the differences in attitude towards COVID-19 between rural and urban dwellers.

Research Question 3: What is the extent to which rural and urban dwellers in Rivers State differ in response to COVID-19 compliance issues?

Table 3: Mean responses of rural and urban dwellers on compliance issues towards COVID-19

s/n	Items	Rural	SA=4	A=3	D=2	SD=1	Mean	SD	Decision
		Urban							
1	I wear face mask wherever I go	Rural=980	50	52	515	363	1.8	0.81	Negative
		No. of persons x response	200	156	1030	363			
		Urban=1002	301	387	311	3	3.0		Positive
		No. of persons x response	1204	-1161	622	3		1.2	
2	I observe protocols like washing and sanitizing of hands	Rural=980	110	87	372	411	1.9	0.95	Negative
		No. of persons x response	440	261	744	411			
		Urban=1002	225	369	364	44	2.8	1.1	Positive
		No. of persons x response	900	1107	728	44			
3	I don't attend social functions just to avoid crowded places	Rural=980	78	64	398	440	1.8	0.87	Negative
		No. of persons x response	312	192	796	440			
		Urban=1002	313	398	254	37	3.0	1.2	Positive
		No. of persons x response	1252	1194	508	37			
4	I do my contacts on phone and social media, no more visits	Rural=980	22	48	325	585	1.5	0.45	Negative
		No. of persons x response	88	144	650	585			
		Urban=1002	267	309	354	72	2.8	1.1	Positive
		No. of persons x response	1068	927	708	72			
5	Isolation and treatment of infected persons is an effective way of managing the spread of the disease.	Rural=980	118	138	356	368	2.0	0.98	Negative
		No. of persons x response	472	414	712	368			
		Urban=1002	256	348	327	71	2.8	1.1	Positive
			1024	1044	654	71			
	Total	1982					2.5	1.1s	Negative

Mean response of rural dwellers =2.0, SD =0.8 while urban dwellers had a of mean =2,9, SD =1.1

Table 3 shows that on compliance issue, the rural dwellers scored below the criterion mean of 2.5 on all the items with an overall mean of 2.0 which means the rural dwellers have a negative attitude towards complying with COVID-19 protocols. On the contrary, their urban counterparts had a mean response of 2.9 which is above the criterion mean of 2.5 and SD of 1.1. However, the grand mean of 2.5 for both groups shows negative attitude to compliance issues by both groups. This result notwithstanding, the answer to research question 3 is: the urban dwellers response to compliance issues is better than that of the rural dwellers to a large extent.

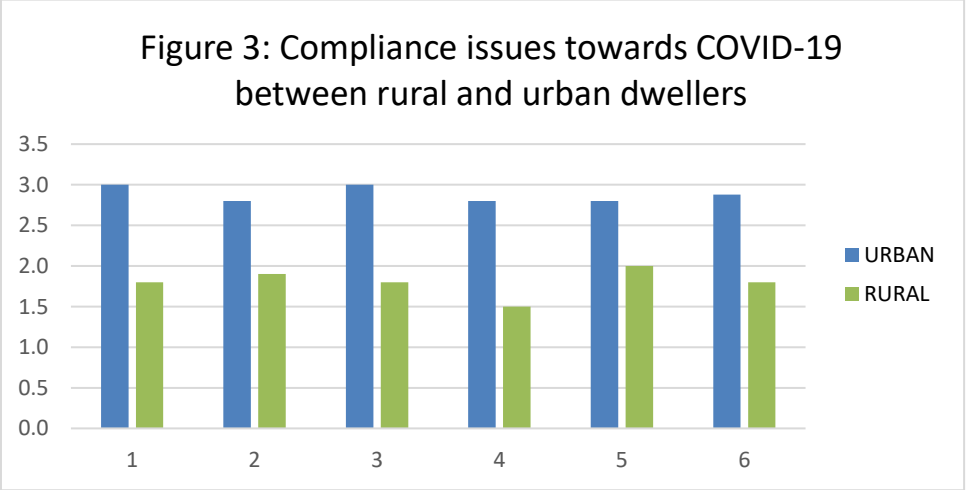

Figure 3 represents the data on table 3 pictorially, it's an excellent tool for visualising level of compliance between rural and urban dwellers. Blue colour represents urban dwellers while green represents rural dwellers. The bars depicts the difference in compliance issues of the virus between rural and urban dwellers.

Discussion on findings

The first finding which answered research question one on table 1 and pictorially presented on figure 1 revealed that both rural and urban dwellers had a good knowledge of COVID-19 with a grand mean of 3.4 which was above the criterion mean of 2.5, Although, the urban dwellers have a higher man score of 3.9 above that of the rural dwellers which was 2.8. This result is not surprising but expected because government and well-meaning individuals did an intensive awareness campaign on electronic media, social media and at the community levels through town criers during the scourge of the disease. This result is in harmony with the findings of Zhong et al (2020), Mohammed et al (2020), Reuben et Saudi Arabia, North central Nigeria and the Philistines. The finding of this study also agrees with that of Habib et al (2021) who in their study of knowledge, attitude and practice towards COVID-19 pandemic in Northern Nigeria discovered that participants had a good knowledge of COVD-19 among participants. In the same vein, the study also corroborates that of Taiwo et al (2020), Oghenekaro et al (2020), Okoro et al (2020) and Waheed et al (2020) who revealed demonstration of good knowledge of COVID-19 among participants in their respective studies in Nigeria, Bayelsa State in Nigeria, Enugu State and Egypt. No conflicting study was found on knowledge of COVID-19. This could be as a result of the intensive campaign done on the disease during its surge around the globe.

The second finding which answers research question 2 on table 2 and shown on figure 2 shows that rural dwellers have poor attitude towards COVID-19 as all their mean scores on all the items were below the criterion mean of 2.5. While that of their urban counterparts were above the set criterion mean. Although, the grand mean for rural and urban dwellers was 2.6 slightly above the criterion mean, this, notwithstanding when the individual mean of 2.0 earned by the rural dwellers is compared to that of their urban counterparts who earned 3.2, it can be concluded that attitude of rural dwellers to COVID-19 is negative and very poor. This result is

also not surprising because one with more knowledge of a thing is likely to develop more positive attitude to that thing. In agreement with this assertion, the findings of Lau et al (2020) revealed that a greater number of preventive measures were taken by those with more knowledge of potential transmission routes. This study had unveiled in the first finding that the urban dwellers had more knowledge of COVID-19 than their rural counterparts. The conclusion is that the urban dwellers had a better attitude towards COVID-19 than their rural counterparts. This result however, is at variance with the findings of Habib et al (2021), Taiwo et al (2020), Okoro et al (2020) and Waheed et al (2020) all found positive attitude towards COVID-19 among participants in their various studies. This variance could be as a result of the location of participants and the time of the study. This notwithstanding a positive attitude was found among urban dwellers.

The third finding which answered research question 3 on table 3 and depicted pictorially on a bar chart on figure 3 revealed that rural dwellers have negative attitude towards compliance issues, as all their mean scores on all the items were below the criterion mean of 2.5. On the contrary, their urban counterparts scored above the criterion mean on all the items indicating positive compliance to COVID-19 protocols. The overall grand mean score for both urban and rural dwellers was 2.5 this also indicates negative compliance. This notwithstanding, when their respective means of 2.0 for rural and 2.9 for urban were compared, the mean scores were found to be statistically different significantly. This result was also not surprising but expected because enforcement of compliance to COVID-19 protocols was more in the urban areas than in the rural areas and again with the easing of lockdown, most people think the storm is over especially at the rural areas. The finding of Reuben et al (2020), negates the finding of this study, they found that majority of respondents had positive attitude towards the adherence to government's IPC measures. This difference could be as a result of the time difference in the conduct of the study. The former was conducted during the height of the pandemic, amidst the

lockdown. While the latter was conducted during the ease off of the lockdown, when there seem to be a nose-diving effect in the State. However, Pearson correlation showed significant relationship between knowledge of COVID-19 and attitude towards preventive measures (Reuben et al, 2020). This finding agrees with the findings of this study which found good compliance measures to COVID-19 by urban dwellers who had a better knowledge of the disease than their rural counterparts. This study also agrees with that of Okoro et al (2020) who revealed that practice of COVID-19 protocols improved due to awareness training, the study revealed in the first finding that the urban dwellers had more knowledge due to intensive awareness campaign and awareness brings about compliance to issues this was revealed in the compliance level of the urban dwellers.

Counselling Implication

No doubt, knowledge, attitude and compliance issues of COVID-19 has great implication to the practice of counselling. Counselling is needed to educate the public to acquire good knowledge and attitude to COVID-19, in order to enforce voluntary compliance to the protocols of the disease, without coercion. Counselling offers guidance for adaptation to individuals and groups, who are dealing with issues that affect their mental health and wellbeing. The Psychological effects generated by COVID-19 is difficult for everybody. The lockdown induced by COVID-19 has created urgent need for psychological help for some people, while reducing the possibility for physical sessions. Internet and online counselling services have filled the gap of social distancing all around the world. There could be workable strategies for its effective implementation in Nigeria, because this may not be possible for those who don't have the needed gadgets and internet connections due to poverty or epileptic power supply and internet cost. Since internet and online counselling have come to stay, counsellors in Nigeria should learn and adapt to this new wave in counselling to reach out to their audience. Though the Counselling industry in Nigeria have not occupied its rightful place in the scheme

of things. Many persons circumvent the role of counsellors in the Nigerian Society. Professional counselling is still struggling to gain grounds. Recently, in 2018 the Nigerian Government through the Federal Ministry of Education launched a national policy on Guidance and Counselling and Implementation guidelines. If this policy is well implemented, professional counselling will get to the grass root and serve those it is meant to serve. The implication of this to counselling is that, Counsellors should adequately equip themselves for the challenges of internet and online counselling programmes, in order to move along with the current wave in the scheme of things. A sound theoretical grounding for effective, competent and ethical psychotherapeutic practice for maximum results, should be acquired by counsellors in order to reap the dividends of counselling.

As a matter of urgency, the Nigerian Government should establish counselling centres at every local government area of the country. Public places like markets, motor parks etc should have counselling centres to carter for the counselling needs of the people caused by the COVID-19 pandemic. Provisions for maintaining social distancing, should be put in place, while observing every COVID-19 protocols. This will reduce the rate of frustration, depression and anxiety disorder suffered among the people, since majority of the people live in poverty and cannot afford access to internet counselling.

Limitation of the study

The major limitation of this study was the paucity of related literature, on empirical studies carried out in Rivers State to compare the findings of this study, no study was found yet in Rivers State on Knowledge, attitude and compliance issues. The few studies found on this subject were foreign only that of Reuben et al (2020) was carried out at North- central Nigeria. Again, the sample used for the study was not large enough to generalize, judging from the

population of Rivers State. However, these limitations not-withstanding, the study met its objectives.

Recommendation

From the findings of the study it was recommended that;

(1)Professional Associations like, Association of Professional Counsellors in Nigeria (APROCON) and the Counselling Association of Nigeria (CASSON) should take up the challenge by offering counselling services on social and electronic media as community development programmes, to enlighten the public on the right attitude to acquire about COVID-19, this will strengthen government's efforts.

(2)Government should collaborate with NGOS, community heads and counselling organizations to launch enlightenment campaigns at the rural areas to educate the rural populace on the right attitude and the need to comply with COVID-19 protocols.

(3)With the easing of lockdown, people are beginning to live a care free life, ignoring COVID-19 protocols in spite the worries about the new/second wave of the disease. Enforcement team should be constituted not only at the urban centres but in every community of the state.

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