CogNexus *Volume: 1 Issue:1 1/2025/pp.112-125*

A Multidisciplinary, Multilingual, International, Peer-Reviewed, Open Access Journal

Coronavirus pandemic: Resolving knowledge gap among working-class households in Abuja, Nigeria

[1]Damilola Micah
damilolamicah@yahoo.com

[1]Adekunle Ajasin University, Akungba-Akoko

ABSTRACT

The coronavirus pandemic affected working-class households globally. However, individuals differ in how they perceive the severity of the disease. The study was conducted among 250 households randomly selected from 1000 households in Abuja Municipal to examine demographic differences in knowledge and experience of COVID-19. This was motivated to bridge the gap in adherence to mitigate pandemic infections. Knowledge measured network and sources of information dissemination on COVID-19. Experience measured risk of contraction of COVID-19. Data were generated and analyzed quantitatively using a structured questionnaire, computer entry, and inferential statistics. Households were sampled using cluster and systematic techniques; two respondents per household were selected using accidental sampling by consent and anonymity. The sample size was 500 and statistically determined. Demographic characteristics consisted of male (55.5%) and female (44.5%), married (65.7%), and single (34.3%), and 35.8% of households lived on a monthly income of N100,000 or $263.5 equivalent. Knowledge of COVID-19 was determined by occupation (r0.8, p<.01), education (r-0.3, p>.20), income (r0.6, p>.30), and marital status (r0.8, p>.40). Covid-19 information was scanty among low income and non-professionals working class. Risk of contagion was predicted by the variance of income (R1.344, p>0.04), education (R1.472, p>0.02), gender (R1.34, p>0.03), and occupation (R1.56, p>.004). Working-class households on a band of moderate income, with education above college graduates and engaged in professional occupations, had a low risk of COVID-19. Dissemination and channels of information on COVID-19 safeguarded working-class households from high risks, although low-income households in Abuja were at high risk. Intervention in pandemic outbreaks should be holistic and pro-poor to protect public workers.

Key Words: COVID-19, working-class households, public workers, urban residents, disease information

INTRODUCTION

Orientation

Countries around the world witnessed an upsurge of coronavirus in magnitude of anxiety, panic, and head-long global effort to contain it. The virus was first discovered in animals especially bats and transmitted to humans (World Health Organisation [WHO], 2020). According to WHO, the first human transmission was found in Wuhan province, China which thereafter spread like a tsunami to other parts of the world. Coronavirus is an example of a severe acute respiratory syndrome (SARS) virus strain known as SARS-CoV which was discovered between 2002 and 2003 (Federal Ministry of Health [FMoH], 2020). This period was when the virus was transmitted from animal to animal. The novel coronavirus is called SARS-CoV-2 found in 2019 (WHO, 2020) also known as COVID-19. This was the time a new variant was discovered in human transmission other than animal-to-animal. The entanglement of the disease in the global arena has surrendered human science to a continuous and endless search for predictable solutions. This is grounded on the collective agreement that the new variant of coronavirus is deadly, spreads faster, imposes severe respiratory disorders, and has claimed millions of lives in the world. Globally, as of May 2021, 166,860,081

confirmed cases were reported; 3,459,996 deaths; and 1,489,727128 vaccine doses were administered (WHO, 2021), although the peak of the infection declined in post 2021 period. This figure combines global countries. Africa has its share of cases both infected victims, discharged, and death cases. Reliable statistics as of May 2021 put it at 4,759,772 infected cases; 128,463 deaths; and 4,302,326 discharged cases (Africa Centre for Disease Control [ACDC], 2021). This figure cuts across Nations of the African continent. The second wave of the virus was indeed a serious concern for African leaders and a concerted approach to tackle it.

Nigeria had its fair share of the virus. As of 2021, the Nigeria Centre for Disease Control [NCDC] (2021) reported that 165,778 cases were found;156,415 discharged; and 2067 deaths recorded. This figure was official records that excluded likely cases of unreported deaths and infections. Like global countries, the Nigerian government imposes various measures to contain the diseases due to the deadly nature of the pandemic. This measure ranges from mass media sensitization to lockdown restrictions, imposition of COVID-19 protocols, house-to-house campaigns, billboard campaigns, religious leaders' engagement, national orientation, and non-governmental organizations that shoulder public communication of the pandemic in public space. Nigeria spent hundreds of billions of naira in active response to COVID-19 to keep citizens informed, updated, tested, treated, discharged or buried COVID-19 deaths. The action of the government was a prerequisite to safeguarding citizens wholesomely. However, there is a widespread cultural belief that altered the preponderance of the population to discount the existence of coronavirus. According to studies by Ozili (2020) and Olapegba et. al (2020), it was found that the low-income class believed the coronavirus was a disease of the rich and therefore it was less needed to abide by protocols. A study by Ohia, Bakarey, and Ahmad (2020) also supported that some residents perceived COVID-19 as a conspiracy of the political class to siphon public funds; there was no need to comply with the theory of lies by the rich. These studies were explorative and only engaged working-class residents in rural areas.

The conspiracy around the disease pandemic is strengthened by the assumption that COVID-19 was created deliberately by the ruling class to shift attention from state failure and poor governance which Nigerian workers have endured decades without respite in sight (Micah, 2023a). The period of pandemic lockdown was marked by fictitious abstract conceptions, delusion, lack of trust, and resentment when Nigerians grappled with low income, inflation, poverty, and state corruption by the ruling elites (Micah, 2023b). It was the era of public resistance that collided with government laws and restrictions aimed at checking widespread transmission. Working-class Nigerians were primarily interested in the resources suitable for survival and desperate intention to retain means of livelihood (Micah, 2020). It was therefore a collision of state law and workers' means of survival during the period of COVID-19. It was not uncommon to perceive contours of compliance and irregularity among the working class's intention to follow guidelines for the prevention of the disease pandemic. This study was therefore conducted in response to the disparity of disease prevention compliance which clouded the attitude of the Nigerian working class in the era of COVID-19. The study was conducted in middle and low-income residents.

RESEARCH PURPOSE AND OBJECTIVES

The purpose of the study was an assess of working-class response to the disease pandemic which altered workplace culture and governance. COVID-19 altered everything in the global arena and it was the period some countries rose to safeguard workplace organizations, protect the rights and obligations of workers, and distribute palliative cushions. However, the plight of Nigerian workers deteriorated, and only a few retained class status. Specifically, the study:

1. Appraised knowledge of COVID-19 among working-class household residents
2. Examined perception of the severity of COVID-19 among household residents which likely influences rational action.

LITERATURE REVIEW

Knowledge and severity of Covid-19

COVID-19 is an infection caused by severe acute respiratory syndrome (SARS-CoV-2). This is a pandemic with high morbidity and mortality (Zhu et al., 2020). Since the outbreak of this pandemic in December 2019, more than 150 million cases of COVID-19 have been reported and more than five million deaths recorded. Fever, dry cough, fatigue, myalgia, shortness of breath, and dyspnea are noted symptoms of COVID-19 (Chan et al., 2020; Riou & Althaus, 2019). Al-Hanawi et al. (2020) noted in their study, a high knowledge score of 17.96 on a scale of 22. Studies have shown satisfactory levels of knowledge, but these studies were among the aged population (Al-Mohrej, Al-Shirian & Al-Otaibi 2020; Centre for Disease Control, 2020). A study has shown that 98% of respondents were aware of the clinical symptoms of COVID-19, but only half of the respondents knew this disease could spread from person to person in close contact (Al-Mohrej et al., 2020; Aldowyan, et al., 2020). Similarly, 56% of the study population did not know masking as a means of preventing infection (Al-Mohrej et al, 2020).

There are three major prongs in the prevention of COVID-19. This includes wearing of face mask, hand washing, and social distancing. Wearing a face mask is recognized as one of the preventive measures and has been seen to be protective (Aronu et al, 2021). A study reported that face masks were 79% effective in preventing transmission (Tian et al., 2020). Although it is noted that wearing masks after illness onset does not protect against the infection, a study noted that the use of face masks has shown a reduction of infection among families living with someone in isolation or quarantine (CDC, 2020). Moreover, the use of face masks was recommended in the community in the United States of America (CDC 2020). The foregoing writers opined that universal face mask use has the potential to reduce outward transmission from infected but asymptomatic people, as well as protect children from becoming infected. ‘The use of face mask is not fully imbibed as people are seen either not wearing the mask or hanging it on their chin while going about their business' (Aronu et al, 2021, p.67).

Strict adherence to the measures of prevention was not completely followed by residents (Adebowale, 2020). This caused a surge in number of cases and deaths. In light of WHO's declaration of COVID-19 as a pandemic, several preventive measures were put in place; such as the suspension of international and local flights, the closing of all malls and markets, the closure of schools, and limiting the number of people in worship centers to 20 people (Nigeria Centre for Disease Control [NCDC], 2020). However, these measures did not curb the rate of infection as the success or failure of these efforts was largely dependent on everyone’s knowledge of the preventive practices.

According to Aronu et al. (2021), 98.4% of residents were aware of COVID-19. They showed that the findings in their study were higher than previous studies which had a prevalence of 69.6%, 73.8%, and 88.2% in Ethiopia; 80.8% were reported in a study in eight countries of five continents, and 78.2% indicated in Sudan respectively (Chirwa, 2020; Hezima et al, 2020). The variation in prevalence was due to the sample size used. Also, it could be due to discrepancies in cut-off values used to categorize the knowledge levels. The majority of the respondents heard about COVID-19 from the local television channels and foreign television channels, while a few got their information from the internet. This is also similar to a study in an urban slum where the majority of adolescents reported that television was a major source of information on COVID-19 (Azlan et al, 2020; Reuben et al, 2020). Adolescents with internet access were prone to misinformation on COVID-19 and this led to fear and wrong preventive measures towards the infection (Reuben et al, 2020).

A significant proportion of residents, 69.2% practiced good preventive measures against COVID-19 (Aronu et al, 2021). This is, however, lower than reports from studies done in Syria, Pakistan, and Sudan where proportions of 73.8% (Saqlain et al., 2020), 80.5% (Alobuia et al, 2020), and 89.9% (Greenhalgh et al., 2020) were obtained respectively. The discrepancy in the prevalence of preventive measures was due to variations in the cut-off values for the assessment of preventive practices. While Aronu et al. (2021) study used a cut-off point of 60%, previous studies used above 80% scores to classify adequate preventive practice. Socio-cultural differences also accounted for this. The majority of the residents noted that COVID-19 could be prevented through social distancing, the use of hand sanitizer, and masking (Aronu et al, 2021).

A study of mask-wearing during the influenza pandemic in Japan showed that the use of masks was more effective between one group and the other (Guan et al., 2020). World Health Organization (WHO) also stated that the 'not harm' phenomenon of masking in children and adolescents should be observed. The guidelines state that masking in adolescents who are more than 12 years old should be the same as that of adults (WHO, 2020).

The use of face masks in developing and resource-poor countries is very necessary especially when they can make their cloth mask. Cloth masks has been found to be effective with a low cost-benefit ratio. Granted that the adolescents, who had good knowledge of the spread of COVID-19 were 7.2 times more likely to have good preventive practices of COVID-19 when compared with those who had poor knowledge, there still exists a huge gap between knowledge of preventive methods and actual practice among college adolescents, university students and residents (Aronu et al, 2021). In this case, it was found that a high knowledge level of 98.4% and a preventive practice of 69.2% were obtained, showing a gap of 29.2% (Alobuia et al., 2020). A study in urban slums in Dakar reported that only 77.3% of residents showed good preventive practices against COVID-19, even though the knowledge was as high as 95.5%. Similarly, those who reported that they had not been going to crowded places were 33.2%, but the knowledge that avoidance of crowded places prevented infection by the novel coronavirus was 90.3% (Zhong et al., 2020).

Similarly, Zhong et al, noted that higher COVID-19 knowledge scores were found to be significantly associated with a lower likelihood of practices toward the COVID-19 epidemic. The reason for this gap between knowledge and preventive practice was that residents showed more commitment to adhere to protective measures in the early phase of the pandemic but now that the lockdown is easing off and people are resuming their normal lifestyles, they deemed it inexpedient to burden themselves with hand washing, social distancing and masking (Amzat et al., 2020). These findings underscore the urgent need to improve and sustain residents' COVID-19 knowledge via health education, which may also result in improvement in their practices towards COVID-19 prevention (Aronu et al, 2021; Amzat et al, 2020).

Although a proportion of residents, 42.4% had a good knowledge of the mode of spread of COVID-19, 52.0% were aware COVID-19 could be transmitted through contact with infected persons while a proportion, 62.6% believed that COVID-19 is not airborne (Aronu et al, 2021). In line with the above study, Mohammed et al. (2020) also noted that approximately half of their respondents were unaware that SARS-CoV-2 could spread from person to person. This poor knowledge of the mode of spread was due to the inaccessibility of information. A study in Saudi Arabia documented a high proportion of respondents who were aware of the clinical symptoms of COVID-19 (Al-Hanawi et al, 2020).

Aronu et al,(2021) observed that male adolescents were 1.4 times less likely to have good knowledge of the mode of spread of COVID-19. In the same vein, adolescents whose parents were self-employed were 1.4 times more likely to have good knowledge of the mode of spread of COVID-19 when compared to those who were in paid employment. The study also revealed that adults were more knowledgeable regarding COVID-19 compared to younger ones (Aronu et al, 2021; Azlan et al., 2020). This finding was in tandem with studies from China and India (Saefi et al., 2020) which showed that female adolescents were curious and wanted to know every new or trending event, including the new novel virus (COVID-19) (Nicholas et al., 2020). In addition, female adolescents need to know more about COVID-19 because they are more vulnerable and at risk of child labor, sexual abuse, and gender-based violence (Aronu et al., 2021).

The finding from Aronu et al. corroborated a study from Wuhan, China with high mortality rates following the pandemic. The authors reported that the university graduates seriously sought information from various information channels such as CCTV, the official website of the National Health Commission of China, and the WeChat official account of the Wuhan Health Commission. The significant positive association between levels of education and COVID-19 knowledge scores supported this speculation. Some Nigerian studies on COVID-19 have emerged in the literature. Olapegba et al (2020) assessed the knowledge and perceptions of Nigerians about COVID-19. They found that some Nigerians have misconceptions about COVID-19, for instance, some respondents believed that COVID-19 is a biological weapon of the Chinese government. These misconceptions prevented them from taking maximum preventive measures. They suggested that evidence-based campaigns should be intensified to remove misconceptions and promote precautionary measures. Ozili (2020) showed that Nigeria had the highest number of COVID-19 cases in

West Africa and the third highest number of cases in Africa between March and April at the time the study was conducted. Ohia et. al. (2020, p 37) predicted that the effect of COVID-19 will be severe in Africa because African countries have fragile health systems. They argued that Nigeria's current national health systems cannot respond to the growing number of infected patients who require admission into intensive care units. The authors suggested that Nigeria should explore available collective measures and interventions to address the COVID-19 pandemic. Jacob et al. (2020) showed that the COVID-19 pandemic affected higher institutions in Nigeria through the lockdown of schools, reduction of international education, disruption of the academic calendar of higher institutions, cancellation of local and international conferences, creation teaching and learning gap, loss of manpower in the educational institutions, and cut in budget of higher education. Adegboye et al. (2020) examined early transmission of COVID-19 in Nigeria and showed that COVID-19 cases in Nigeria were lower than expected. Adenomon and Maijamaa (2020) examined the impact of COVID-19 on the Nigerian stock exchange from 2nd January 2020 to 16th April 2020. Results revealed a loss in stock returns and high volatility in stock returns during the COVID-19 period in Nigeria. Besides cases in Nigeria, studies outside Nigeria have shown that covid-19 wreaked havoc on nations. The death tolls in America and Europe were unprecedented (Haleem et al., 2020). The pandemic imposed gross damage to the world economy (World Trade Organisation [WTO], 2021); strained international relations (WTO, 2021): diplomatic suspicions (National Bureau of Statistics [NBS], 2021); conspiracy theories (Sirkeci & Yüceşahin, 2020); and multinational capitalism which consisted global cabals and mafia suspected to be inventors of covid-19 virus for inordinate gains.

The place of the working class amid COVID-19 is significant and there are collections of bulk studies that investigated the subject. Working class amid the disease pandemic showed some disparities in terms of knowledge and severity of the disease. Notably, studies by scholars in the literature combined adults and adolescents, who in the case of the former were working class, the majority lived on regular income and were caught in the web of pandemic lockdown (). Notwithstanding the intention of researchers listed in the literature, there is pressing insight to argue that the disease pandemic affected all members of society, working class, dependants, adults, young and old, and class distinction. The curiousness found in empirical studies extends the scope of research and ongoing intellectual grounding associated with workplace governance during the disease pandemic. The working class is conceived on the notch of distinctive work groups which can be middle class, lower middle class, or bottom base working group (Micah, 2018). Sociologists argued that the working class consisted of service class and process workers, while in the case of the former, it is a professional and managerial work group; the latter covers workers in technical, skilled, or semi-skill occupations (Giddens, 2010). There is therefore conspicuous distinction in the life chance and positive outcome obtainable by work groups. Covid-19 was an acute disadvantage to workplace organisations and negative outcomes were obtained differently for workgroups. Stemming from knowledge of the pandemic, researchers have argued that the working class varied by knowledge, in this case, high for the middle class, moderate for the lower middle class, and low for bottom level work group (Azlan et al., 2020). The predisposition for the variance was associated with class distinction, income variance, level of education, and prospect of occupation (Micah, 2023b). There is a predisposition by the middle class to safeguard the work environment, desire clean space, and support staff designated to shore up cleanliness and strict compliance. Workers on the bottom rung of the ladder are inclined to shore up wages, combine two or more jobs simultaneously, sometimes moonlighting, and are strictly motivated by the gratification of the work (National Bureau of Statistics, 2021). COVID-19 was a mere distraction from wage increases, and reductions in targeted wage spots, and were eager to compromise restrictions in the interest of wages. Knowledge of the pandemic therefore varied and was predetermined by wage interest.

The severity of COVID-19 also appeared in empirical studies, although scholars were inclined to focus on different research subjects. Severity measures the risk perception of the disease, susceptibility perception, and boundary of behavior required to mitigate the risk (Micah, 2023c). Literature in the study showed that the risk of COVID-19 was severe in some cases, less severe, and not severe and this varied by geographical location, age group, education, workgroup, or status (Federal Ministry of Health, 2020). Similarly, risk perception of COVID-19 was high for middle-class occupations, and low incidents were recorded in the case of process workers (Olapegba et al., 2020). Micah (2023c, p. 35) posited that 'there is predisposition among middle-income earners to attach high risk of contagion to covid-19 and adopted clearly defined behavior to mitigate the risk'. This is drawn from disease prevention behavior and modeling attitude which form a way of life and strict compliance among the middle class. Studies also showed that

risk perception varied among holders of regular income, daily income, professionals, skilled and semi-skilled occupations, and demographic status or gender (Haleem et al., 2020). Notwithstanding existing literature on the subject matter of COVID-19, there is an ongoing search for knowledge covering scientific models suitable to mitigate the future occurrence of the disease pandemic and its effect on the productive population especially the working class group. This study is therefore motivated by the strength of new knowledge and Nigeria as a case study.

THEORETICAL FRAMEWORK

Theoretically, this work is hinged on the Rational Action Theory prescribed by Max Weber. According to Weber as cited in Ritzer (2016), the individual is rational being confronted with options of calculability, precision, consciousness, accountability, and interpretive understanding. Central to this theory is Weber's introduction of voucher, also known as interpretive understanding. Here, every rational individual in a social situation engages in social action which takes the attention of others and actors aware of the consequence of action. It is rational action because the outcome can be predicted and the individual is aware of such. Weber argued that since social action is rational, there is a tendency to engage in precision, calculability, and social understanding of the outcome. In the practical realm, the desire by individuals to seek knowledge of covid-19 pandemic is subjective and rational according to how they perceive the serious of the disease. Seeking information is a rational action because it is a conscious action seeking to know, verify originality, and comply accordingly by prescription of the information. This information can be represented as form or social fact (Durkheim cited in Ritzer, 2016) and it can be represented as profane (Durkheim) which lacks the weight of acceptance. Some individuals thought covid-19 is myriad and some thought it was real. There is conscious action at both levels of definition. In this study, how this definition affected knowledge and severity of the pandemic is the main focus. There is a variance of interpretation associated with knowledge and severity when it is considered in terms of groups in the workplace organization. There is also by extension household knowledge or perception of severity which is led by income holders or breadwinners. Ultimately, middle-income, middle-lower-income, and bottom-income households are likely to vary by knowledge and risk behavior in the disease pandemic. The variants also depend on worldviews and interpretive understanding led by heads of households who are members of the workplace community.

RESEARCH DESIGN

Research approach

This study adopted a descriptive cross-sectional survey of household residents in Abuja Municipal Area Council (AMAC). The study area was located in an urban setting which consisted of middle-income and low-income residents. Abuja is the federal capital of Nigeria. It is classified into urban suburban and rural zone.

Research methods

Research participants

This study purposively selected urban residents to update existing studies in Nigeria which focused on rural residents. AMAC is one of the seven urban locations in Abuja. It was chosen using a random ballot having considered viability for data collection, proximity, security of researcher, and availability of respondents. There are 2500 households in AMAC, numbered in 25 estate locations. Per estate, there are a maximum of 100 houses required by urban housing law and ventilated air space. Only 10% of the households were purposively covered (2500*0.1=250). These households were scattered across five estates randomly selected using the ballot method. The estates have adjoining boundaries which made identification easy. Per household, only two respondents above the age of 18 years were selected. The sample size was 500 having considered the number per household. The sampling technique was multistage and this consisted of purposive, cluster, random ballot, and accidental. The purposive method was applied to determine the choice of study location, i.e., AMAC having consisted requirements for the study which is the urban location and urban population. The cluster method was applied to label streets or closed avenues in each estate

which made household selection easy. There were clusters of 10 streets or avenues identified for each estate. Only five clusters were randomly selected by ballot. The random ballot was applied to select five estates from 25 available in AMAC. Accidental sampling was applied to select members of the household who were available and consented to participate.

Measuring instrument

Data were collected and analyzed quantitatively using a closed-ended questionnaire instrument and descriptive and inferential statistics for analysis. Knowledge was measured as network and sources of information dissemination of COVID-19. Severity was measured as the risk of contraction of COVID-19 or perception of the severity of the pandemic.

Research procedure and ethical consideration

Before the collection of data, a consent approval form was issued by the authority of the Abuja housing estate. This provided ground for the takeoff of the research. The researcher was guided by the ethics as stipulated in the approval form. The first phase was the engagement of familiarity with residents and community leaders to provide acquaintance for the smooth takeoff. This phase lasted for three weeks and the researcher gained smooth acceptance, especially when dealing with the subject of public health. The second phase was a face-to-face meeting with households marked out for the study. At this stage, the researcher endeared himself to households and engaged in casual discussion on the subject of COVID-19 and related diseases. It was in phase two researcher distinguished the intention to participate in the study among households. Having established acquaintances across households, participants were labeled by consent, inclusion, and exclusion. Inclusion was by consent, deliberate willingness, and facial expression of calm action to the researcher. Residents who showed the opposite attitude to inclusion were excluded. The third phase was the application of the study instrument. During this session, participants were encouraged to read through the entire text in the document, were allowed to decide their intention to fill out the questionnaire, and were granted some days to come up with their decision. Five days were granted and within this period all participants in the study had agreed to fill out the questionnaire. A total of eight days were allowed for participants to submit the documents. The researcher ensured that the identities of participants were covert, and there was no disclosure of personal addresses, private phone numbers, or any information related to private life and secrecy.

Statistical analysis

The study applied descriptive and inferential statistics. At the level of descriptive, data outcomes were labeled in frequency count and percentage. Using a computer software program, Statistical Package for Social Science (SPSS), data items were coded and input into the software. Code labels were used and this yielded quantitative statistics. Descriptive analysis captured categorical variables. At the level of inferential statistics, nominal and ordinal variables were combined, and computer commands in the software yielded data output. This analysis showed a causal relationship between variables and inferences were derived.

RESULTS AND DISCUSSION

Results of data outcomes are presented in tables and discussion of results in the table is systematically constructed. Discussion of results is classified into sub-sections covering knowledge and severity of the coronavirus pandemic.

Table 1: Demographic variance in knowledge of disease pandemic

Demographic characteristics	Knowledge of coronavirus	Chi-square	Correlation
Sex	Are you aware that there is a disease called coronavirus?	X^2 9.837 df=4	r=0.8 p<.04

		Yes	No	Total	p<.02 simple linear regression (R1.34 p<.03)	
	Male	270(97.1%)	8(29.0%)	278(55.6%)		
	Female	200(90.1%)	22(9.9%)	222(44.4%)		
	Total	470(94.0)	30(6.0%)	500(100.0)		
Age (in years)		Do you know that coronavirus is deadly disease affecting people in Nigeria?			X^2 23.542 df=16 p>.10	r=0.2 p>.20
		Yes	No	Total		
	18-29	9(42.9%)	12(57.1%)	21(4.2%)		
	30-34	48(60.0%)	32(40.0%)	80(16.0%)		
	35-44	62(62.0%)	38(38.0%)	100(20.0%)		
	45-54	74(61.7%)	46(38.3%)	120(24.0%)		
	55-64	64(64.0%)	36(36.0%)	100(20.0%)		
	65 and above	48(60.8%)	31(39.2%)	79(15.8%)		
	Total	305(61.0%)	195(39.0%)	500 (100.0%)		
Social class		Do you know that the coronavirus is a global disease that has tormented numerous lives in Nigeria?			X^2 13.277 df=4 p>.01	r=0.8 p<.04
		Yes	No	Total		
	Middle class	151(87.8%)	21(12.2%)	172(34.4%)		
	Process workers	289(88.1%)	39(11.9%)	328(65.6%)		
	Total	440(88.0%)	60(12.0%)	500(100.0%)		
Monthly income (in naira)		Do you know that coronavirus is highly contagious and can be contracted rapidly?			X^2 13.442 df=10 p>.20 sinple linear regression (R1.344 p<.04)	r=0.6 p>.30
		Yes	No	Total		
50,000-100,000 (bottom band)		78(59.1%)	54(40.1%)	132(26.4%)		
100,001-150,000 (bottom band)		87(48.6%)	92(51.4%)	179(35.8%)		
150,001-200,000 (middle band)		49(55.1%)	40(44.9%)	89(17.8%)		
200,001-250,000 (middle band)		38(79.2%)	10(20.8%)	48(9.6%)		
Above 250,000 (top band)		37(71.2%)	15(28.8%)	52(10.4%)		
Total		289(57.8%)	210(42.2%)	500(100.0%)		
Education		Do you know that coronavirus has affected people living in your location of residence?			X^2 16.812 df=6 p<.01 simple linear regression (R1.472 p<.02)	r=0.7 p<.03
		Yes	No	Total		
Primary education (bottom rank)		52(65.8%)	27(34.2%)	79(15.8%)		
Secondary education (top-bottom)		74(61.2%)	47(38.8%)	121(24.2%)		
Tertiary education (top rank)		241(80.3%)	59(19.7%)	300(60.0%)		
Total		367(74.4%)	133(26.6%)	500(100.0%)		

Source: Researcher's Survey, 2021

Table 1 listed demographic variance and knowledge of coronavirus among households in the study area. At the level of gender, 55.6% were male; female participants were 44.4%. Gender was cross-tabulated with knowledge composition of coronavirus, awareness of the virus (94.0%), and lack of awareness (6.0%). Chi-square value (9.837) was significant at p>.02; correlation r0.8 was positive linear and significant at p>.04. The interpretation of the result, in this case, is that knowledge of the virus was widespread in gender group, although some members of gender group varied by sources of information which was an important determinant of knowledge, acceptance or rejection of protocols stipulated to check the spread. Respondents showed that awareness of coronavirus cut across age groups that participated in this study. There were six age groups which ranged from 18 years the lowest to 65 years the highest. At the level of awareness that coronavirus, a deadly disease, cluster of 61.0% in the age group were aware of the risk associated; 39.0% lacked awareness. Although more than half of the households' respondents were aware of the virus danger, this did not suggest that knowledge was equitably distributed, especially in the households of different bands of social class or working class categories. Knowledge was fairer in middle-class and lower middle-class bands having an average mean score of 9.55 twice higher than the bottom band. At the level of chi-square, age group and knowledge (x^2 23.542; p>.10) were not significantly associated, and the correlation, r0.2 also showed a weak positive linear direction. Yet the correlation was not significant at p>.20. Interpretatively, some households possibly have subjective definitions of the coronavirus, especially in the case of class ranks, class affiliation, and sources of pandemic disease information (Ohia et. al (2020).

Middle-class households consisted of 65.6%; process workers consisted of 34.4%. The latter group covers households whose sources of income depend on skilled occupation, semi-skilled, artisans, and low-income self-employed. Although 88.0% were aware that coronavirus was a major killer disease in Nigeria, knowledge of susceptible risk varied. At the level of chi-square statistic x^2 13.277, p<.01 was significant. This means the working class varied by knowledge and subjective description of pandemic disease. Correlation, r0.8 was near perfect and positive linear, although it was not significant, p>.40. The cross-tabulation implied that households showed preponderance to the knowledge of coronavirus which could safeguard family members, especially the vulnerable. However, awareness of coronavirus danger varied significantly and this was largely due to subjective definition grounded in class division. There is subsisting evidence that culture mix and individual attitudes hampered the government proactive effort to eradicate coronavirus in Nigeria as claimed in the work of Olapegba et. al (2020). Every class-based household is distinguished by culture and this is influenced by status group affiliation.

Household income was cross-tabulated with knowledge of health risks associated with the disease pandemic. At the level of income, monthly household income was #50,000 naira and there were 26.4% earners in the range. Respondents (57.8%) were aware that coronavirus was highly contagious; 42.2% maintained that they were not certain about health risks. At the level of chi-square, x^2 13.442, the estimate was not significant, p>.20. The Correlation value, r0.6 was positive linear, not significant at p>.30. Households nonetheless income level were not overwhelmingly convinced that coronavirus was highly contagious. The conviction was a factor of subjective or personal belief that coronavirus was highly contagious or otherwise. Indeed, subsisting studies such as Olapegba et. al. (2020), Ozili (2020), and Jacob, Abigail, and Lydia (2020) found cultural rigidity, distrust, ethnic suspicions, and poverty as factors militating against acceptance of covid-19 protocols in Nigeria, especially rural location. Disaggregating the result, acceptance, and knowledge of health risk is a major factor in the household study considering evidence of subjective interpretation of risk. Inferential statistics in the Table showed that the correlation of association between income group and knowledge of health risk was not perfectly fit in the case of chi-square or associated in the case of correlation. This means households constructed subjective definitions and are largely determined by class, who they related with, and status group. Sociologically speaking, the reference group of individual households interplays as a determinant, overlapping reference at the level of occupation status, workgroup, location of residence, and normative life. It is better in the case of the middle class due to the advantages available to them.

Academic qualifications of households were cross-tabulated with the awareness that coronavirus affected people living in the location of residence. Among the respondents, academic qualifications consisted of

primary education (15.8%), secondary education (24.2%), and tertiary education (60.0%). Similarly, 74.4% reported that they were aware of infections of coronavirus in their residence; 26.6% were not aware.

At the level of chi-square, x^2 16.812, there was a significant relationship at p<.01. Correlation test was a positive association, r0.7, and significant at p<.03. Indicatively, education of the households was vital reinforcement of knowledge of health risk of disease pandemic. There is a structural dimension to knowledge of coronavirus and the danger thereof. Some residents' households in the study area were not sober about the surge of COVID-19, and some displayed weak attitudes of protocol observance and distrust in government policies. Notably, process workers were keen on daily income, and survival, moaned about lackadaisical government palliative, and were lackluster.

Table 2: Perception of Corona Virus Severity

Demographic characteristics	**Severity of coronavirus**			**Chi-square**	**Correlation**
Working class households	Are you aware that coronavirus is terminal disease?			X^2 8.558 df=6 p>.20	r=0.7 p<.01
	Yes	No	Total		
Middle class	41(54.7%)	34(45.3%)	75(15.0%)		
Lower middle class	104(50.0%)	104(50.0%)	208(41.6%)		
Process workers	132 (60.8%)	85 (39.2%)	217(43.4%)		
Total	277(55.4%)	223(44.6%)	500 (100.0%)		
Occupation	Do you know that coronavirus is deadly disease affecting people in Nigeria?			X^2 24.054 df=12 p<.02	r=0.8 p<.01
	Yes	No	Total		
Professional/ Administrative	78(72.9%)	29(27.1%)	107(21.4%)		
Managerial	62(54.4%)	52(45.6%)	114(22.8%)		
Technical/Clerical	49(50.0%)	49(50.0%)	98(19.6%)		
Skilled occupation	38(58.5%)	27(41.5%)	65(13.0%)		
Semi-skilled	24(56.7%)	38(61.3%)	62(12.4%)		
Unskilled	21(38.9%)	33(61.1%)	54(10.8%)		
Total	272(54.4%)	288(45.6.0%)	500 (100.0%)		
Household ethics	Do you know that coronavirus is a global disease that has tormented numerous lives in Nigeria?			X^2 13.277 df=4 p<.01	r=0.8 p<.04
	Yes	No	Total		
Hausa	79(59.8%)	53(40.2%)	132(26.4%)		
Yoruba	102(60.4%)	67(39.6%)	169(33.8%)		
Igbo	114(57.3%)	85(42.7%)	199(39.8%)		
Total	295(59.0%)	205(41.0%)	500(100.0%)		
Social class	Do you know that coronavirus is highly contagious and can be contracted rapidly?			X^2 18.168 df=8 p<.02	r=0.8 p<.04
	Yes	No	Total		
Middle class	78(76.5%)	24(23.5%)	102(20.4%)		
Lower middle class	112(66.3%)	57(33.7%)	169(33.8%)		
Working class process workers	65(36.5%)	113(63.5%)	178(35.6%)		

Lower working class	11(21.6%)	40(78.4%)	51(10.2%)		
Total	266(53.2%)	234(46.28%)	500(100.0%)		

Source: Researcher's Survey, 2021

Table 2 listed research items on the perception of the severity of the coronavirus. Working-class households are a cluster of middle-class, lower-middle-class, and process workers. For the middle class, 54.7%, lower middle class, 50.0%, and process workers, 60.8% expressed knowledge of the severity of the pandemic disease. At the level of chi-square value, x^2 8.558, there was no significant difference, p>.20. The correlation value, r0.7 was positive linear and significant, p<.01. The distinction here is that although household residents were aware of the fatal cases of coronavirus, such perception was not sufficient to alter preconceived notion about the disease especially expressed by some households. This subsisting notion still did not deter some others from accepting the reality of the pandemic disease and taking proactive steps to safeguard; however, some households consistently felt the disease was moderate and should not destabilize daily income earnings for the working class who solely relied on self-driven skills. The occupation was cross-tabulated with the perception of fatality of coronavirus. This was aimed to check how occupants of occupation in Abuja responded to the outbreak of the pandemic. Occupation was classified into seven hierarchies and all occupants in the hierarchies were influenced in a particular way. Purposely, 54.4% held the perception that the coronavirus was fatal; and 45.6% refuted the fatality of the pandemic. At the level of chi-square (x^2 24.054), there was a significant difference, p<.02. Correlation r0.8 was also significant, p<.01. Indicatively, there was preponderance among some occupation holders in Abuja to comply with covid-19 protocol may be due to government directive as civil/public servants. However, not all workers in the study complied. Abuja is a federal capital territory and a large percentage of senior civil servants reside in the location. The majority of professional occupation and managerial complied. Conversely, the mix of process workers was skeptical about disease severity and this was largely connected to income disparity and intention to mitigate obstacles to survival of occupation despite pandemic disease.

Ethnic affiliation was cross-tabulated with the perception that carriers of the virus were potential risks to others. Nigeria is a multi-ethnic society and occupants of occupation are deeply influenced by ethnic belief systems found and rooted in ethnicity. Household ethnicities in the survey consisted of Hausa (26.4%), Yoruba (33.8%), and Igbo (39.8%). Also, 59.0% held that the carrier of coronavirus was a potential risk to others; 41.0% refuted potential risks associated with the disease. There was a significant difference in chi-square value (x^2 16.812, p<.01); and correlation r0.6, p<01. However, the variation is that some household residents did not perceive the potential risks of COVID-19. Indicatively, while it is possible to state that misinformation or disinformation about the pandemic disease was a regular occurrence among households, on the other hand, it varies significantly by households, ethnic belief system, and occupational groups to which they were affiliated. Studies have shown that Nigeria was polarised by ethnic sentiment during the pandemic disease dealing with scepticism of public perception of the severity of the disease.

Household social class was cross-tabulated with the perception of contagious COVID-19. Grouping cases, the middle class was 76.5%, the lower middle class was 66.3%, process workers were 37.5% and the lower working class was 21.6%. Less than half of process workers or below the rank were skeptical about the contagious pandemic disease. There was a significant difference in chi-square, x^2 18.168, p<.02; and correlation r0.8, p<.04. Physical contact in the pandemic reinforced evidence for household residents to hold perceptions about severity or otherwise. Despite the perception of severity and fatality held by some, contact with carriers of the disease was not adequate to alter perceptions for others especially the process workers who expressed skepticism of the disease. Unfortunately, the Nigerian Presidential Task Force (PTF) on COVID-19 arrested chunks of violators of coronavirus protocols in parts of Nigeria claiming that offenders deliberately violated rules and protocols (NCDC, 2021). The offenders were largely low-income earners who held the perception that the pandemic virus was manipulated and could not be real as it was conceived.

LIMITATION AND RECOMMENDATIONS

There is a significant push by the lower working class to neutralize the severity of pandemic disease in pragmatic terms and this is grounded in the utilitarian conception. Low-income households were strongly

catalyzed by income and resistant to economic lockdown attributable to inadequate palliative and state intervention. This study is limited to Nigerian working class and urban settings. The study recommends the following.

1. There is a need for government to reconstruct an approach to respond to citizens' necessities. A proactive government to the needs of citizens builds trust and cooperation for national interest. Abuja working-class households lacked the trust in government and were not willing to cooperate adequately.
2. Although culture mix hampered cooperation among Abuja working class households to uphold COVID-19 protocols, factors such as poor social investment in terms of family allowance, unemployment stipends, and citizens' insurance were non-existent to cover the low-income working class. There is a need to rejig the government's approach to social investment which is vital to building government-citizenship trust and cooperation.

CONCLUSION

This study showed some differences in demographic variance and how this interplayed to explain household perceptions of coronavirus. There were positive and negative conceptions among Abuja households reflecting the coronavirus attitude. Some households held a proactive attitude to prevent the disease in the form of a willingness to update knowledge through viable government sources and social media. These individuals were eager to know that the virus was highly contagious, posed potential risks, followed health protocols, and communicated potential risks to families seeking absolute protection. On the other hand, some households held that coronavirus was not as severe as it was thought and they were skeptical about the pandemic. This perception was reinforced by subsisting notions of distrust, lack of reliable government policies, suspicions, age-long attitude and culture, and preponderance of low-income households to survive. These households blamed the government for lacking response to citizens' needs in times of urgent need. The dichotomy between households that held a positive attitude to uphold COVID-19 protocols and follow rules accordingly and households that demonstrated otherwise was found in the government handling of the disease. The household class group helped to show in clarity the proportion of the complied and the skeptical. It depicted at a glance how many households were aware of the pandemic; and how many respondents shared the severity of the disease which informed rational action to prevent it. Also, it depicted at a glance, the proportion of household residents that were at loggerheads against the coronavirus and treatment protocols. It is a real fact that Nigeria suffered from the virus, especially Abuja, which was rated as one of the epicenters of coronavirus. Subsisting attitude is attributed to the disjuncture between government rationality and citizens' rationality. This significantly magnified distrust and poor coordination of citizens to accept government directives, especially in control of epidemiology like the coronavirus. Process working class and low-income households were skeptical about the disease pandemic.

Acknowledgments

The study acknowledges the positive role played by heads of housing estates in the Abuja Municipal Area Council (AMAC). There were heads of landlords/ladies' associations in the municipal who provided soft ground for the smooth takeoff of the study. The contribution of my post students is commendable during data collection; they were consistent in thick and thin of the survey.

Competing interest

I declare that there is no competing interest whatsoever in this work either financial obligation or bond. The survey was solely financed by me as there was no moral obligation to any party.

Author contribution

The work is solely authored by me. All texts and constructs are done by me.

Funding

The work is solely funded by me.

Data availability

The resources used for this work are available on the internet through database links, online URLs, DOI, and library sources. Survey data are exclusively available on my personal storage device computer.

Disclaimer

The construct of explanation and inferential texts available in this work are exclusively my views and are not influenced by any official, organizational, or external actors.

REFERENCES

- Adebowale, N. (2020, August 20). Coronavirus: Nigeria's health minister recommends use of improvised face masks. The Guardian
- Adegboye, O. A., Adekunle, A. I. & Gayawan, E. (2020). Early transmission dynamics of novel coronavirus (COVID-19) in Nigeria. *International Journal of Environmental Research and Public Health, 17(9)*, 30-54.
- Adenomon, M. O. & Maijamaa, B. (2020). Effects of COVID-19 outbreak on the Nigerian Stock Exchange performance. Retrieved, December 23, 2020, from, https//www.googlebooks.com
- Africa Centre for Disease Control. (2021). Africa update of coronavirus: Weekly reports. Retrieved August 29, 2022, from: http//:www.acdc.gov.
- Aldowyan, N., Abdallah, A.S. & El-Gharabawy, R. (2017). Knowledge, attitude, and practice (KAP) study about Middle East respiratory syndrome coronavirus (MERS-CoV) among the population in Saudi Arabia. *Int. Arch Med*, *10(1),* 10-19
- Al-Mohrej, O.A., Al-Shirian, S.D. & Al-Otaibi, S.K. (2016). Is the Saudi public aware of Middle East respiratory syndrome? *Journal of Public Health, 9(25)*, 9–66
- Alobuia, W.M., Dalva-Baird, N.P. & Forrester, J.D (2020). Racial disparities in knowledge, attitudes, and practices related to COVID-19 in the USA. *Journal of Public Health (Oxf), 42(4)*, 7–8
- Amzat, J., Aminu, K. & Kolo, V.I. (2020). Coronavirus outbreak in Nigeria: burden and socio-medical response during the first 100 days. *International Journal of Infectious Disease*, *98(2)*, 8–24.
- Azlan, A.A., Hamzah, M.R. & Sern, T.J. (2020). Public knowledge, attitudes, and practices towards COVID-19: A cross-sectional study in Malaysia. Retrieved March 29, 2022 from https://journals.plos.org
- Federal Ministry of Health. (2020, 21 May). Nigeria centre for Disease Control daily update on covid-19. *Health Watch,* p. 21
- Giddens, A. (2010). '*Sociology: African Reprint'* (8th edition). P.W. Sutton (ed.). New York: Macmillan
- Haleem, A., Javaid, M., & Vaishya, R. (2020). Effects of covid 19 pandemic in daily life. *Current Medicine Research and Practice*.
- Jacob, O. N., Abigeal, I., & Lydia, A. E. (2020). Impact of COVID-19 on the higher institutions' development in Nigeria. *Electronic Research Journal of Social Sciences and Humanities, 2*, 126-135.
- Micah, D.J (2023b). Coronavirus pandemic and globalization of African disadvantage: An outlook of Nigeria workplace in post-covid 19. *Compensation management in Nigeria: Resolving dilemmas, reinforcing milestones. A legal perspective. Policy Paper 2, September*
- Micah, D.J. (2018). Welfare service on employees' motivation in Guinness Plc, Lagos Nigeria. *The Social Management Scientist Scientists,* 10(1), 69-75
- Micah, D.J. (2020). The pattern of occupational discrimination among university female employees in Ondo State. *Nigerian Journal of Labour and Development Studies,* 3(1), 101-109
- Micah, D.J. (2023a). Covid-19 lockdown: Exploring dysfunction among Nigerian artisans in new normal. Akungba *Journal of Economic Thought, 13(1),* 18-30
- Micah, D.J. (2023c). Subjective risk and severity of COVID-19 pandemic among residents community: Mediating role of State. *The Social and Management Scientist, 15(1)*
- National Bureau of Statistics (2021). *Nigeria's economic outlook*. Abuja, Nigeria: Federal Republic. Retrieved, August 21, 2022 from: www.nbs.gov.ng
- Nigeria Centre for Disease Control [NCDC] (2021). Nigeria update of COVID-19 pandemic: Daily report. Retrieved, September 23, 2022, from: www.ncdc.gov.ng

- Ohia, C., Bakarey, A. S., & Ahmad, T. (2020). COVID-19 and Nigeria: Putting the realities in context. *International Journal of Infectious Diseases*, *23(3)*, 123-128
- Olapegba, P. O., Ayandele, O., Kolawole, S. O., Oguntayo, R., Gandi, J. C., Dangiwa, A. L., & Iorfa, S. K. (2020). Knowledge and perceptions of Nigerians about Covid-19. *Journal of Contemporary African Studies, 12(12)*, 23-28. Retrieved from: https//www.taylorandfrancis.gov.
- Ozili, P.K. (2020). COVID-19 in Africa: Socio-economic impact, policy response and opportunities. *International Journal of Sociology and Social Policy*, *12(2)*, 75-79.
- Ritzer, G. (2016). *Sociological theory* (8th edition). New York: McGraw-Hill
- Sirkeci, I., and Yüceşahin, M. (2020). Coronavirus and migration: Analysis of human mobility and the spread of Covid-19. https://doi.org/10.33182/ml.v17i2.935.
- World Health Organisation [WHO] (2020). World Health Organisation declares COVID-19 global pandemic. *Global Health Journal,* Geneva.
- World Trade Organisation (2021). *World economic recovery annual report*. Geneva, Switzerland. Retrieved from: www.wto.org