impact International Journals and Publications

© IIJP 2026 | Volume 2, Issue 1, pp. 359-372 | ISSN: 2636-4484

ATTITUDES AND PREVENTIVE PRACTICES TOWARDS COVID-19 PANDEMIC AMONG RURAL RESIDENTS OF SELECTED LOCAL GOVERNMENT AREAS IN KOGI EAST SENATORIAL DISTRICT, NIGERIA

IBRAHIM, Yusuf Baba[1], IBRAHIM, Umar[2], NNANNA, Emmanuel Patrick[3] & TIMOTHY, Idachaba[4]

[1]United Evangelical Church (UEC) College of Nursing, Ochadamu. Kogi State
yusufbabs1010@gmail.com 08066633498
[2]UEC College of Nursing, Ochadamu. Kogi State, Nigeria.
uibrahim699@gmail.com 09023339165
[3]Department of Demography and Social Statistics, Federal University Oye-Ekiti, Ekiti State, Nigeria
Nnannapatrick7@gmail.com 08034976427
[4]TIMOTHY, Idachaba
Prince Abubakar Audu University Teaching Hospital, Anyigba. Kogi State.
timothyidachaba29@gmail.com 08038609302

ARTICLE INFO
Article No.: 0153
Accepted Date: 09/01/2026
Published Date: 10/02/2026
Type: Research

ABSTRACT

The COVID-19 pandemic created significant public health challenges, particularly for rural populations with limited access to healthcare and preventive resources. This study investigated the attitudes and preventive practices towards COVID-19 Pandemic in Selected Local Government Areas in Kogi East Senatorial District, Nigeria, and examined the relationship between attitude and preventive behaviour. A survey research design, and in-depth interviews was employed. The study was conducted in Ankpa, Dekina, and Idah Local Government Areas, with a sample of 422 respondents and 398 questionnaire were returned, selection of sample size was done using the Krejcie and Morgan sample size determination table. Data were collected through structured questionnaires and interview guides, and analyzed using descriptive statistics and simple linear regression, percentage and frequency count using SPSS version 21.0. The finding of generally positive attitudes toward COVID-19 characterized by high perceived seriousness and susceptibility despite mixed trust in government response represents a notable anomaly that warrants critical engagement. In Kogi State, the state government publicly questioned the presence and severity of COVID-19 during the early stages of the pandemic. The second major finding was that preventive practices were selectively adopted further illustrates how local economic and cultural realities shape behaviour. The study conclude that the importance of context sensitive public health strategies that combine risk communication with structural support to enable sustained preventive behaviour in rural, resource limited settings. The study recommends that Government and Non-governmental Organization should integrate livelihood sensitive support into rural health strategies. Pandemic interventions should include flexible work arrangements, temporary market support, or conditional relief to reduce barriers to adherence.

Keywords: Attitude, COVID-19, Kogi East, Nigeria, Preventive practices, and rural Residents.

Introduction

The Coronavirus Disease 2019 (COVID-19) pandemic, caused by the severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2), emerged as a major global public health emergency with far-reaching health, social, and economic consequences. Since its declaration as a pandemic by the World Health Organization in March 2020, countries across the world have relied heavily on non-pharmaceutical interventions and later vaccination to control transmission (World Health Organization [WHO], 2022). Central to the effectiveness of these interventions are the attitudes and practices of individuals and communities, as public health measures are only successful when people perceive the risk, trust health information, and adopt recommended behaviours.

In Nigeria, COVID-19 response strategies included movement restrictions, public sensitization campaigns, promotion of personal hygiene, use of face masks, physical distancing, and vaccination. Despite these efforts, several studies have shown that compliance with preventive measures varied significantly across regions, socio-economic groups, and settlement types (Reuben et al., 2021; Habib et al., 2021). Research evidence suggests that knowledge of COVID-19 does not automatically translate into positive attitudes or appropriate preventive practices, particularly in settings characterized by misinformation, low risk perception, and distrust in government institutions (Ibrahim et al., 2021).

Rural dwellers constitute a particularly vulnerable group in pandemic response due to structural and contextual challenges. Rural communities in Nigeria often experience limited access to formal health information, inadequate water and sanitation facilities, poor healthcare infrastructure, and heavy dependence on informal communication networks such as community leaders and religious institutions (Akwaowo et al., 2021). These factors significantly influence attitudes toward disease severity, susceptibility, and prevention, which in turn affect the adoption of preventive practices. Kogi State presents a distinctive context in Nigeria's COVID-19 experience.

Empirical studies conducted within the state have documented public knowledge, attitudes, and practices regarding COVID-19, indicating mixed perceptions and varying levels of compliance with preventive guidelines (Ibrahim, Azaka, & Balogun, 2023). Furthermore, recent studies on COVID-19 vaccination in Kogi State reveal that attitudes toward vaccination and actual uptake are influenced by perceived risk, perceived benefits, social norms, and access constraints (Adeyeye, 2024; RSI International, 2024). However, these studies are largely statewide or urban-biased and do not sufficiently disaggregate findings to reflect the lived realities of rural populations.

The lack of rural disaggregated data for Kogi East, absence of empirical testing of attitude-practice linkage in rural Nigeria, or policy failure due to rural specific barriers is particularly concerning because rural communities may serve as silent reservoirs for disease transmission due to delayed health seeking behaviour, limited testing, and underreporting of cases (Nigeria Centre for Disease Control [NCDC], 2022). It is against this backdrop that this study seek to examine the attitudes and practices towards COVID-19 Pandemic among rural residents in Selected LGA in Kogi East Senatorial District. Nigeria.

Objectives of the Study

i. Examine the attitude of rural dwellers toward information during COVID-19 pandemic in Kogi East Senatorial District.

ii Assess the preventive practices adopted by rural dwellers in response to the COVID-19 pandemic in Kogi East Senatorial District.

© IIJP 2026 | Volume 2, Issue 1, pp. 359-372 | ISSN: 2636-4484

iii. Determine the relationship between attitude toward COVID-19 and preventive practices among rural dwellers in Kogi East Senatorial District.

Conceptual Review

COVID-19

COVID-19 is an infectious respiratory disease caused by SARS-CoV-2, formally characterized as a pandemic on 11 March 2020 due to its rapid global spread and severity (WHO, 2020). Control strategies relied heavily on (i) non-pharmaceutical interventions (hand hygiene, face masks, physical distancing, reduced gatherings) and (ii) later vaccination, making community behaviour central to outcomes (WHO, 2020; NCDC, 2020).

Attitude (toward COVID-19)

In this study, attitude refers to a rural dweller's evaluative and perceptual orientation toward COVID-19 and its control measures. It typically includes; Risk perception (perceived susceptibility and severity) Trust in health authorities and information sources, Beliefs about causes/transmission (including misinformation), Perceived effectiveness of preventive measures and vaccines. Kogi based evidence has shown that attitudes can be mixed people may express optimism about control, yet show limited trust in government handling or skepticism in specific contexts (Ibrahim, Azaka, & Balogun, 2023).

Practices (COVID-19 preventive practices)

Practices are the observable behaviours adopted to reduce COVID-19 transmission and consequences. Common indicators include; Regular hand washing/anitizer use, Wearing face masks in public, Physical distancing/avoiding crowds, Compliance with public health advisories, COVID-19 testing when symptomatic/exposed (where accessible), Vaccine uptake (as a key "practice" in later phases), KAP studies in Nigeria and Kogi State commonly operationalize practice using these indicators (Reuben et al., 2020; Ibrahim et al., 2021).

Rural dwellers

Rural dwellers are residents of non-urban settlements characterized by: Limited access to formal health services and health workers, lower exposure to validated health information channels, dependence on informal networks (traditional/religious leaders, peer groups), structural constraints (water/sanitation, transport, cost barriers). These factors shape both attitude formation and feasibility of practices; hence, rural settings often show different behavioural outcomes compared to urban areas (Ojo et al., 2023).

Attitude toward COVID-19

Several empirical studies have examined public attitudes toward COVID-19 in Nigeria, with findings indicating that attitudes toward the pandemic vary significantly across populations and geographical locations. In a cross sectional study conducted in Kogi State, Ibrahim, Azaka, and Balogun (2023) assessed public knowledge, attitudes, and practices toward COVID-19 and reported that although awareness was generally high, attitudes toward the disease and government control measures were mixed. The authors observed that trust in information sources and perception of disease severity influenced respondents' attitudes toward COVID-19.

Similarly, Ibrahim et al. (2021) examined residents' attitudes toward COVID-19 in Kogi State and found that attitudes were shaped by perceived susceptibility to infection and belief in the effectiveness of preventive measures. The study emphasized that attitude plays a critical role in determining how individuals respond to public health directives.

At the regional level, Reuben et al. (2021) investigated knowledge, attitudes, and practices toward COVID-19 in North-Central Nigeria and found that respondents' attitudes varied significantly, with some perceiving COVID-19 as a serious health threat while others exhibited

skepticism. The study concluded that negative attitudes could undermine compliance with preventive measures.

In another Nigerian study, Habib et al. (2021) reported that attitudes toward COVID-19 in Northern Nigeria were influenced by cultural beliefs, misinformation, and perceived personal risk. These findings suggest that attitudes toward COVID-19 are context-specific and may be particularly complex in rural settings where informal information sources dominate.

Preventive Practices toward COVID-19

Evidence indicates that adoption of COVID-19 preventive practices varies across Nigeria, especially between urban and rural populations. Ibrahim et al. (2021) assessed preventive practices among residents of Kogi State and found varying levels of compliance with recommended measures such as hand hygiene, face mask use, and avoidance of crowded places. The study noted that while some respondents practiced preventive measures consistently, others did so irregularly.

Focusing on rural populations, Akwaowo et al. (2021) examined knowledge, attitudes, perceptions, and practices toward COVID-19 among rural dwellers in Akwa Ibom State. The study revealed that preventive practices were generally low, particularly regarding consistent mask use and physical distancing, largely due to limited access to resources and prevailing misconceptions about the disease.

Similarly, Ekpin et al. (2021) reported inconsistent adoption of COVID-19 preventive practices among rural dwellers in southern Nigeria. In another study, Ibrahim (2025) Review the effects of COVID-19 Pandemic on academic Activities in tertiary Institutions in Nigeria, revealed that the directives of government for the universities to switch to online or virtual teaching were not implemented by the majority of public universities in Nigeria. The authors attributed poor practices to low risk perception, lack of basic sanitation facilities, and dependence on informal sources of information.

With the introduction of COVID-19 vaccines, vaccination uptake emerged as a critical preventive practice. In Kogi State, Adeyeye (2024) examined determinants of COVID-19 vaccine acceptance and found that uptake was influenced by perceived benefits, perceived barriers, and confidence in vaccine safety. The study reported that rural residents were less likely to be vaccinated due to access challenges and vaccine hesitancy.

Relationship between Attitude and Preventive Practices

Studies have established a significant relationship between attitude toward COVID-19 and preventive practices. Reuben et al. (2021) demonstrated that respondents with positive attitudes toward COVID-19 control measures were more likely to engage in preventive behaviours such as regular hand washing and mask use. The study provided statistical evidence that attitude significantly predicted preventive practices.

In another study, Habib et al. (2021) similarly found that favourable attitudes toward COVID-19 were associated with higher levels of compliance with public health guidelines. The authors concluded that attitude serves as an important behavioural determinant in pandemic control.

In a rural focused study, Akwaowo et al. (2021) reported that rural dwellers who perceived COVID-19 as a serious health threat were more likely to adopt preventive practices compared to those with negative or indifferent attitudes. This finding underscores the importance of attitude in shaping behaviour in rural communities.

Furthermore, Adeyeye (2024) established a significant relationship between attitudes toward COVID-19 vaccination and vaccine uptake among adults in Kogi State, confirming that attitudes translate into preventive action when barriers are minimized.

© IIJP 2026 | Volume 2, Issue 1, pp. 359-372 | ISSN: 2636-4484

Theoretical Framework

Health Belief Model (HBM)

The Health Belief Model (HBM) was developed in the 1950s by Godfrey M. Hochbaum, Irwin M. Rosenstock, and Stephen Kegels, social psychologists working with the United States Public Health Service. The model was later expanded by Marshall H. Becker, who introduced the concept of self-efficacy to explain individuals' confidence in performing health-related actions.

HBM posits that individuals are more likely to adopt health-protective behaviours when they perceive themselves as susceptible to a health threat, believe the threat has serious consequences, perceive clear benefits in taking preventive action, and perceive minimal barriers to action. The key constructs of the model include perceived susceptibility, perceived severity, perceived benefits, perceived barriers, cues to action, and self-efficacy.

In the context of this study, the Health Belief Model explains how rural dwellers' perceptions of their vulnerability to COVID-19, beliefs about the seriousness of the disease, perceived effectiveness of preventive measures (such as mask use, hand hygiene, and vaccination), and perceived barriers (such as poor access to health facilities, misinformation, or distrust of authorities) shape their attitudes toward COVID-19 and ultimately influence their preventive practices. The model is particularly relevant to rural Kogi East, where structural and informational barriers may weaken the translation of awareness into action.

Theory of Planned Behaviour (TPB)

The Theory of Planned Behaviour (TPB) was proposed by Icek Ajzen in 1985 as an extension of the Theory of Reasoned Action, which he developed in collaboration with Martin Fishbein. TPB explains human behaviour as a function of behavioural intention, which is influenced by attitude toward the behaviour, subjective norms, and perceived behavioural control.

According to TPB, individuals are more likely to perform a behaviour when they hold a positive attitude toward it, believe that significant others (such as family members, community leaders, and religious authorities) approve of the behaviour, and feel capable of performing it despite existing constraints. Perceived behavioural control also has a direct influence on behaviour, particularly in contexts where access and resources are limited.

In this study, TPB provides a useful framework for understanding how social norms within rural communities, including expectations from community leaders and peers, and perceived control over preventive actions (such as availability of water for hand washing or access to vaccination centres) influence rural dwellers' intention to practice COVID-19 preventive behaviours and their actual practices. This theory is especially suitable for rural settings where collective norms and structural constraints strongly shape individual behaviour.

Relevance of the Theories to the Study

The integration of the Health Belief Model and the Theory of Planned Behaviour offers a comprehensive explanation of COVID-19 related behaviour among rural dwellers. While HBM emphasizes individual perceptions of risk and benefits, TPB captures the role of social influence and perceived control in shaping behaviour. Together, these theories provide a robust analytical lens for examining the attitudes of rural dwellers toward COVID-19 and how these attitudes translate into preventive practices in Kogi East Senatorial District.

Methodology

The study was conducted in three selected Local Government Areas (LGAs) in Kogi East Senatorial District, namely Dekina, Ankpa, and Idah Local Government Areas. These LGAs were selected because they represent major population concentrations within Kogi East and consist largely of rural communities, making them suitable for examining rural dwellers' attitudes and

practices toward the COVID-19 pandemic. The study adopted a survey research design. This design was considered appropriate because it allows for the systematic collection of primary data from a large population and enables the measurement of attitudes and self-reported practices related to COVID-19 among rural dwellers at a specific point in time. A multistage sampling technique was employed in selecting respondents for the study. In the first stage, the three LGAs were purposively selected from Kogi East Senatorial District. In the second stage, wards within each selected LGA were chosen using a balloting method to ensure randomness. In the third stage, communities within the selected wards were purposively selected based on their rural characteristics. Finally, respondents were selected from the communities using simple random sampling. The population of the study comprised all rural dwellers in the selected LGAs. According to the 2006 National Population Census, Ankpa LGA has a population of 266,176, Dekina LGA has 260,968, and Idah LGA has 79,755, giving a total population of 606,899. Recent estimates put the population at 2,255,476 in 2021, with projections of 2,514,256 by 2026 (Yaro et al., 2020). A sample size of 422 respondents was determined using the Krejcie and Morgan Table for sample size determination. The sample was proportionately allocated to reflect the population size of each LGA. Accordingly, 185 respondents were selected from Ankpa LGA, 182 respondents from Dekina LGA, and 55 respondents from Idah LGA, making a total of 422 respondents.

Data for the study were collected using questionnaire and in-depth interview instruments. The questionnaire was structured and designed to elicit information on respondents' socio-demographic characteristics, attitudes toward COVID-19, and preventive practices adopted during the pandemic. Although, out of the 422 questionnaires distributed, 398 were duly completed and returned, representing a response rate of 94.3%. The 24 unreturned questionnaires were likely due to respondents' unavailability, time constraints, or loss of questionnaires. The in-depth interview was used to obtain qualitative information that provided deeper insights into perceptions, beliefs, and contextual factors influencing attitudes and practices among rural dwellers. Data collected through in-depth interviews were sorted, transcribed, and analyzed thematically, with responses reported verbatim where necessary to support quantitative findings. Data obtained from the questionnaires were coded and analyzed using descriptive statistics, including frequencies and percentages, to summarize respondents' attitudes and practices toward COVID-19. Data collected were subjected to analysis with the use of Cronbach's Alpha reliability coefficient test and Exploratory Factor Analysis as well as Pearson Product Moment correlation of inter-item.

Results

Table 4.1: Socio-Demographic Characteristics of Respondents (N=398)

Variables	Category	Frequency (N=398)	Percentage (%)	Total
Age (in years)	18–28	20	5.0	
	29–38	61	15.3	
	39–48	87	21.9	
	49–58	190	47.7	
	59 and above	40	10.1	100
Sex	Male	256	64.3	
	Female	142	35.7	100
Marital Status	Single	65	16.3	
	Married	296	74.4	
	Separated	10	2.5	
	Divorced	11	2.8	
	Widow/Widower	16	4.0	100
Religion	Islam	215	54.0	
	Christianity	171	43.0	
	Traditional	12	3.0	100
Ethnic Group	Igala	252	63.3	
	Yoruba	83	20.9	
	Egbira	35	8.8	
	Bassa	9	2.3	
	Others	19	4.8	100
Educational Attainment	No formal education	34	8.5	
	Primary education	51	12.8	
	Secondary education	95	23.9	
	Tertiary education	197	49.5	
	Others	21	5.3	100
Occupation	Fishing/Farming	32	8.0	
	Civil service	25	6.3	
	Trading	203	51.0	
	Artisan	81	20.4	
	Others	57	14.3	100

Source: Field Survey (2024).

The results show that participants span the age range of 18 years and above. Twenty respondents (5.0%) are between 18-28 years, 61 respondents (15.3%) fall within 29-38 years, while 87 respondents (21.9%) are within 39-48 years. The majority of respondents are within the age bracket of 49-58 years (47.7%), while 40 respondents (10.1%) are 59 years and above. This age distribution indicates that most respondents are within the economically productive age group, which suggests that they were likely to have direct experiences of how COVID-19 affected work activities, household stability, and daily life.

In terms of sex distribution, there were more males (64.3%) than females (35.7%) among the respondents. This may reflect rural participation patterns where men are more available for community surveys or are more frequently recognized as household representatives. Gender is relevant to COVID-19 attitudes and practices because exposure patterns and social roles can influence compliance with preventive measures, especially in rural communities where men often engage more in external economic activities.

Regarding marital status, the majority of respondents were married (74.4%), while single respondents accounted for 16.3%. Respondents who were separated (2.5%), divorced (2.8%), and widowed (4.0%) constituted smaller proportions. This high proportion of married respondents implies substantial household responsibilities, which may have shaped attitudes toward COVID-19 risk and the willingness to adopt preventive practices to protect family members.

The religious composition indicates that Islam (54.0%) was the most reported religion among respondents, followed by Christianity (43.0%), while traditional religion (3.0%) constituted the least. Religious identity is important because religious teachings, faith-based messaging, and gathering patterns may influence perception of COVID-19 and compliance with public health directives.

Findings on ethnicity show that a high proportion of respondents were Igala (63.3%), followed by Yoruba (20.9%), Egbira (8.8%), Bassa (2.3%), and other ethnic groups (4.8%). The dominance of Igala respondents reflects the indigenous population structure of Kogi East and provides cultural context for interpreting community attitudes and practices toward COVID-19.

The educational profile reveals that 49.5% of respondents had tertiary education, while 23.9% had secondary education. Those with primary education constituted 12.8%, while 8.5% had no formal education, and 5.3% fell into other categories. The relatively high level of tertiary education could be based on the fact that tertiary institution is located in the study area, and suggests that many respondents were capable of understanding health information and could make informed contributions regarding COVID-19 related attitudes and practices.

In terms of occupation, more than half of the respondents (51.0%) were engaged in trading, followed by artisans (20.4%), fishing/farming (8.0%), civil service (6.3%), and other occupations (14.3%). This occupational distribution reflects the economic structure of the study area and suggests frequent social interactions (especially among traders and artisans), which may affect adherence to preventive measures.

© IIJP 2026 | Volume 2, Issue 1, pp. 359-372 | ISSN: 2636-4484

Table 4.2: Attitude of Rural Dwellers toward COVID-19 Pandemic (N=398)

Attitudinal Statements	Category	Frequency	Percentage (%)	Total
COVID-19 is a real disease	Agree	364	91.5	
	Disagree	34	8.5	100
COVID-19 can infect anyone	Agree	372	93.5	
	Disagree	26	6.5	100
COVID-19 is a serious health threat	Agree	349	87.7	
	Disagree	49	12.3	100
Fear of contracting COVID-19	Yes	311	78.1	
	No	87	21.9	100
Trust in government handling of COVID-19	Yes	198	49.7	
	No	200	50.3	100
Belief in effectiveness of preventive measures	Yes	361	90.7	
	No	37	9.3	100

Source: Field Survey (2024)

Table 4.2 presents the attitude of rural dwellers toward the COVID-19 pandemic in Kogi East Senatorial District. The results show that a very high proportion of respondents demonstrated awareness and acceptance of the reality of COVID-19. Specifically, 91.5% of the respondents agreed that COVID-19 is a real disease, while 93.5% believed that anyone could be infected, indicating a high level of perceived susceptibility.

Furthermore, 87.7% of respondents perceived COVID-19 as a serious health threat, while 78.1% expressed fear of contracting the disease. This suggests a generally cautious and concerned attitude toward the pandemic among rural dwellers. Such perceptions are important because fear and risk awareness often motivate individuals to adopt preventive behaviours. . This was in tandem with this participant who says;

> For me, I believe it is real, there's no lie about it, it was real, I don't believe what some people are saying that it was fake, to me personally it was real, in short, I was shocked when I heard of the outbreak, but thank God it has come and gone.

(IDI 7/Female/49years/Community member/Igalaogba, Idah/2024).

With this statement from this participant it is obvious that the position of the people in the study areas differs from the stands of those who belief in the none-existence of the disease.

However, respondents' trust in government handling of COVID-19 was divided. While 49.7% expressed trust in government response, a slightly higher proportion (50.3%) indicated distrust. This mixed perception reflects uncertainty and skepticism that may influence compliance with official guidelines.

Despite this skepticism, belief in the effectiveness of preventive measures remained high, with 90.7% of respondents agreeing that measures such as hand washing, face mask use, and social distancing are effective. Overall, the findings indicate that rural dwellers in Kogi East possessed largely positive attitudes toward COVID-19, though institutional trust was inconsistent.

Table 4.3: Preventive Practices Adopted by Rural Dwellers toward COVID-19 (N=398)

Preventive Practices	Category	Frequency	Percentage Total
Regular hand washing	Yes	341	85.7
	No	57	14.3 100
Use of face mask in public	Yes	362	91.0
	No	36	9.0 100
Use of hand sanitizer	Yes	287	72.1
	No	111	27.9 100
Maintaining physical distance	Yes	271	68.1
	No	127	31.9 100
Avoidance of crowded places	Yes	309	77.6
	No	89	22.4 100
Avoidance of social/religious gatherings	Yes	246	61.8
	No	152	38.2 100

Source: Field Survey (2024)

Table 4.3 shows the preventive practices adopted by rural dwellers in response to the COVID-19 pandemic. The findings indicate that most respondents adopted at least one recommended preventive practice during the pandemic.

The most commonly practiced measures were use of face masks in public (91.0%) and regular hand washing (85.7%), suggesting widespread acceptance of basic preventive guidelines. A substantial proportion also reported avoiding crowded places (77.6%) and using hand sanitizers (72.1%). This position is also similar to the statement by a participant who stated thus;

> I got a pack of face masks/gloves for me and family members during that period which we usually used when going out and we also made use of one locally made sanitizer too, honestly speaking we used to avoid going to public places as much as possible that time but if it becomes necessary I go myself since I know I will be more careful than some of them. ***(IDI 6/Male/63years/community head/Anyigba, Dekina/2024).***

The statement by the participant indicated how careful households were towards the COVID-19 Pandemic. However, practices that significantly disrupt social and economic routines recorded relatively lower compliance. Only 68.1% maintained physical distancing, while 61.8% avoided social or religious gatherings. This indicates that while awareness and willingness to comply existed, economic necessity, cultural norms, and social obligations limited full adherence, especially in rural settings where livelihoods depend on daily interpersonal interactions. Overall, the results suggest that preventive practices were selectively adopted, with respondents prioritizing measures that were easier to implement while struggling with those that conflicted with livelihood and social life.

Table 4.4: Simple Linear Regression Analysis Showing the Relationship between Attitude toward COVID-19 and Preventive Practices (N=398)

Model Variables	Beta (β)	Std. Error	t-value	Sig. (p-value)
(Constant)	1.284	0.192	6.688	0.000
Attitude toward COVID-19	0.462	0.064	7.184	0.000*

$R = 0.462$ $R^2 = 0.213$ Adjusted $R^2 = 0.211$
$F(1, 396) = 51.61$ $p < 0.05$

Source: Field Survey (2024)

The results indicate a positive and statistically significant relationship between attitude toward COVID-19 and preventive practices ($\beta=0.462$, $p < 0.05$). This implies that as respondents' attitudes toward COVID-19 become more positive characterized by higher perceived seriousness, fear of infection, and belief in the effectiveness of preventive measures the likelihood of adopting preventive practices increases significantly. The coefficient of determination ($R^2=0.213$) shows that approximately 21.3% of the variation in preventive practices among respondents is explained by their attitude toward COVID-19. This indicates that attitude is an important predictor of preventive behaviour, although other factors not included in the model may also influence practices. The F-statistic ($F=51.61$, $p < 0.05$) confirms that the regression model is statistically significant and suitable for explaining the relationship between the independent and dependent variables. This suggests that the observed relationship between attitude and preventive practices did not occur by chance.

The implication of this finding is that rural dwellers who perceived COVID-19 as a serious and real health threat, and who believed in the effectiveness of preventive measures, were more likely to engage in behaviours such as regular hand washing, use of face masks, avoidance of crowded places, and adherence to other preventive guidelines. Conversely, respondents who expressed skeptical or indifferent attitudes toward COVID-19 were less likely to consistently adopt preventive practices. This finding is further supported by qualitative evidence from the in-depth interviews. One respondent noted:

> Because I believed the sickness was dangerous, I made sure I followed the rules like wearing mask and washing my

> hands.**(IDI/Male/59 years/Community leader/Dekina/2024).**

Another participant stated:

> Those who said COVID-19 was not serious were the same people not following the rules.**(IDI 17/Female/46 years/Trader/Ankpa/2024).**

The statement by the participant indicated how careful households were towards the COVID-19 Pandemic. These statements reinforce the statistical result that attitude plays a critical role in shaping preventive behaviour among rural dwellers.

This study examined attitudes and preventive practices related to COVID-19 among rural dwellers in selected LGAs of Kogi East Senatorial District and assessed the relationship between attitude and preventive behaviour. Overall, the findings both support established behavioural theories and reveal context-specific dynamics shaped by the unique political and socio-economic realities of Kogi State.

Discussion of Findings

The finding of generally positive attitudes toward COVID-19 characterized by high perceived seriousness and susceptibility despite mixed trust in government response represents a notable anomaly that warrants critical engagement. In Kogi State, the state government publicly questioned the presence and severity of COVID-19 during the early stages of the pandemic. One might therefore expect low perceived risk among rural populations. However, respondents' recognition of COVID-19 as a real and dangerous disease suggests that personal experiences, informal information networks, and observations from neighbouring states outweighed official denial narratives. This finding aligns with the Health Belief Model, which emphasizes perceived susceptibility and severity as key drivers of health attitudes, and supports evidence from other parts of Northern Nigeria showing that rural populations may acknowledge disease risk even when institutional trust is weak (Reuben et al., 2021; Habib et al., 2021). In the Kogi context, this pattern reflects a political environment where state level messaging diverged from federal and global narratives, compelling individuals to rely on lived experience rather than formal authority.

The second major finding was that preventive practices were selectively adopted further illustrates how local economic and cultural realities shape behaviour. While hand washing and face mask use were relatively common, adherence to practices such as physical distancing was lower. This apparent inconsistency should not be interpreted as attitudinal failure. Rather, it reflects structural constraints typical of rural Kogi communities, including dependence on daily income, crowded market settings, communal living arrangements, and limited access to alternative livelihood options. Within the Health Belief Model, this pattern is best explained by high perceived benefits coexisting with strong perceived barriers. Similar findings across rural Nigeria indicate that awareness and willingness often coexist with practical inability to comply (Ekpin et al., 2021; Reuben et al., 2021). Thus, the results challenge deficit based interpretations of rural behaviour and instead highlight feasibility as the critical determinant of practice.

While, the third objectives revealed a statistically significant relationship between attitude and preventive practices provides further theoretical and empirical insight. Consistent with the Theory of Planned Behaviour, respondents with more favourable attitudes toward COVID-19 were more likely to engage in preventive behaviours. However, the strength of this relationship was moderated by socio-economic conditions, underscoring the role of perceived behavioural control. In the rural Kogi context, positive attitudes increased the likelihood of compliance only where practices were economically and socially manageable. This finding supports Nigerian studies

linking attitudes to preventive behaviour and vaccination uptake (Habib et al., 2021; Ibrahim et al., 2021), while also illustrating the limits of attitudinal change in structurally constrained environments.

Several methodological limitations should be acknowledged. First, the cross sectional design limits causal inference between attitudes and practices. Second, reliance on self-reported data may have introduced social desirability bias, particularly for widely promoted behaviours such as hand washing. Third, the absence of an urban comparison group restricts the ability to attribute observed patterns exclusively to rurality. Finally, the study did not directly measure exposure to political messaging, which could have further clarified the influence of state-level denial on attitudes. These limitations suggest caution in generalizing the findings beyond similar rural contexts.

Despite these constraints, the study provides important insights into how health attitudes and behaviours are negotiated within politically contested and economically constrained settings. By situating behavioural responses within the local realities of Kogi State, the findings underscore the need for public health strategies that go beyond awareness creation to address structural and contextual barriers to compliance.

Conclusion

This study demonstrates that rural dwellers in Kogi East Senatorial District maintained generally positive attitudes toward COVID-19 despite mixed trust in government narratives, illustrating that personal risk perception and lived experience can outweigh institutional skepticism. Preventive practices were selectively adopted: behaviours such as hand washing and face mask use were more feasible, whereas measures disrupting livelihoods or social routines were less consistently observed, highlighting the structural and socio-economic constraints characteristic of rural Kogi communities. The significant association between attitude and preventive behaviour supports behavioural theories while emphasizing that compliance depends on both willingness and practical feasibility. These findings underscore the importance of context sensitive public health strategies that combine risk communication with structural support to enable sustained preventive behaviour in rural, resource limited settings.

Recommendations

Based on the findings of the study, the following recommendations were made:

i. Government should redesign rural markets and communal spaces to support physical distancing. Local authorities should restructure market layouts, stagger market days, and manage crowd flow to make distancing feasible without disrupting livelihoods.

ii. Government should also Prioritized feasible, high adoption preventive measures Hand washing and face mask use were consistently adopted. Public health programs should focus on sustaining these behaviours through provision of hand-washing stations, affordable masks, and community-led demonstrations.

iii. Government and Non-governmental Organization should integrate livelihood sensitive support into rural health strategies. Pandemic interventions should include flexible work arrangements, temporary market support, or conditional relief to reduce barriers to adherence.

iv. Government and Non-governmental Organization should leverage trusted community structures for health communication. Health messaging should be delivered through community leaders, religious institutions, and local volunteers to ensure uptake.

References

Adeyeye, O. S. (2024). Determinants of COVID-19 vaccine acceptance among adults in Kogi State, Nigeria. *Texila International Journal of Public Health*. 12(3): 45-58. DOI:10.21522/TIJPH.2013.12.03.Art018

Ajzen, I. (1991). The theory of planned behavior. Organizational Behavior and Human Decision Processes, 50(2), 179-211. https://doi.org/10.1016/0749-5978(91)90020-T (Foundational TPB reference; mandatory for theory credibility)

Akwaowo, C. D., et al. (2021). Knowledge, attitude, perception and practices towards COVID-19 among rural dwellers in Akwa Ibom State, Nigeria. *Ibom Medical Journal*, 14(3), 343-360.

Ekpin, V. I., et al. (2021). Knowledge, attitude, perception and practices towards COVID-19 among rural dwellers in southern Nigeria. *Ibom Medical Journal*. 3(14): 343-360.

Glanz, K., Rimer, B. K., & Viswanath, K. (2015). Health behavior: Theory, research, and practice (5thed.). Jossey Bass. (Gold-standard behavioural health textbook) (Official Nigerian public-health authority)

Habib, M. A., Dayyab, F. M., Iliyasu, G., & Habib, A. G. (2021). Knowledge, attitude and practice survey of COVID-19 pandemic in Northern Nigeria. PLOS ONE, 16(2), e0245176.

Ibrahim, L., Azaka, L., & Balogun, S. K. (2023). Public knowledge, attitudes and practices towards COVID-19 in Kogi State, Nigeria. *ESUT Journal of Social Sciences & Humanities*. 8(1): 177-189.

Ibrahim, R., Kabir, Z. O., Yahaya, I. A., et al. (2021). Knowledge, attitude and preventive practices towards COVID-19 among residents of Kogi State. *Journal of Advances in Medicine and Medical Research.* 33(1): 36-46.

Ibrahim, Y.B. (2025) A Theoretical Review of the Effects of COVID-19 Pandemic on Academic Activities in Tertiary Institutions in Nigeria. *West African Journal of Interdisciplinary Research*. 3(1), 1-12. DOI: 10.5281/zenodo.14599920

Nigeria Centre for Disease Control (NCDC). (2020–2022). COVID-19 situation reports and public health advisories. Abuja: NCDC. https://ncdc.gov.ng

Ojo, T. O., Ojo, A. O., Ojo, O. E., Akinwalere, B. O., & Akinwumi, A. F. (2023). Determinants of COVID-19 vaccine uptake among Nigerians: Evidence from a cross-sectional national survey. *Archives of Public Health, 81*, 95. https://doi.org/10.1186/s13690-023-01107-1

Reuben, R. C., et al. (2021). Knowledge, attitudes and practices towards COVID-19 in North-Central Nigeria. *Journal of Community Health*. (46): 457-470.

Rosenstock, I. M., Strecher, V. J., & Becker, M. H. (1988). Social learning theory and the Health Belief Model. Health Education Quarterly, 15(2), 175-183. https://doi.org/10.1177/109019818801500203 (Classic HBM reference; widely accepted)

World Health Organization (WHO). (2020). Coronavirus disease (COVID-19): Situation reports and public health guidance. World Health Organization. https://www.who.int (Authoritative global public-health source)

Yaro, C.A., Ezekiel, K., Luka, S.A., & Kabir, J. (2020) School based Cross sectional Survey on Soil transmitted Helminths in Rural Schools of Kogi East, Nigeria. Dr. Suleiman Al Habib *Medical Journal*. Vol.2(1)10-19.