

## **Influence of Radio Jingles on Knowledge and Perception of COVID-19 Preventive Measures among Residents of Imo State, Nigeria**

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### **Abstract**

In the wake of the outbreak of the COVID-19 pandemic, intensive public health information via the mass media was one of the tools employed by governments, health agencies and non-governmental organizations (NGOs) to persuade the public to adopt preventive measures which had been proven effective in preventing the spread of the deadly virus. This study investigated the influence radio jingles on Imo State residents' knowledge and perception of the COVID-19 preventive measures. Data were collected with a structured questionnaire from 266 respondents, while bivariate analysis was used to explain exposure to, knowledge, and perception of Imo state residents' towards COVID-19 radio jingles. Results indicated that Imo state residents were exposed to COVID-19 radio jingles in several languages with English as the most used; although a good number agreed that the use of Igbo language in the jingles was very helpful in understanding the messages. There was a significant relationship between age and how regularly the respondents listened to radio ( $\chi^2 = 27.231$ ;  $p < .01$ ) while the Chi-square result (22.73,  $p < .01$ ) showed that there was a statistically significant relationship between age and understanding of radio messages/jingles on Covid-19. However, such relationship was not sustained in the aspect of believing the messages/jingles they heard.

**Key words:** COVID-19, Radio Jingles, Preventive Measures, Imo State, Knowledge, Perception

### **Introduction**

The novel coronavirus 2019 (COVID-19) which was declared a pandemic by the World Health Organisation (WHO, 2020) on December 11, 2020 seriously affected global health and economy. In the absence of both drugs and vaccines (at the beginning of the pandemic), control depended on adherence to a number of non-pharmaceutical measures such as physical distancing, wearing of face masks, regular hand washing with soap, use of hand sanitizers which had been certified effective in preventing infections (Gray et al, 2020), since the cooperation and compliance of the population was needed to ensure success of the preventive measures (Kaso et al, 2021; Azlan et al, 2020), Governments and health organizations therefore, continue to rely on health communication, especially via the mass media, to persuade the population to adopt the non-pharmaceutical measures.

In times of health emergencies such as an epidemic, people usually depend on the mass media for knowledge and guidance (Anwar et al, 2020; Dhanashree et al, 2021). This makes the mass media essential and effective in public health communication (Wogu et al, 2019; Kigatiira, 2020; Center for Disease Control, 2017). Therefore, amidst the confusion and anxiety that attended the outbreak of COVID-19 (Mbachu et al, 2020; Bener and Al-Khal, 2004; Liu and Liu, 2020), the public continues to depend on the mass media and interpersonal communication to make sense of the strange disease and how to protect themselves and their families.

Many studies have indicated widespread use of both mainstream and social media for the dissemination of COVID-19 health information ((Papagiannis et al, 2020; Kigatiira, 2020; Serwaa, et al, 2020; Mahmood et al, 2020). In Nigeria, as in many developing countries, radio is a medium of choice in disseminating public health information. Though a study in Nigeria (Ngonso and Chukwu, 2021) found radio to be less effective in public health communication as a result of the decreasing number of people who use it, the general consensus is that radio remains an important medium for health and other

information (Hugelius et al, 2019; Santos and Brazil, 2020; Ephraim, 2020). Its advantages include cost effectiveness, reach, ability to overcome the limitations of illiteracy and poor infrastructure such as electricity (Olajide et al, 2022; Hugelius et al, 2019).

Radio health messages often come in the form of jingles. Jingles are mostly slogans, short messages or information, usually not spoken, but produced with interesting musicals to leave lasting impression on people (Degboro & Dokunmu, 2022). They belong to the electronic media advertising and have been found out to be particularly effective in persuading people to behave in specified way as indicated in an advertisement. Its success lies in the fact that it combines such elements like music, rhymes, repetition, among others (Stanley, 2020). Radio jingles are utilized in health risk communication to improve knowledge of people who may be at risk of a particular health hazard and persuading them to adopt favourable attitude and behaviours that underline prevention and effective management of infectious diseases (Ben-Enukora, et. al., 2021). Overall, the literature shows the social media, television and radio as important sources of COVID-19 information (Babafunke et al, 2022; Okon et al, 2021).

**Objectives: The objectives of the study are to:**

1. Determine the extent to which Imo State residents are exposed to radio jingles on COVID-19.
2. Assess Imo State residents' knowledge of COVID-19 and its preventive measures.
3. Ascertain Imo State residents' perception of COVID-19 and its preventive measures.

**Research Hypotheses**

**H<sub>1</sub>:** There is a significant difference in peoples' exposure to COVID-19 radio jingles in Imo State

**H<sub>1</sub>:** There is a significant difference in peoples' knowledge of COVID-19 radio jingles in Imo State

**H<sub>1</sub>:** There is a significant difference in peoples' perception of COVID-19 radio jingles in Imo State.

**Empirical Review**

In public health emergencies, the mass media can be utilized to create awareness about diseases and the associated risk factors, boost knowledge and influence behaviour change. The literature is rich with empirical evidence of the effectiveness of radio as an important source of health information. In Nigeria, radio is one of the country's leading media channels, with a capacity to reach tens of millions daily (Philip, 2020), as exposure to effective programmes has been associated with increases in knowledge about programme topics, attitude change, and self-efficacious perceptions (Farr et al, 2005). Manyanga et al (2021) found that radio was an important source of information on Ebola Virus Disease in Tanzania. Patil et al (2019) equally found that in India where 96 percent of the population is reached by radio, the medium was effective in not only raising awareness and knowledge of tuberculosis but was also successful in influencing positive behaviour change. In another study in Uganda, Ahimbisibwe et al (2020) found that a great majority of respondents identified radio as their source of exposure to health messages on malaria.

Public knowledge of diseases is essential in disease control as poor knowledge can result in low risk perception which can hamper disease control efforts. Exposure to, and consumption of information during epidemic outbreaks may alter peoples' risk perception and trigger behavioural changes, which can ultimately affect the evolution of the disease (Gozzi, et. al., 2020). While perception cannot be equated with actual health behaviour, it triggers decisions about the acceptability, and exert critical influence on health behaviour before, during and after health emergencies (Rohrmann, 2008). Health communication can positively affect risk perception of diseases which is essential for disease control (Okon et al 2021).

Perception of diseases refers to a set of beliefs about a disease or illness including the cause of the disease, symptoms, consequences of the disease, how long it will last, and how it is controlled and cured (Katavic et al, 2015). Rohrmann (2008) define risk perception as people's judgments and evaluations of hazards they or their facilities, or environments are or might be exposed to. Perceptions of diseases are influenced by personal experiences of illnesses and treatments, observing others and through communication from close-ones, healthcare providers and the mass media (Grauman et al, 2022). This fact is corroborated by Decker et al (2012) who aver that mass media coverage of the risks of disease can enable individuals to understand a health issue better and warn them about the associated risks in addition to preventive actions they can take. In a study in Pakistan, Mahmood et al (2021) found that social media messages were linked to perceived threat and self-efficacy which were associated with COVID-19 preventive behaviour. Similarly, Xu (2021) found that obtaining information from unofficial communication channels heightened people's perceived risk of contracting COVID-19. This finding is consistent with other studies in Nigeria and Japan (Erubami et al, 2021; Adachi, 2022) which found a positive association between exposure to COVID-19 information through the social media and increased risk perception.

Radio messages have been found effective as health information sources as well as being linked with behaviour change. Lee et al (2011) examined the effectiveness of radio as health information source. They found that a health education radio show successfully increased knowledge levels and individuals' intention to positively modify health behaviours. Similarly, Ahimbisibwe et al (2020) in Uganda found the radio effective in raising knowledge about malaria and other health issues but also positively influenced behaviour change. Nwachukwu and Ajaero (2020) equally found that the mass media were correlated with decreased odds of mixing drugs for malaria treatment with radio as the dominant source of information. In another study in Rivers State, Nigeria, Anyanwu and Ikpegbu (2022) found that the BBC *Nebor My Nebor* Radio drama programme has had positive impact on the respondents' knowledge of diarrhoea and influenced adoption of the preventive practices.

Radio has equally been used extensively in the COVID-19 media campaigns with good results. In studies in Nigeria radio messages were reported to have influenced knowledge of COVID-19 and health behaviour modifications in favour of the promoted preventive measures ( Talabi et al, 2022; Olajide et al, 2022). A number of studies have been conducted to specifically ascertain the influence of radio jingles on the adoption and adherence to preventive measures with regard to infectious diseases. Some of these studies specifically looked at the language of these jingles, like Yoruba (Ben-Enukora, et.al., 2021; Degboro & Dokunmu, 2022) and Pidgin English (Idowu, n.d). Furthermore, other studies on radio jingles and campaigns include analysis of environmental radio jingles (Ojebode, 2005), impact of jingles among rural dwellers (Stanley, 2020) and HIV/AIDs (Schroeder, 2016). These studies found that radio jingles are an effective means of communicating health related risks but they differ as to its impact on people's perception, attitude and behaviour. A good number of these studies were conducted in the South-West and South-South but little study has been conducted on the influence of COVID-19 radio jingles on knowledge, perception and adoption of COVID-19 preventive measures in Imo State, Southeast Nigeria.

### **Theoretical Framework**

The study is anchored on the Health Belief Model which was developed by Geoffrey Hochbaum in the 1950's with additional work done by other scholars such as Becker, Haefner and Maiman in 1977. The Health Belief Model is founded on the assumption that there are two fundamental components of health behaviour. The first is people's need to avoid illness and where it occurs, to get well. The second component is the belief that adopting a specific health action will either help to prevent illness or treat it (LaMort, 2019).

The HBM has six constructs which explain why individuals despite being exposed to the same health information behave differently. Some people for example may decide not to take positive action to protect themselves against infection after being exposed to information about the severity of a specific disease and how to prevent it. The six constructs include:

1. How individuals perceive the threat posed by the disease (perceived susceptibility).
2. Beliefs about the consequence of the disease (perceived severity).
3. Beliefs about the potential benefits of taking the promoted health action (perceived benefits).
4. Perceived barriers to the promoted health action.
5. Exposure to factors that prompt action such as information from a physician or the mass media (cues to action).
6. One's confidence in one's ability to carry out the required health action (perceived self-efficacy) (LaMorte, 2019; National Cancer Institute, 2005).

The HBM offers an appropriate framework to explain respondents' exposure, knowledge and perception of the risk factors associated with COVID-19 and their willingness to adopt the recommended preventive measures.

## **Methodology**

The study which employed the survey research method used a sample size of 300 respondents. The sample size was arrived at by means of Comrey and Lee's 1992 formula (cited in Wimmer & Dominick, 2011, p. 103) which states that 50 = very poor; 100 = poor; 200 = fair; 300 = good; 500 = very good; 1,000 = excellent. The study was conducted across six towns in Imo State. To select the respondents, one Local Government Area was selected by simple random sampling from each Senatorial District of Imo State. From each Local Government Area, two electoral wards were selected by simple random sampling from the Independent National Electoral Commission (INEC) list of electoral wards. From Imo East Senatorial District, Owerri Municipal Local Government Area was selected; Oru West L.G.A from Imo West, and Okigwe from Imo North Senatorial District. Simple random sampling was further used to select Aladinma 1 and Ikenegbu 11 wards from Owerri Municipal Local Government Area; Ibiasoegbe and Mgbidi 1 wards from Oru West Local Government Area, and Ihube and Umulolo wards from Okigwe Local Government Area. Finally, convenience sampling was used to administer 50 copies of the questionnaire to respondents in each of the selected six wards with the help of research assistants.

## **Results**

### **(i) Demographic Data of Respondents**

Data show that out of the 300 copies of the questionnaire shared, only 266 were recovered. Out of the 266 respondents, 112 (42.1%) were male while 154 (57.9%) were female. Across all age ranges, those less than 20 years were 50 (18.8%); 20-29 years were 149 (56%); 30-39 years were 23 (8.6%); 40-49 years were 18 (6.8%) and 50+ years were 26 (9.8%).

### **(ii) Respondents' Exposure to Radio Jingles on COVID-19**

The result as presented in Table 1 shows that almost all the respondents across the age difference are well aware of COVID-19 as they agreed to have heard about it. The medium they got this information from was mostly radio and television, as they emerged as the most used medium, with the radio as the most accessible medium except for those in age group <20 who agreed that television was their most preferred medium. As regards listenership, a good number of the respondents agree that they listen to their radio less than 3 hours a day, a few more than 3 hours while others agree that they always listen while at work

or home. Respondents also agreed that they are exposed to COVID-19 radio jingles in several languages with English as the most used. Although a good number agreed that the use of Igbo language in the jingles was very helpful in understanding the message.

**Table 1: Bivariate analysis on exposure to radio jingles**

	20 yrs	20-29 yrs	30-39 yrs	40-49 yrs	50+yrs	Chi square
<b>Variables</b>	Freq (%)	Freq (%)	Freq (%)	Freq (%)	Freq (%)	Freq (%)
<b>Have you heard of COVID-19 before?</b>						5.449
Yes	49 (98.0)	146(98.6)	23 (100)	17 (94.4)	24 (92.3)	
No	1 (2.00)	2 (1.4)	0 (0.00)	1 (5.60)	2 (7.70)	
<b>Through which medium did you become aware of COVID-19?</b>						61.339
Radio	7 (14.6)	43 (29.5)	15 (65.2)	9 (52.9)	14 (56.0)	
Television	17 (35.4)	50 (34.2)	5 (21.7)	7 (41.2)	7 (28.0)	
Market leaders	0 (0.00)	3 (2.10)	1 (4.30)	0 (0.00)	2 (8.00)	
Traditional rulers	0 (0.00)	1 (0.70)	0 (0.00)	1 (5.90)	0 (0.00)	
Radio and Television	15 (31.2)	31 (21.2)	2 (8.70)	0 (0.00)	2 (8.00)	
Radio, Television and Market leaders	3 (6.2)	2 (1.40)	0 (0.00)	0 (0.00)	0 (0.00)	
Television, neighbours, social media	0 (0.00)	1 (0.70)	0 (0.00)	0 (0.00)	0 (0.00)	
Social media	2 (4.02)	4 (2.7)	0 (0.00)	0 (0.00)	0 (0.00)	
Radio, TV, market leaders, village messenger/traditional rulers	1 (2.10)	1 (0.70)	0 (0.00)	0 (0.00)	0 (0.00)	
Radio, TV, Social media	2 (4.02)	3 (2.10)	0 (0.00)	0 (0.00)	0 (0.00)	
Radio, market leaders	1 (2.10)	1 (0.70)	0 (0.00)	0 (0.00)	0 (0.00)	
Radio, TV, Village Messenger/traditional rulers	0 (0.00)	3 (2.10)	0 (0.00)	0 (0.00)	0 (0.00)	
Gossip	0 (0.00)	1 (0.70)	0 (0.00)	0 (0.00)	0 (0.00)	
TV and market leaders	0 (0.00)	2 (1.40)	0 (0.00)	0 (0.00)	0 (0.00)	
<b>Which of these two audio-visual mass media is mostly accessible to you in your community?</b>						11.651*
Radio	21 (42.0)	84 (57.5)	18 (78.3)	11 (61.1)	19 (73.1)	
Television	29 (58.0)	62 (42.5)	5 (21.7)	7 (38.9)	7 (26.9)	
<b>If (radio)how often do you listen to it?</b>						27.231**
Less than one hour a day	18 (56.2)	58 (51.8)	3 (15.0)	3 (23.1)	5 (21.7)	
Up to 3 hours a day	4 (12.5)	22 (19.6)	5 (25.0)	2 (15.4)	11 (47.8)	

<b>Always listening while at work or home</b>	10 (31.2)	32 (28.6)	12 (60.0)	8 (61.5)	7 (30.4)	
<b>Have you been exposed to radio jingles on COVID-19 and safety measures?</b>						36.533**
<b>Yes</b>	38 (88.4)	107 (84.3)	8 (38.1)	8 (57.1)	10 (47.6)	
<b>No</b>	5 (11.6)	20 (15.7)	13 (61.9)	6 (42.9)	11 (52.4)	
<b>If yes, in which language was the message/jingles communicated?</b>						45.557**
<b>English</b>	28 (65.1)	73 (60.3)	8 (38.1)	4 (30.8)	8 (47.1)	
<b>Pidgin</b>	5 (11.6)	11 (9.10)	3 (14.3)	0 (0.00)	2 (11.8)	
<b>Igbo</b>	2 (4.70)	21 (17.4)	10 (47.6)	9 (69.2)	7 (41.2)	
<b>English, Pidgin, Igbo</b>	3 (7.00)	8 (6.60)	0 (0.00)	0 (0.00)	0 (0.00)	
<b>English and Igbo</b>	2 (4.70)	6 (5.00)	0 (0.00)	0 (0.00)	0 (0.00)	
<b>English, Pidgin</b>	3 (7.00)	2 (1.70)	0 (0.00)	0 (0.00)	0 (0.00)	
<b>If Igbo, how did the local language/dialect help you understand the message/jingles?</b>						6.423
<b>Very helpful</b>	17 (68.0)	69 (77.5)	16 (88.9)	10 (76.9)	14 (82.4)	
<b>Not helpful</b>	3 (12.0)	6 (6.70)	0 (0.00)	0 (0.00)	2 (11.8)	
<b>Not sure</b>	5 (20.0)	14 (15.7)	2 (11.1)	3 (23.1)	1 (5.90)	

In terms of accessibility of different audiovisuals, the findings show that respondents within the age of 30-39 years, indicated greater access to radio, followed by the oldest respondents category (50 years and above). But regarding access to television, younger respondents who were less than 20years, reported higher access at 58%. This disparity was further seen to be statistically significant ( $\chi^2 = 11.651$ ;  $p < .05$ ), which implies that there is a significant relationship between age and access to audio-visual mass media in the respective communities. Similarly, how regular the respondents who make use of radio as a channel of mass media, actually listens to it, was also found to differ by age. For example, among those that indicated radio as their most accessible mass media channel, respondents within 40-49years had the highest relative proportion of regular listeners (always listen while at work or home), compared to other age groups. But in terms of non-regular listeners (less than once a day), younger respondents who are less than 20years, had a greater relative percentage to that regard (56.2%). The difference was also statistically significant ( $\chi^2 = 27.231$ ;  $p < .01$ ); which infers that there is a significant relationship between age and how regular the respondents listen to radio.

### (iii) Knowledge of COVID-19 among Respondents

Data in Table 2 indicate that respondents across all age groups agreed that they understand the jingles on COVID-19 very well but a few agreed that they do not believe the message heard. As regards cure, few said there is a cure, a good number said no while others say that they are not sure. It is also apparent from the table that young people between ages 20-29 had the highest proportion of those who understood radio messages/jingles on Covid-19 (93.9%), followed by those between ages 30-39 (90.9%). Furthermore, the



Chi-square result (22.73,  $p < .01$ ) shows that there is a statistically significant relationship between age and understanding of radio messages/jingles on Covid-19. However, such relationship was not sustained in the aspect of believing the message/jingle they heard. Although majority of the respondents across all age groups believed the messages/jingles they heard about Covid-19, such believe is neither evenly distributed nor where the differences significant. This is because, the Chi-square result (4.785,  $p > .05$ ) shows that there is no statistically significant difference between the different age groups in terms of believing the messages/jingle they heard.

**Table 2: Bivariate analysis of respondents' knowledge of COVID-19**

	< 20 years	20-29 years	30-39 years	40-49 years	50+years	Chi Square
Variables	Freq(%)	Freq(%)	Freq(%)	Freq(%)	Freq(%)	
<b>Do you understand the radio messages/jingles on COVID-19 very well?</b>						22.73**
<b>Yes</b>	35 (85.4)	124 (93.9)	20 (90.9)	10 (66.7)	18 (69.2)	
<b>NO</b>	0 (0.00)	2 (1.5)	1 (4.50)	1 (6.70)	1 (3.80)	
<b>Not clear</b>	6 (14.6)	6 (4.50)	1 (4.50)	4 (26.7)	7 (26.9)	
<b>Do you believe the message/jingles you heard?</b>						4.785
<b>Yes</b>	29 (67.4)	89 (67.4)	16 (72.7)	9 (64.3)	19 (73.1)	
<b>No</b>	3 (7.00)	6 (4.50)	3 (13.6)	1 (7.0)	1 (3.80)	
<b>Not sure</b>	11 (25.6)	37 (28.0)	3 (13.6)	4 (28.6)	6 (23.1)	
<b>Does it have a cure yet?</b>						
<b>Yes</b>	6 (13.6)	32 (22.5)	5 (23.8)	4 (23.5)	6 (24.0)	
<b>No</b>	24 (54.5)	44 (31.0)	8 (38.1)	6 (35.3)	8 (32.0)	
<b>Not sure</b>	14 (31.8)	66 (46.5)	8 (38.1)	7 (41.2)	11 (44.0)	

#### (iv) Perception of COVID-19 among Respondents

The results in Table 3 show that a good number of respondents across the various age groups believe that COVID-19 is real, but the percentage of those who believe it exists in Nigeria were a little bit above average as some respondents believe that it does not exist in Nigeria despite the jingles they heard. However, almost all the respondents agree that everyone can be affected. The preventive measures like

the use of facemasks and attitude towards personal hygiene and environmental sanitation were adhered to by a great percentage of the respondents.

The results in Table 3 show that at least 80% of the respondents in all the age groups believed that COVID-19 is real. In addition, there are significant differences in the way populations of the different age groups wear face masks ( $\chi^2=25.188$ ;  $p=0.002$ ) and in whether they believe figures/reports of infected cases and Covid-19 related death cases at the national and state level ( $\chi^2=23.797$ ;  $p=0.002$ ).

**Table 3: Bivariate analysis of perception of respondents' towards COVID-19**

	20 years	20-29 years	30-39 years	40-49 years	50+ years	Chi Square
Variables	Freq(0%)	Freq(%)	Freq(%)	Freq(%)	Freq(%)	
<b>Do you believe that COVID-19 is real?</b>						<b>3.998</b>
Yes	39 (84.8)	119 (83.2)	19 (86.4)	14 (87.5)	23 (88.5)	
No	2 (4.30)	6 (4.20)	2 (9.10)	1 (6.20)	0 (0.00)	
Not sure	5 (10.9)	18 (12.6)	1 (4.50)	1 (6.20)	3 (11.5)	
<b>If yes, do you believe that it really exists in Nigeria?</b>						<b>10.956</b>
Yes	26 (57.8)	67 (48.9)	12 (54.5)	9 (60.0)	12 (57.1)	
No	16 (35.6)	55 (40.1)	8 (36.4)	4 (26.7)	3 (14.3)	
Not sure	3 (6.70)	15 (10.9)	2 (9.10)	2 (13.3)	6 (28.6)	
<b>Which class of society do you think are more likely to be infected by COVID-19?</b>						<b>30.308</b>
The rich and wealthy	6 (13.6)	22 (15.4)	0 (0.00)	2 (11.8)	2 (7.70)	
The poor and average	5 (11.4)	7 (4.90)	0 (0.00)	0 (0.00)	0 (0.00)	
Politicians	1 (2.3)	12 (8.40)	6 (27.3)	3 (17.6)	5 (19.2)	
Everybody	32 (72.7)	92(64.3)	15 (68.2)	12 (70.6)	18 (69.2)	
Nobody	0 (0.00)	4 (2.80)	1 (4.50)	0 (0.00)	1 (3.80)	
The rich and wealthy, Politicians	0 (0.00)	4 (2.80)	0 (0.00)	0 (0.00)	0 (0.00)	
The poor and average, everybody	0 (0.00)	1 (0.70)	0 (0.00)	0 (0.00)	0 (0.00)	
The rich and wealthy, the poor and average, politicians	0 (0.00)	1 (0.70)	0 (0.00)	0 (0.00)	0 (0.00)	
<b>Do you wear face masks?</b>						<b>5.611</b>
Yes	43 (95.6)	127 (91.4)	19 (100.0)	15 (100.0)	22 (100.0)	
No	2 (4.40)	12 (8.60)	0 (0.00)	0 (0.00)	0 (0.00)	
<b>How often do you wear face mask?</b>						<b>25.188*</b>
Always	7 (15.9)	53 (37.3)	16 (72.7)	8 (47.1)	8 (30.8)	
Sometimes	28 (63.6)	65 (45.8)	6 (27.3)	7 (41.2)	14 (53.8)	
Rarely	9 (20.5)	21 (14.8)	0 (0.00)	2 (11.8)	4 (15.4)	
Never	0 (0.00)	3 (2.10)	0(0.00)	0 (0.00)	0 (0.00)	



<b>Do you believe that religion/spirituality can prevent or cure COVID-19?</b>						<b>5.980</b>
<b>Yes</b>	15 (34.1)	50 (35.7)	11 (50.0)	6 (35.3)	13 (50.0)	
<b>No</b>	22 (50.0)	66 (47.1)	8 (36.4)	7 (41.2)	7 (26.9)	
<b>Not sure</b>	7 (15.9)	24 (17.1)	3 (13.6)	4 (23.5)	6 (23.1)	
<b>Do you believe the figures/reports of infected cases and COVID-19 related deaths at the national and state levels?</b>						<b>23.797**</b>
<b>Yes</b>	7 (16.3)	32 (23.0)	8 (36.4)	7 (41.2)	7 (26.9)	
<b>No</b>	30 (69.8)	74 (53.2)	4 (18.2)	3 (17.6)	13 (50.0)	
<b>Not sure</b>	6 (14.0)	33 (23.7)	10 (45.5)	7 (41.2)	6 (23.1)	
<b>How has your attitude to environmental sanitation and personal hygiene changed since the outbreak of COVID-19?</b>						<b>9.514</b>
<b>Greatly improved</b>	29 (70.7)	99 (75.6)	15 (71.4)	10 (66.7)	20 (76.9)	
<b>Not so improved</b>	8 (19.5)	16 (12.2)	6 (28.6)	4 (26.7)	2 (7.70)	
<b>As it were</b>	4 (9.80)	16 (12.2)	0 (0.00)	1 (6.70)	4 (15.4)	

## Discussion of Findings

Findings from the study showed that respondents were exposed to radio jingles on COVID-19 and this greatly improved their knowledge of the disease. More of the proportion of people aged 30-39 years (100%) has heard of COVID-19 (Table 2). The results also showed significant differences in the exposure to COVID-19 among the age groups with regard to audiovisual mass media that is most accessible ( $\chi^2=11.651$ ;  $p=0.05$ ), how often the respondents listen to radio ( $\chi^2=27.231$ ;  $p=0.002$ ), exposure to radio messages/jingles on corona virus and safety measures ( $\chi^2=36.533$ ;  $p=0.002$ ), and on which language the message/jingles communicated through the radio ( $\chi^2=45.557$ ;  $p=0.002$ ). The research was specifically on radio jingles and the respondents agreed that the radio was the medium they got their COVID-19 reports, this is because among the various mediums for health campaigns, radio programmes tend to have the most widespread impact (Schroeder, 2016).

Respondents identified COVID-19 radio jingles in English, Igbo and pidgin English. The use of indigenous language for radio jingles on COVID-19 was seen to be helpful as respondents across the various age groups agreed that radio jingles in Igbo language helped in understanding the message. This is in line with Ben-Enukora, et.al. (2021) and Degboro & Dokunmu (2022) who found that the use of the Yoruba language, an indigenous language, increased knowledge of the diseases (Lassa fever and COVID-19). Idowu (n.d) also attests to the fact that local vocabularies and coinages affect total comprehension of the imports of the jingles and that radio jingles in Nigerian pidgin English are better understood by the people.

While respondents believe that COVID-19 is real, a good percentage across the various age groups do not believe it exists in Nigeria. This could be attributed to the belief that the hot weather experienced in Nigeria prevented the wide spread of the disease since the number of affected persons was low. It could also be as a result of few testing done in Nigeria as majority of Nigerians were not tested. However, it is good to note that respondents agreed that everybody can be affected by the disease and are more conscious of their personal hygiene and environmental sanitation. These will help curtail a fresh outbreak of COVID-19 together with vaccination. This supports Talabi, et.al (2022) study that media messages influence awareness and adoption of COVID-19 preventive measures.

## **Conclusion**

The study sought to ascertain the influence of radio jingles on audience exposure to, knowledge and perception of COVID-19 in Imo State. The results show that radio is an important means of communicating health information. However, in view of the fact that there is still scepticism regarding the existence of COVID-19, there is need for health agencies to continue to use public health communication to educate the public and correct COVID-19-related misinformation.

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