

Stakeholders' Assessment of Information Management of Polymerase Chain Reaction (PCR) Test Results and the Controversies about Covid-19 Infection Figures in Akwa Ibom State, Nigeria

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Abstract

Public health communication and information management entails presenting health information in an ethical manner that enhances public trust and makes public health intervention acceptable to the populace. It is against this backdrop that this study investigated stakeholders' assessment of the controversies between the Akwa Ibom State government and the Nigeria Centre for Disease Control (NCDC) following Polymerase Chain Reaction (PCR) test results released by NCDC on the infection figures in Akwa Ibom State in April 2020. The study adopted the descriptive survey research design where a sample of 357 respondents were purposively selected from a population of 5,670 health professionals and media personnel using Philip Meyer's guide. The research objectives included finding out whether the disagreement between NCDC and the Akwa Ibom State government had heightened the uncertainty and fear among citizens concerning COVID-19 pandemic; whether the controversies had cast doubt on the sincerity and competence of Nigerian government on the handling of the pandemic. Findings revealed that 89.4 % of the respondents agreed that the disagreement had aggravated the uncertainty and fear about the pandemic. A total of 74.2% of the respondents noted that the controversies caused them to doubt the sincerity and competence of the government functionaries in handling COVID-19 pandemic in Nigeria. Based on these findings, the study concluded that many Nigerians doubted the scientific information given to them by the government functionaries. Hence, the study recommended strict adherence to professional handling of health information to avoid unnecessary controversy capable of aggravating misinformation and suspicious between healthcare givers and the populace.

Keywords: Assessment, COVID-19, Information, PCR test, Stakeholders

Introduction

The global pandemic tagged COVID-19 as coined by the World Health Organisation (WHO) brought with it so much anxiety, fear and uncertainty among the populace. The severity of the pandemic and its rapid spread with fatal consequences among human population worldwide makes useful information concerning the deadly disease very crucial and indispensable. The deadly virus infection, which broke out in China in December 2019, was reported to have reach Nigeria through the index case confirmed by the Nigeria Centre for Disease Control (NCDC) on February 28, 2020 (Chukwu & Ate, 2020). Like other nations of the world, Nigeria had to evolve containment measures to curb the spread of the virus and also minimise incidence of deaths resulting from the infection. The measures, which were at the outset nonpharmaceutical, included hand washing, use of nose mask, face shield, use of hand sanitiser, observing social distancing, restriction of movements, closure of schools, offices, markets, total lockdown and ban on inter-state travels (Bassey & Umoren, 2022). Implementation of these measures had called for public enlightenment, information dissemination and sensitisation of citizens through the mass media.

Information management became imperative given the urgent need to inform, educate, sensitise and also raise the consciousness of the citizens to the level of obeying all containment measures while dispelling fake news, disinformation, conspiracy theory, misinformation and unverified claims of cure and superstitions. To ensure that the Nigerian citizens get the correct and adequate information in the midst of conflicting news reports, the Federal Government of Nigeria set up the Presidential Task Force on COVID-19 headed by the then Secretary to the Government of the Federation (SGF), Mr. Boss Mustapha. This taskforce in conjunction with NCDC was saddled with the responsibility of providing information and also evolving measures of curtailing the spread of the virus among the citizens.

Sequel to the announcement of the index case of February 28, 2020, many states in Nigeria had set up committees to advise governments and also devise means of improving healthcare delivery in the polity. Akwa Ibom State Government being one of the 36 states in Nigeria had put in place some measures to contain the spread of the virus by collecting samples from health workers and isolating people with suspected symptom of the virus. The uncertainty that surrounded COVID-19 had created panic everywhere such that by the time NCDC reported for the first that

Akwa Ibom State had recorded initial five cases following samples analysed from the state, controversy erupted on April 2, 2020.

The then State Commissioner for Health, Dr. Dominic Ukpong, had on behalf of the Akwa Ibom state government rejected NCDC test result, alleging “a disturbing breach in the test and reporting procedure.” The state government had demanded a fresh test to be carried out on the suspected samples because of what it termed irregularities in testing and reporting procedures. Kwen (2020) quotes the Director-General of NCDC, Dr. Chikwe Ihekweazu, as insisting that the Akwa Ibom State Government had no reason to reject the polymerase chain reaction (PCR) results of coronavirus tests. The NCDC Director-General had explained that the challenges brought by the killer virus were so complicated and that governments at all levels needed to work together rather than antagonised each other.

The Polymerase Chain Reaction (PCR) test for COVID-19 is a molecular test that analyses the upper respiratory specimen, looking for genetic material (ribonucleic acid or RNA) of SARS-CoV-2, the virus that causes COVID-19. Pietro (2022) notes that scientists use the PCR technology to amplify small amounts of RNA from specimens into deoxyribonucleic acid (DNA), which is replicated until SARS-CoV-2 is detectable if present. The PCR test is reputed to be the gold standard test for diagnosing COVID-19 because it is sensitive, accurate and reliable.

Amidst the frustration expressed by the Akwa Ibom State Health Commissioner over the initial five coronavirus cases recorded in the state as announced by NCDC, another dose of controversy emerged on April 24, 2020 when the state epidemiologist was sacked for allegedly refusing to manipulate test figure in accordance with the directive of the Health Commissioner. Anthony (2020) reports that the Akwa Ibom State Epidemiologist, Dr Aniekeme Uwah, was allegedly sacked for taking 30 samples of suspected COVID-19 cases for PCR test contrary to the directive given by the State Health Commissioner that only 10 samples should be tested.

According to Anthony (2020), the sack of the state epidemiologist worsened the relationship between the health commissioner and workers in the health sector. The situation degenerated into another round of controversy, where a group of health workers in Akwa Ibom State under aegis of Coalition of Health Professionals demanded the resignation of the Health Commissioner. The group, which comprised the state branches of Nigerian Medical Association (NMA), National

Association of Nigerian Nurses and Midwives (NANNW), Pharmaceutical Society of Nigeria (PSN) and Association of Medical Laboratory Scientists of Nigeria (AMLSN), passed a vote of no confidence in the Health Commissioner, accusing him of lacking the managerial and interpersonal skills in managing the COVID-19 health emergency. According to Ashameri (2020), the coalition had declared that it could no longer enjoy the leadership of the Health Commissioner in the health sector, accusing him of disregard for professionals and professionalism, high-handedness, divisive tendencies and outright poor management of COVID-19 health emergency. The group had allegedly accused the health commissioner of trying to cover up lapses in the health sector as relate to facilities in curbing the pandemic, thus exposing the professionals to danger.

According to Udoudo (2021), the novelty of coronavirus made information the most sought commodity such that the management of information to accommodate the diverse needs and anxiety of the people became a herculean task. Given the barrage of controversies surrounding the handling of COVID-19 health emergency in Akwa Ibom State of Nigeria, this study interrogated stakeholders' assessment of information management of PCR test results and the controversies about COVID-19 infection figures in the state.

The COVID-19 pandemic being a global health emergency generated much uncertainties, anxieties and fears giving room to speculations and conjectures. Udoudo (2021) notes at the advent of the coronavirus disease, various kinds of information were generated among world leaders, the elite and even from among the ordinary citizens in various countries. Some snippets of information given at the peak of the pandemic contradicted the reality and was misleading to members of the public who were supposed to be empowered with knowledge and understanding about the health problems posed by the virus and possible interventions.

Health communication and information management entails presenting health information in a scientific and an ethical manner that enhances public trust and makes public health intervention acceptable to all the citizens (Lee, 2013). It is about strategic dissemination, critical evaluation of relevant, accurate, accessible and understandable health information aimed at improving health outcomes through behavior modification and social change. Health information management presupposes a coordinated approach to inform and influence individuals and communities through exchange of ideas, techniques and knowledge of health issues based on scientific and ethical

considerations. But during the peak of the pandemic, health professionals and managers were thrown into confusion, accusations and controversies in Akwa Ibom State. This controversy did cast doubt on the sincerity and proficiency of health personnel and their managers in handling the health emergency. From the above picture, health workers in the state and indeed the citizens became suspicious of government and the managers of public health sector. Hence, given this controversy and accusations surrounding the management of COVID-19 pandemic in Akwa Ibom State of Nigeria, this study posed the question: How did the stakeholders in the health sector in Akwa Ibom State assess the management of information on the PCR test results and the controversies about COVID-19 infection figures in the state? The study has the following research questions:

1. What level of information did health professionals in Akwa Ibom State have concerning the COVID-19 health emergency?
2. To what extent did the disagreement between NCDC and the Akwa Ibom State Government aids misinformation and fear among the citizens concerning the COVID19 pandemic?
3. How did the controversies in the handling of COVID-19 PCR test figures in Akwa Ibom State make you doubt the competence and sincerity of the Nigerian Government concerning information management during the pandemic?
4. To what extent were you satisfied with the daily media briefing and information given by NCDC on the spread of the COVID-19 pandemic across Nigeria?

Operational Definitions

The following terms were operationally defined in this study as follows:

- **Assessment:** This means judging or appraising the performance of those saddled with the responsibility of managing the COVID-19 pandemic in Akwa Ibom State and Nigeria.

Within the context of this study, it is the act of rating the level of satisfaction that stakeholders had with the management of the emergency.

- **Health Workers:** Here health workers refer to those whose duty is to protect the citizens from contracting the virus by giving advice, medication and education. They include community health workers, nurses, doctors, pharmacists, laboratory scientists and the administrators in the health sector.
- **Management:** Management in this context refers to the executive function of planning, organising and directing the flow of information on COVID-19 to reduce uncertainty and misinformation among the citizens during the pandemic.
- **Stakeholders:** Stakeholders in this study refer to the health workers who were directly involved in the management and treatment of COVID-19 and the journalists who owed the society a duty to report occurrences during the pandemic. This study focused on only these two groups of stakeholders.

Need for Health Information

Health communication is important because it has the potential of changing people's beliefs, attitudes and behaviours relating to health and promoting health related knowledge among the target audience. It is through health communication that issues such as disease diagnosis, treatment and cure, prevention, health institutions and available facilities are made known. It also entails programmes on health personnel training, health research, health policies, health legislations and health administration.

Lee (2013) asserts that health communication, when delivered effectively in mass mediated contexts, has considerable potential to promote the health of individuals, communities and populations. It must be noted that ethical health communication is not only a moral prerequisite but has pragmatic significance. Lee explains that ethical health communication presupposes the

interplay of accountability, credibility, respect and trust. The uncertainty that surrounded the outbreak of COVID-19 was so obvious given the flurry of misinformation and disagreements among health professionals across the world. Given this scenario of confusion, health information management becomes inevitable. Health information management entails making information easily accessible and in a manner that fits the individuals' needs. Karasz *et al.* (2013) note that information is better managed when it is provided seamlessly in a flow of the daily contexts of people's lives unique to the individual recipients of health messages. This approach to health information management is likened to information appeal in marketing communication where the target audience is persuaded to accept the brand (health message) because it is the best option available and it does a better job of meeting the consumers' needs (Bassey, 2017). In the same vein, Rimal and Adkins (2003) posit that the need to tailor health information to specific audience has led to evolution of the concept of narrowcasting health information where timely and relevant information on health that suits the specific needs of the consumers is developed. Dissemination of adequate and current information is necessary for the proper healthcare management in the society.

COVID-19 and Flood of Misinformation in Nigeria

At the peak of the pandemic so much snippets of information were generated of which some were myths and outright misinformation.

Udoudo (2021) notes that the public suggestion made by President Donald Trump of America that hydroxyl chloroquine was a potent cure for coronavirus was seen as misinformation by health professionals. Though medical experts debunked this suggestion, the governor of Bauchi State of Nigeria, who had earlier contracted the disease, called on his people to treat themselves with hydroxyl chloroquine. COVID-19 pandemic had heightened uncertainty and increased curiosity for information on its cure among the world population including people in Nigeria. Feleke (2020) quotes the governor of Nairobi City County, Kenya, Mike Sonko, as suggesting that the drinking of alcohol would cure coronavirus attack. The governor had postulated that alcohol had the power of killing the virus in the throat, since alcohol is a "throat sanitizer." In Iran, it was reported that an Islamic cleric, Prophet Mehdi Sabili, had prescribed the drinking of camel urine as a cure for the coronavirus. This suggestion, however, attracted public condemnation (Radio Farda, 2020).

Marivate *et al.* (2021) note that COVID-19 pandemic was a unique occurrence that shook the whole world and had disrupted the way we live including working life and thinking pattern. They observe that across Africa, the arrival of COVID-19 had drawn attention to the continent in terms of how “badly” the impact would be given the poor state of facilities to respond to health emergency.

COVID-19 and Effective Health Information Management

COVID-19 pandemic had generated enormous fear prompting citizens to seek for information voraciously in order to reduce the prevailing uncertainty. Health information management is essential to the provision of vital health information because proper coordination of information on health issues assist in defining the illness, health services and products available to help consumers manage their health. Where information is scanty, uncertainty becomes heightened especially when such information is unreliable, inaccurate, obsolete or irrelevant and incomplete (Bevan *et al.*, 2013).

Erinoso *et al.* (2021) posit that effective communication is very critical for mitigating the public health risks associated with the COVID-19 pandemic. They explain that effective communication requires dissemination of information through credible communication channels in such a manner that is beneficial to the control of the pandemic. The effectiveness of the communication will depend on the qualities of the health information such as the currency of the information; relevance of the information; reliability and accuracy of the information; comprehensibility and inclusiveness of the information; useful of the information in meeting the needs of the individuals. Effective health information dissemination entails the art and technique of informing, influencing and motivating individuals, institutions and large public audiences about important health issues based on sound scientific and ethical principles.

Similarly, Accti and Luppicini (2013) assert that effective communication is essential to the proper functioning of the healthcare system, particularly in the sharing of information between healthcare providers and between providers and patients; explaining that where there is poor communication, the quality of healthcare services will be poor and unsatisfactory. On the other hand, Lee (2013) opines that ethical public health messages should possess five principles of truthfulness, authenticity, respect for the persons being persuaded, equity of persuasive appeal and social responsibility for the common good. Using Lee’s prescription as standard for measurement,

it is obvious why controversies erupted in Akwa Ibom State between the Health Commissioner and the NCDC on one hand and the Health Commissioner and the health workers on the other hand.

Theoretical Framework

This study is anchored on two theoretical paradigms of the Uncertainty Reduction Theory and Protection Motivation Theory. The uncertainty reduction theory asserts that uncertainty and fear of the unknown is what drives people to take certain actions towards making it known, thus ‘reducing uncertainty’ through the act of communication. This theory was propounded by Charles Berger and Richard Calabrese (1975) to explain how uncertainty is unpleasant and how communication helps to reduce uncertainty. The major assumption of this theory is that initial interactions between strangers are characterised by information seeking in order to reduce uncertainty. According to Onuegbu and Paul (2019), the theory focuses on how human communication is used to gain knowledge and understanding of uncertainty with the basic postulation being that of having a deep desire to know what one will get or expect from the other person before investing in a relationship. Applying uncertainty reduction theory to health communication, Udoudo *et al.* (2009) explain that medical doctors are expected to do everything possible within the professional and communication realms to reduce any kind of uncertainty that could possibly stand between them and their patients when reporting bad news. They assert that reducing cognitive uncertainty means acquiring information that allows one to discard many possible assumptions agitating the mind. According to Griffin (2000), Berger’s eight axioms of reducing initial uncertainty are as follows:

Axiom 1: As uncertainty is further reduced, the amount of verbal communication will increase.

Axiom 2: As non-verbal affiliative expressiveness increases, uncertainty levels will decrease in initial interaction situation.

Axiom 3: High levels of uncertainty cause increases in information-seeking behaviour. As uncertainty levels decline, information-seeking behaviour decreases.

Axiom 4: High levels of uncertainty in a relationship cause decreases in the intimacy level of communication content and low levels of uncertainty produce high levels of intimacy.

Axiom 5: High levels of uncertainty produce high levels of reciprocity. Low levels of uncertainty produce low levels of reciprocity.

Axiom 6: Similarities between persons reduce uncertainty while dissimilarities increase uncertainty.

Axiom 7: Increases in uncertainty level produce decreases in liking; decreases in uncertainty networks produce increases in liking.

Axiom 8: Shared communication networks reduce uncertainty while lack of shared networks increases uncertainty (Griffin, 2000, pp138-140).

The level of uncertainty and fear generated by the outbreak of COVID-19 was so obvious that the citizens sought for all manners of information as enunciated in axiom 3 above and this was corroborated empirically in a study carried out by Erinoso *et al.* (2021) on predictors of COVID-19 information sources and their perceived accuracy in Nigeria. Hence, this theory is relevant to this study because people needed to get the right information to free themselves from uncertainty and misinformation.

The second theory is the Protection Motivation Theory which was propounded in 1983 by Ronald W. Rogers. In his exposition of this theory, Ogbuoshi (2020) notes protection motivation theory is hinged on persuasive communication with emphasis on the cognitive processes mediating behaviour change. The major assumptions of this theory are that people tend to seek protection under four conditions as enumerated below:

- (i) the perceived severity of a threatened event.
- (ii) the perceived probability of the occurrence, or vulnerability (in this example, the perceived vulnerability of the individual to an attack)
- (iii) the efficacy of the recommended preventive behavior (the perceived response efficacy)

- (iv) the perceived self-efficacy (i.e., the level of confidence in one's ability to undertake the recommended preventive behaviour).

Ogbuoshi (2020) posits that protection motivation is the consequence of threat and coping appraisal, explaining that threat appraisal refers to the estimation of the chances of contracting a disease (vulnerability) and the estimation of the severity of the disease. Coping appraisal on the other hand consists of response efficacy, which is the expectation that obeying the health advisory will prevent the infection. Anaeto *et al.* (2008) assert that this theory hinges on three elements: the magnitude of the harmfulness of a depicted event; the probability of that event's occurrence; and the efficacy of the recommended response. They explain that audience members process in their minds every fear appeal that they are exposed. If the harmfulness of the event is not believable or the event is not likely to occur, the recommended actions are not believed to be adequate to deal with the threat, therefore attitude change is not likely to be achieved. The authors assert that attitude change is dependent on the amount of protection motivation caused by the cognitive appraisal that the audience member goes through. Given the horrible health threat caused by COVID-19 pandemic, people were ready to obey the health advisory or perform adaptive responses (protection motivation) to stay protected against the virus. Therefore, this theory is appropriate to this study because the citizens needed to observe all the COVID-19 containment measures to stay safe.

Methods

The study adopted the descriptive survey as the research design where a sample of 357 respondents were purposively selected from a population of 5,670 health professionals and media personnel using Philip Meyer's guide. The health workers component of this population were drawn from the Akwa Ibom State Ministry of Health Headquarters constituted 5,020 (88.54%) while the media personnel drawn from the Akwa Ibom State Council of Nigeria Union of Journalists (NUJ) made up of the remaining 650 (11.46%).

To obtain the sample size for the study, Philip Meyer's sample size table as adapted by Bassey (2020) was used to select a sample of 357. Table 1 below presents Philip Meyer's sample size table.

Table 1: Philip Meyer's Table for Sample Size

Population size	Sample
500, 000 or more	384
100, 000	383
50, 000	381
10, 000	370
5,000	357
3, 000	341
2, 000	322
1, 000	248

(Meyer's Sample Guide 2011)

From the Table 1 above, a total of 357 respondents were polled as sample size for this study. The purposive sample was adopted because the study was restricted to health workers and those practicing journalism covering the health beat in Akwa Ibom State. A total of 88.54% of this sample was drawn from the health workers while journalists accounted for 11.46%.

This study used a structured questionnaire for data collection. The instrument comprised 12 items divided into two sections of A and B. Section A made up of items 1- 5 deals with the bio-data of the respondents while section B made up of items 6- 12 dwells on the core issues of this study. Items 6 and 7 on the questionnaire were used to respond to Research Question 1; items 8 and 9 responded to Research Question 2; items 10 and 11 answered Research Question 3 while item 12 responded to Research Question 4. Two research assistants helped to administer the instrument to the respondents.

Result

Data collected for this study were computed and analysed in Tables using simple percentages and weighted mean score (WMS) based on a five-point Likert Scale. The responses were weighted as follows: Strongly Agree (5); Agree (4); Undecided (3); Disagree (2); Strongly Disagree (1). From the computation, the WMS is 3.00 (5+4+3+2+1/5). The mean score of 3.00 was used as the basis for a decision on the responses to each item. Any mean score which is equal to or more than 3.00 is positive and accepted while any mean score that is less than 3.00 is tagged negative and is rejected.

Out of the 357 copies of the questionnaire distributed, 340 were completed correctly and returned while 17 copies could not be retrieved. The return rate was 95%. This figure formed the basis for computation.

Table 2: Stakeholders’ perception of health professionals’ capacity to tackle COVID-19 pandemic in Akwa Ibom State following PCR test controversies

COVID -19 health emergency in Akwa Ibom State.										
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Source: Field work (2022)

Items	Questionnaire statements	SA	A	U	D	SD	Total	N	WMS	Decision
6	Health professionals did not have adequate information on COVID-19 pandemic in Akwa Ibom State.	505	500	150	80	24	1,259	340	3.7	Positive
7	The health workers were incapable of responding to the	400	500	210	100	15	1,225	340	3.6	Positive

The data in Table 2 above show a positive weighted mean score of 3.7 (74%) on the stakeholders’ perception of health professionals the COVID-19 pandemic in Akwa Ibom State. On the health workers’ inability to respond to the COVID-19 pandemic in Akwa Ibom State, the weighted mean score on item 7 recorded a positive score of 3.6 (72%).

Table 3: Stakeholders’ perception of the disagreement between NCDC and Akwa Ibom State Government over PCR test results of positive cases of COVID-19 infection figures in Akwa Ibom State

Items	Questionnaire Statements	SA	A	U	D	SD	Total	N	WMS	Decision
8	The disagreement between NCDC and Akwa Ibom State Government over PCR test results in the state aggravated myths and misinformation concerning COVID-19 pandemic	450	520	225	50	20	1,265	340	3.72	Positive
9	The controversies over COVID-19 PCR test heightened the level of uncertainty and fear among citizens in Akwa Ibom State concerning the pandemic.	775	500	120	40	-	1,435	340	4.22	Positive

Source: Field work (2022)

The information presented in Table 3 above shows a positive weighted mean score of 3.72 (74.4%) on the stakeholders’ perception of the disagreement between NCDC and Akwa Ibom State Government over PCR test results as having aggravated myths and misinformation on COVID-19 pandemic. From the computation of item 9, a high weighted mean score of 4.22 (84.4%) was recorded on the controversies causing high level of uncertainty and fear among the citizens.

Table 4: Stakeholders’ perception of the controversies over PCR test results as showing incompetence in handling health emergency by Nigerian Government

Items	Questionnaire Statements	SA	A	U	D	SD	Total	N	WMS	Decision
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10	The controversies over COVID19 PCR test results revealed incompetence in handling health emergency by the Nigerian Government.	375	600	195	70	15	1, 255	340	3.69	Positive
11	Following the COVID-19 PCR test controversies, the citizens doubted the sincerity of Nigerian Government in tackling the health emergency.	380	620	198	60	13	1, 271	340	3.74	Positive

Source: Field work (2022)

The data presented in Table 4 above show a positive weighted mean score of 3.69 (73.8%) on item 10 dealing with how the stakeholders assessed the level of incompetence of Nigerian Government in handling the COVID-19 pandemic based on the controversial PCR test results in Akwa Ibom State. The computation from item 11 recorded a positive weighted mean score of 3.74 (74.8%) on the extent to which the citizens doubted the sincerity of Nigerian Government in the COVID-19 health emergency.

Table 5: Stakeholders’ assessment of citizens’ satisfaction with daily media briefing and information on COVID-19 released by NCDC

Item	Questionnaire Statement	SA	A	U	D	SD	Total	N	WMS	Decision
12	Following the COVID-19 PCR test controversies, the citizens were	450	520	180	70	25	1, 245	340	3.66	Positive

briefing and information released on COVID -19 by NCDC.										
not satisfied with daily media										

Source: Field work (2022)

The computation in Table 5 above dealing with item 12 shows a positive weighted mean score of 3.66 (73.2%) on the level of dissatisfaction of citizens with the daily media briefing and information released on COVID-19 by NCDC following the PCR test controversies in Akwa Ibom State.

Discussion

This study set out to investigate stakeholders’ assessment of information management of PCR test results against the backdrop of controversies about COVID-19 infection figures in Akwa Ibom State, Nigeria. The findings of the study were analysed based on the research questions developed.

From the data in Table 2, it is obvious from the assessment of the stakeholders that the health professionals did not have adequate information on the COVID-19 pandemic as attested by 74% of the respondents in this study. Following inadequate information on the pandemic, the health workers were unable to respond to the COVID-19 health emergency satisfactorily in Akwa Ibom State as confirmed by 72% of the respondents. The summation of the weighted mean scores for items 6 and 7 gives a positive weighted mean score of 3.65 (73%). The implication of this result is that the health professionals in the state then lacked inadequate information and therefore were unable to respond to the COVID-19 pandemic satisfactorily in Akwa Ibom State. This finding corroborates the earlier submission that the coronavirus was a novelty and at a point information on the virus was sketchy and unreliable; also COVID-19 was exceptionally hard to contain due to its asymptomatic contagion and long incubation period (Lee, 2013; Marivate *et al.*, 2021).

The information presented in Table 3 above shows that the stakeholders perceived that the disagreement between NCDC and the Akwa Ibom State Government over PCR test results may have aggravated myths and misinformation about the COVID-19 pandemic by 74.4%. The computation of item 9 shows that 84.4% of the respondents believed that the controversies had caused high level of uncertainty and fear among the citizens concerning the coronavirus. The weighted mean score of items 8 and 9 shows that 89.4% of the respondents had perceived the controversies over the PCR test results as capable of increasing misinformation and fear among the citizens in Akwa Ibom State. This result explains why the health workers in Akwa Ibom State at a point became apprehensive and accused the State Health Commissioner of insensitivity (Ashameri, 2020). This finding justifies the application of uncertainty reduction theory to this study in which case axiom 3 says that uncertainty increases information-seeking behavior of citizens (Griffin, 2000).

The data presented in Table 4 above show that 73.8% of the stakeholders agreed that the controversial handling of the COVID-19 PCR test results by both NCDC and Akwa Ibom State Government smacked incompetence on the part of Nigerian Government in responding to COVID-19 pandemic. The computation from item 11 shows that 74.8% of the respondents believed that the citizens doubted the sincerity of Nigerian Government in the COVID-19 health emergency following the controversies surrounding the PCR test figures in Akwa Ibom State of Nigeria. The combined weighted mean score of items 10 and 11 recorded a positive weighted mean score of 3.71(74.2%) meaning that respondents doubted the competence and sincerity of the Nigerian Government in information management during the pandemic. This finding corroborated Udoudo (2021) that many Nigerians doubted the sincerity of the Presidential Task Force and NCDC in handling the proceedings during the COVID-19 era.

The computation in Table 5 above has a positive weighted mean score of 3.66 (73.2%) on the level of dissatisfaction of citizens with the daily media briefing and information released on COVID-19 by NCDC following the PCR test controversies in Akwa Ibom State. The implication of this finding is that majority of Nigerians did not have faith in what the government at the Federal and State Government levels were doing given the trust deficit existing between the citizens and

the government functionaries in Nigeria. This finding supports earlier study by Udoudo (2021) that many Nigerians suspected the NCDC and the Presidential Task Force of using the opportunity of the COVID-19 for personal enrichment.

Conclusion and Recommendations

Based on the data presented health workers in Akwa Ibom State did not have adequate information on COVID-19 pandemic and could not respond adequately to the health emergency. The controversies triggered by the PCR test results on the initial infection rate in Akwa Ibom State released by NCDC aggravated misinformation, fear and also cast doubt on the competence of the Nigerian Government in the handling of the pandemic. The controversial PCR test results in Akwa Ibom State had weakened the faith of Nigerians in the daily media briefing and scientific information released on COVID-19 by NCDC.

From the findings of this study, the following recommendations are made:

1. The health professionals and the journalists providing information in Akwa Ibom State should be given regular training and orientation on the ever-evolving health challenges in order to build their capacity and equip them with relevant information for responding to health emergency.
2. Strict adherence to professional handling of health information is required to manage uncertainty and health emergency in order to avoid unnecessary controversy capable of aggravating misinformation and suspicious among health workers and their managers.

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