Research Paper

Perceived Threat, Outcome Expectancy and Level of Satisfaction of A Local Community With Covid-19 Response Preparedness Initiative By The Government In Edo State

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ABSTRACT
This study assessed perceived threat of COVID-19, outcome expectancy towards government COVID—19 response preparedness initiative and the level of satisfaction to the response preparedness initiative among the residents in Benin metropolis, Edo State. It further relates perceived threat of COVID-19 to outcome expectancy of the response preparedness initiative and outcome expectancy to level of satisfaction towards COVID-19 response preparedness initiative. These were with a view to determining the influence of perceived threat of COVID-19 on outcome expectancy and satisfaction towards response preparedness initiative among residents of Benin Metropolis, Edo State, Nigeria.
The study was a descriptive cross-sectional survey among residents of the study location. Multi-stage sampling technique was used to select 353 respondents. A semi-structured questionnaire was used to elicit information on socio-demographic and socio-economic characteristics of the residents, perceived threat of COVID-19, outcome expectancy and their level of satisfaction. Data were analyzed using Statistical Product for Social Solution (SPSS 20.0). Descriptive and inferential statistics were used where appropriate while multinomial logistic regression was used to ascertain the influence on the dependent variables. The level of significance was set at 5%.
Of the 353 respondents, 48.2% perceived low threat for COVID-19, 47.3% had negative expectation towards the government response preparedness initiative towards COVID-19 and 48.2% were not satisfied with the initiative. Low threat of the COVID-19 caused negative expectancy of government COVID-19 response

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preparedness initiative (χ^2 = 23.198, P < 0.001) and negative expectancy influenced low level of satisfaction among the residents studied (χ^2 = 39.815, P < 0.001).
Residents with low perceived threat of COVID-19 were 3 times less likely to have positive expectancy of government response preparedness initiative when compared with those who have high perceived threat (OR = 2.858, P < 0.001) while, those with negative expectation were 4 times less likely to have high satisfaction of the initiative when compared with positive expectancy (OR = 4.053, P < 0.001).
KEYWORDS: *perceived threat, outcome expectancy, level of satisfaction, covid-19, response preparedness, initiative.*

I. INTRODUCTION

The World Health Organization (WHO) was informed of clusters of pneumonia-like cases which at the time, December 2019, broke-out from Wuhan City, of China's Hubei Province and with causes not known. Subsequently, Chinese government signified its causative agent as a new type of Coronavirus (SARS-COV 2) (WHO, 2020). Being an outcome of the recommendation made by International Health Regulation Emergency Committee (IHREC), WHO Director-General announced that COVID-19 outbreak is "a Public Health Emergency of International Concern (PHEIC). This declaration was made on 30 January 2020 and it was further described as "a pandemic on 11 March 2020" (WHO, 2020). Corona Virus Disease (COVID-19) outbreak at the time has been identified and documented in all continents, while for Africa, its first case was reported in Egypt in the February of 2020 (Gilbert *et. al.,* 2020).

Worldwide, over 80 million confirmed COVID-19 cases have been reported and approximately, 1.2 million deaths linked to COVID-19 have been documented (Worldmeter, 2020) while Nigeria, as one country from the 220 affected globally had her first confirmed case in a 44-year old Italian who came in from Milan on 24th of February, 2020. The Italian presented himself at a health facility in Lagos on 26th of the same month and was confirmed positive on the day after (NCDC, 2020). Afterwards, during contact tracing, 216 people were traced to this index case and followed-up with one (1) of them confirmed as another positive case of COVID-19 on 9th of March the same year (NCDC, 2020). Thereafter, the number of confirmed COVID-19 cases has continually increased as it has been transmitted across all states in Nigeria. Although majority of early cases were traced to migrants/travellers into the country, the subsequently detected cases (over 80,000 and approximately 1200 deaths as at 30th Nov. 2021) were evident of community transmission as it was mostly among people with no history of travel.

Since the outbreak of COVID-19, many preventive and control measures have been globally employed to contain the disease. The deadliness of the disease is underscored by its potential to infect, cause hospitalization and death of so many persons within the shortest time frame. Worse still, some measures targeted at preventing the disease in emergency cases such as the lockdown procedure crippled the economy and thus increase poverty level of the affected community (The new humanitarian, 2020). Avoiding such challenges, the World Health Organization (WHO), earlier had declared COVID-19 as a public health emergency of international concern (PHEIC) (World vision, 2020). As at 30th October, 2020 no cure or vaccine has been found and the disease keeps spreading (WHO, 2020).

In preparation for the first case of COVID-19 in Nigeria, the Nigerian authority set-up a response preparedness initiative (Coronavirus preparedness group) managed by the nation's number 1 public health agency, Nigeria Centre for Disease Control(NCDC). NCDC capitalized on the successes recorded on EVD (Ebola Virus Disease) outbreak by setting up screening for travellers at the various points of entry, improved the diagnostic competency of National Reference Laboratory for infectious-prone pathogens. Through this course, 22 states of the federation were aided in the establishment of Emergency Operation Centres (EOC's) by NCDC. Training was also conducted for rapid response teams across the federations 36 states (Ihekweazu C., 2020). The agency (NCDC), further furnished the citizens with needed public health advisory by enlightening them on the case-definition and preventive information using the public health workforce at both national and subnational levels, developed their competency to trace contacts effectively using the contact tracing guidelines and case management. The agency also equipped five laboratories for diagnostic capabilities (Adepoju P., 2020).

Non-medical remedies till date (staying at home, travel bans to and from high-risk countries with community transmissions of COVID-19, border controls, deployment of rapid response teams to all affected states, state-level training and capacity building of health personnel on; infection, prevention and control; case management, intensified risk communication, community engagement, heightened surveillance, field epidemiological investigations, rapid identification of suspected cases, isolation, diagnosis, contact tracing, monitoring and follow-up of persons of interests), have been adopted in the limitation of importing more new

cases of COVID-19and the spread of the disease locally (WHO, 2020; Global humanitarian, 2020; UK Government, 2020).

Understanding Individual's perception of threats posed by COVID-19 and Outcome Expectancy of behavioural change to prevent one from contacting the virus may undoubtedly help public health experts design better programs to shape public response to the preventive measures and ultimately, reduce the rapidity of spread and geographical circumlocution of the topmost challenging public health emergency in recent time (Gates, 2020). Level of satisfaction with the previous preventive measures in times of outbreak or national emergency also, may play a role in their willingness to adopt a behavioural change to eliminate current outbreak (Moran & Del Valle, 2016). Perceptions of the public are also a major factor of global reactions to the pandemic. For example, the response of the public to country-wide level communications will critically influence how the pandemic outstretch across the United Kingdom (Cowper, 2020). Individual perception on the risk of an infection is a critical tool in epidemiological prediction models (Bagnoli, Lio & Sguanci, 2007).
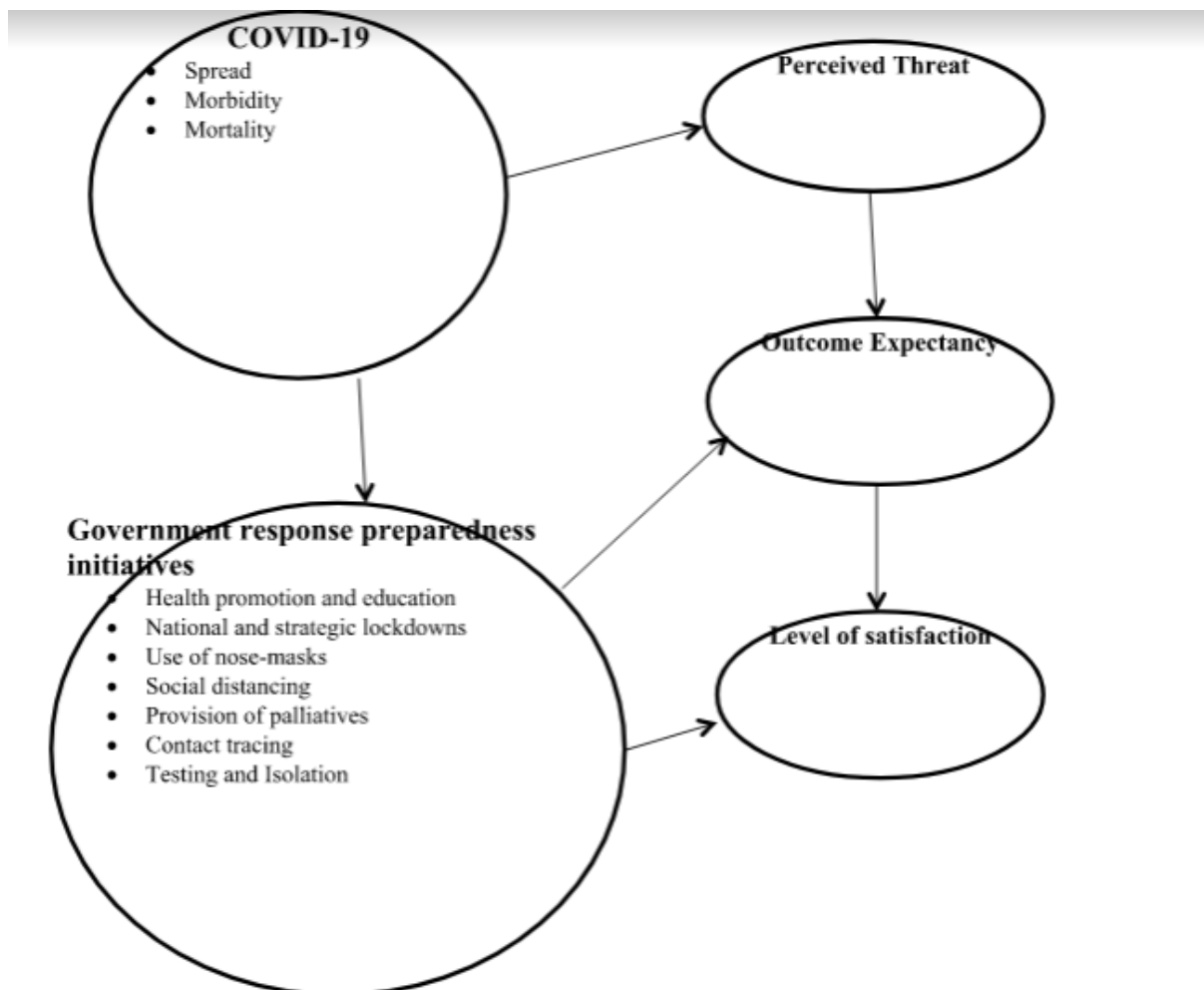
1.1 CONCEPTUAL FRAMEWORK

Figure 2.1: Conceptual Framework of the effect of perceived threat of COVID-19 on Outcome expectancy and Level of satisfaction of Government response preparedness initiative

II. METHODS

The study was a cross-sectional descriptive survey design which employed the use of quantitative research approach

The study population comprised of residents in the three Local Government Areas (LGAs) that make up Benin metropolis which are Egor, Ikpoba-Okha and Oredo Local Government Areas in Edo State.

Sample Size determination

The Fisher's formula for estimating sample size when population is greater than 10,000 was employed to determine sample size using the following indices and statistics.

$N = \dfrac{Z^2 pq}{d^2}$

Z = Standard normal deviation (1.96)

p = 69%: percentage of respondents with high score for attitude towards COVID-19 compliance in Cameroun (Ngwewondo et. al., 2020)

A minimum sample size of 329 was estimated and was increased to 362 bearing in mind 10% non-response rate. Multistage sampling technique was used to recruit respondents for the study.

Sampling Technique

Multistage sampling technique was used to recruit respondents for the study. Using the three (3) local government areas (LGA's) that make up Benin municipality (Egor, Ikpoba-Okha and Oredo Local Government Areas). Stage one involved selection of 2 wards per LGA by systematic sampling technique from the lists of wards in each LGA to make a total of 6 wards while, the second stage involved selection of 2 settlements per ward by simple random sampling (balloting) technique. In total at this stage, 12 settlements had been selected from the 3 LGA's.he third stage employed simple random sampling technique to select 2 streets from each settlement. A total of 24 streets was visited to administer questionnaire for the study. From each selected street, house mapping was conducted which involved the numbering of all houses on the street and the listing of all household in each numbered house. Stage four then involved the recruitment of households into the study with one eligible person representing a household and not more than a household per numbered house with an average of 15 participants per street.

II.   RESULTS

Socio-demographic characteristics of respondents

From the study**,** more than half (196, 55.5%) of the respondents were young people (18 – 24 years) while approximately 15% of them (7.9% & 6.8%) were adults (40 – 59 years & ≥60 years).. Major ethnic groups became evident as minor ethnic groups in this study. The study location, Benin metropolis, Edo state is not categorized as any of the major ethnic groups (Hausa, Igbo or Yoruba) in Nigeria. Other ethnic groups have the majority (52.1%) of respondents in this study while Hausa (6.5%) has the least of representation among the major ethnic groups.

As evident in this study, the major religion of the residents in Benin metropolis was Christianity (83.9%). Islam and traditional constitute of a little above 10% of religion practiced by the people while other forms of religions were negligible (2.5%) among the study population. It is also evident in the study location that residents have monogamous family type (78.8%) while approximately, one-fifth of them were from polygamous families.

Formal education at the level of secondary school and tertiary education was 90% .

Table 3.1: Socio-demographic characteristics of respondents

N=353

Variables	Frequencies (n)	Percentages (%)	
Age group (years)			
18 - 24	196		55.5
25 - 39	105		29.7
40 - 59	28		7.9
60 and above	24		6.8
Mean age ± SD	29.09±13.91		
Sex			
Male	191		54.1
Female	162		45.9
Ethnicity			
Hausa	23		6.5

Igbo	80	22.7
Yoruba	66	18.7
Others	184	52.1
Religion		
Christianity	296	83.9
Islam	21	5.9
Traditional	27	7.6
Others	9	2.5
Family type		
Monogamous	278	78.8
Polygamous	75	21.2
Household Size		
Small (≤3)	45	12.7
Medium (4-5)	131	37.1
Large (≥6)	177	50.1
Level of Education		
No Formal Education	20	5.7
Primary	20	5.7
Secondary	149	42.2
Tertiary	164	46.5
Occupation		
Unskilled	101	28.6
Semi-skilled	95	26.9
Skilled	157	44.5

Perceived threat of COVID-19 among respondents

Among the respondents, questions that saw the response "True of me" and "very true of me" being agreed upon by most of the respondents were questions like Thinking about COVID threatens me, Awareness that a person with COVID might die, Worried about the COVID, tried hard to avoid other people because I don't want to get sick & Watching a lot of news about COVID gets me scared. These questions depict that at least, more than half of the respondents had high threat of COVID-19. A question which examines the threat level of respondents in relation to social distancing (Being in close proximity with someone who has been diagnosed with coronavirus (COVID-19) makes me threatened) further shows higher perceived threat level with approximately, 60% of them being wary of the threat it posed to be near someone diagnosed of the disease.

Based on the responses for the questions, it was further classified that fairly above half (51.8%) of the respondents had high level of perceived threat for COVID-19. A matter for concern however, is the proportion of those who do not have such high level of threat (48.2%).

Responses on Perceived Threat of COVID-19 among residents of Benin metropolis

N = 353

Perceived threat of COVID-19	Certainly not true of me n (%)	Not true of me n (%)	True of me n (%)	Very True of me n (%)
Thinking about the coronavirus (COVID-19) threatens me	76 (21.5)	90 (25.5)	88 (24.9)	99 (28.1)
I am aware that a person with the coronavirus (COVID-19) will die	80 (22.7)	79 (22.4)	102 (28.9)	92 (26.1)
I am worried about the coronavirus (COVID-19)	60 (17.0)	93 (26.3)	102 (28.9)	98 (27.8)
I am stressed around other people because I worry, I'll catch the coronavirus (COVID-19)	89 (25.2)	96 (27.2)	105 (29.7)	63 (17.8)
I have tried hard to avoid other people because I don't want to get sick	78 (22.1)	94 (26.6)	85 (24.1)	96 (27.2)
Being in close proximity with someone who has been diagnosed with coronavirus (COVID-19) makes me threatened	64 (18.1)	72 (20.4)	121 (34.3)	96 (27.2)
Watching a lot of news about the Coronavirus (COVID-19) gets me scared	68 (19.3)	94 (26.6)	91 (25.8)	100 (28.3)
I spend time trying to find updates online or on TV about Coronavirus (COVID-19) because I get worried	104 (29.5)	86 (24.4)	85 (24.1)	78 (22.1)

Outcome expectancy towards response preparedness initiative

On outcome likelihood of COVID-19 response preparedness initiative, the likelihood of government initiatives yielding positive outcomes was well received by the respondents. For instance, the respondents said "Likely" (30.3%) and "Very likely" (51.3%) to a question that asked whether the respondents, their family & their friends will become safe after ensuring that governments measures to COVID-19 prevention are observed religiously. Similarly, in all the other questions such as "I now reduce contact with body parts like eyes, nose and mouth especially without washing hands, the awareness creation and advocacy on COVID-19 prevention strategies by the government will help me to know how to protect myself from contacting COVID-19", positive outcome likelihood was approved by approximately 80% of the respondents.

Similar to outcome likelihood, the outcome values measured shows how they think the various government response initiatives were important. To each of the questions mentioned earlier in outcome likelihood section, over 80% of them saw the importance by selecting either "important" or "very important". The responses from this segment indicate the outcome expectation of the residents on government initiative.

Responses on Outcome Likelihood of Govt. COVID-19 response preparedness initiative among residents of Benin metropolis

N = 353

Outcome Likelihood	Very Unlikely n (%)	Unlikely n (%)	Likely n (%)	Very Likely n (%)
The awareness creation and advocacy on COVID-19 prevention strategies by the government will help me to know how to protect myself from contacting COVID-19	46 (13.0)	25 (7.1)	207 (58.6)	75 (21.2)
The use of nose mask when in public places and maintaining social distancing of at least 2 meters from the next person to me is a good measure to prevent me from contacting COVID-19	29 (8.2)	39 (11.0)	169 (47.9)	116 (32.9)
Slow spread of COVID-19	24 (6.8)	45 (12.7)	208 (58.9)	76 (21.5)
I will know how to maintain personal hygiene	22 (6.2)	32 (9.1)	159 (45.0)	140 (39.7)
Strengthening of the health system	32 (9.1)	43 (12.2)	176 (49.9)	102 (28.9)
I now reduce contact with body parts like eyes, nose and mouth especially without washing hands	41 (11.6)	81 (22.9)	140 (39.7)	91 (25.8)
I can educate other people on the need and importance of government measure to prevent COVID spread	37 (10.5)	48 (13.6)	185 (52.4)	83 (23.5)
I and my family and friends will become safe after ensuring the measures are observed religiously	32 (9.1)	33 (9.3)	181 (51.3)	107 (30.3)

Level of satisfaction towards response preparedness initiative

Further findings were made to assess the level of satisfaction towards COVID-19 response preparedness initiative of residents in the study location. Questions generally assessed how satisfied they were with the various measures and initiatives put in place by the government. For instance, the level of satisfaction on govt. recommendation on the use of nose mask was assessed high by approximately 60% of the residents. In another question on training, capacity building and every preparation in the health sector, about 54% of them were not so satisfied. In general, just a little above half (51.8%) of the residents were satisfied with the response initiatives put in place by the government leaving behind almost another half (48.2%) who were not satisfied. Cumulatively, almost half (51.8%) of the residents were satisfied with all the govt. response preparedness initiative in the study location and the other (48.2%) were not satisfied.

Responses on Level of satisfaction towards Govt. COVID-19 response preparedness initiative among residents of Benin metropolis

N = 353

Satisfaction	Certainly not satisfied n (%)	Not satisfied n (%)	Satisfied n (%)	Very Satisfied n (%)
Government sensitization effort in preventing the spread of COVID-19	79 (22.4)	80 (22.7)	35 (9.9)	159 (45.0)
Trainings, capacity building and every preparation in the health sector which later paid-off during the pandemic	103 (29.2)	83 (23.5)	26 (7.4)	141 (39.9)
Governments recommendation on the use of Nose mask	72 (20.4)	66 (18.7)	53 (15.0)	162 (45.9)
Recommendation on social distancing and avoidance of crowded places	73 (20.7)	67 (19.0)	49 (13.9)	164 (46.5)
Recommendation on social distancing and avoidance of crowded places	46 (13.0)	84 (23.8)	45 (12.7)	178 (50.4)
Setting up of task force headed by state governors in	78 (22.1)	68 (19.3)	49 (13.9)	158 (44.8)

formulating policies to help in combatting COVID-19 spread				
Ban on travel to and from high-risk states and state border control	95 (26.9)	66 (18.7)	54 (15.3)	138 (39.1)
Ban on mass gatherings and religious gathering for over 20 persons	87 (24.6)	84 (23.8)	49 (13.9)	132 (37.4)
Indefinite closure of schools to reduce transmission especially among and through children	94 (26.6)	83 (23.5)	50 (14.2)	126 (35.7)
Stay at home /lockdown order	109 (30.9)	65 (18.4)	54 (15.3)	125 (35.4)
Government economic stimulus package for households, SMEs, health sector etc.	123 (34.8)	50 (14.2)	32 (9.1)	148 (41.9)
Free food rations given to the needy	138 (39.1)	31 (8.8)	33 (9.3)	151 (42.8)
Transfer of funds to the poor	137 (38.8)	37 (10.5)	26 (7.4)	153 (44.8)
Every government effort in fighting the spread of COVID-19	71 (20.10	78 (22.1)	46 (13.0)	158 (44.8)

One hundred and ninety-four of the respondents were satisfied with Governments sensitization effort in preventing the spread of COVID-19 (9.9% & 45%), Two hundred and fifteen of them were satisfied with Governments recommendation on the use of Nose mask (15% & 45.9%), Two hundred and thirteen of them were satisfied with recommendation on social distancing and avoidance of crowded places (13.9% & 46.5%), Two hundred and fifteen of them were satisfied with Setting up of task force headed by state governors in formulating policies to help in combatting COVID-19 spread (13.9% & 46.5%), One hundred and ninety-two of them were satisfied with ban on travel to and from high-risk states and state border control (15.3% & 39.1%), One hundred and eighty-one of them were satisfied with Ban on mass gatherings and religious gathering for over 20 persons (13.9% & 37.4%) and One seventy-seven of them were satisfied with Indefinite closure of schools to reduce transmission especially among and through children (14.2% & 35.75).

Association between perceived threat and outcome expectancy

Perceived Threat	Outcome Expectancy			χ^2/Fishers Exact	P-value
	Negative Expectancy	Positive Expectancy	Total		
Low threat	103 (60.6)	67 (39.4)	170		
High Threat	64 (35.0)	119 (65.0)	183	23.198	<0.001*
Total	167	186	353		

The finding in the study revealed an association between resident's perceived threat of COVID-19 and their outcome expectancy towards the response preparedness initiative by the govt. Residents who perceive low threat for COVID-19 show negative expectation towards the initiatives put in place by the govt. while those who perceive high threat for COVID-19 show positive expectation towards the initiatives. In this report, only residents who see a serious threat of COVID-19 transmission that will expect a positive outcome in measures meant at preventing its transmission. Those who do not see COVID-19 with high vulnerability may expect less of positive outcome (negative outcome) from the various measures meant at curtailing its spread.
Residents who perceive the threat of COVID-19 as high will 3 times likely have positive outcome towards the initiative compared to those who see less threat in COVID-19.

Association between outcome expectancy and level of satisfaction

Outcome Expectancy	Level of Satisfaction			χ^2/Fishers Exact	P-value
	Not satisfied	Satisfied	Total		
Negative Expectancy	110 (65.9)	57 (34.1)	167		
				39.815	<0.001*
Positive Expectancy	60 (32.3)	126 (67.7)	186		
Total	170	183	353		

Further finings in the study revealed an association between outcome expectancy towards COVID-19 response preparedness initiative and the level of satisfaction towards the initiative. It was revealed that residents who have negative outcome expectancy towards govt. response initiative will have low level of satisfaction towards the initiatives while those with positive outcome expectancy will have demonstrated high level of satisfaction to the said initiative. There was also, four times likelihood of scoring high the level of satisfaction

by residents who expected positive outcomes towards the initiative when compared to those who do not expect positive outcome (negative outcome).

III. DISCUSSION

This study determined the perceived threat of COVID-19, outcome expectancy and level of satisfaction of COVID-19 response preparedness initiative by government among residents in Benin metropolis, Edo State. The study determined the association between the perceived threat of COVID-19 among the residents and their outcome expectancy towards response preparedness initiative by the government. It further determined the association between their outcome expectancy and level of satisfaction towards response preparedness initiative.

Socio-demographic characteristics of respondents

From the study, more than half (196, 55.5%) of the respondents were young people (18 – 24 years) while approximately 15% of them (7.9% & 6.8%) were adults (40 – 59 years & ≥60 years). The mean age of 29.09 years indicates that the study location has more youth population than the adults. Although, there were more males (54.1%) than females (45.9%), the difference in gender population among the respondents within the study population was minimal (29). Major ethnic groups became evident as minor ethnic groups in this study. The study location, Benin metropolis, Edo state is not categorized as any of the major ethnic groups (Hausa, Igbo or Yoruba) in Nigeria. Hence, it was not surprising that the other ethnic groups have the majority (52.1%) of respondents in this study while Hausa (6.5%) has the least of representation among the major ethnic groups. This could be due to the distance in location of Benin metropolis to the northern state of the country.

As evident in this study, the major religion of the residents in Benin metropolis was Christianity (83.9%). Islam and traditional constitute of a little above 10% of religion practiced by the people while other forms of religions were negligible (2.5%) among the study population. It is also evident in the study location that residents have monogamous family type (78.8%) while approximately, one-fifth of them were from polygamous families. This is supportive of the fact that majority of the respondents were Christians, and as their faith implies, one man, one wife.

Formal education at the level of secondary school and tertiary education was very common among the residents in this study which constitute of approximately 90% of them. It implies that the people in the study location embraced western/formal education with only 5.7% of them left with no form of formal education.

Perceived threat of COVID-19 among respondents

Among the respondents, questions that saw the response "True of me" and "very true of me" being agreed upon by most of the respondents were questions like Thinking about COVID threatens me, Awareness that a person with COVID might die, Worried about the COVID, Tried hard to avoid other people because I don't want to get sick & Watching a lot of news about COVID gets me scared. These questions depict that at least, more than half of the respondents had high threat of COVID-19. A question which examines the threat level of respondents in relation to social distancing (Being in close proximity with someone who has been diagnosed with coronavirus (COVID-19) makes me threatened) further shows higher perceived threat level with approximately, 60% of them being wary of the threat it posed to be near someone diagnosed of the disease. This response is similar to a finding stated in a study by Ngwendo et. al., 2020 which assessed the knowledge and health-seeking behaviors of respondents during COVID-19 pandemic, where 73.1% think they can be contaminated by coming in contact with people, It can be deduced from here that a considerable level of awareness on the mode of transmission of COVID and prevention strategies must have been communicated.

Based on the responses for the questions, it was further classified that fairly above half (51.8%) of the respondents had high level of perceived threat for COVID-19. A matter for concern however, is the proportion of those who do not have such high level of threat (48.2%). A study (De Zwart et. al., 2009) which examined the perceived threat of SARS as an emerging infectious disease reported perceived threat of 8.3 as the mean on a scale of 1-10 for SARS. Other countries compared in the study were on a scale of 1 – 4 with average scores including Denmark (3.0), Poland (3.4), UK (3.1), Spain (3.3) and Hong-Kong (3.5). Considering the effect of the pandemic on human activity during the spread of COVID, one would have concluded that if there is any group with low threat for the disease, it would have been minimal. However, care needs to be taken when interpreting the differences between countries because cognitive constructs such as risk perceptions are not necessarily interpreted in the same way in different cultures (Luszczynska et. al., 2005).

Outcome expectancy towards response preparedness initiative

On outcome likelihood of COVID-19 response preparedness initiative, the likelihood of government initiatives yielding positive outcomes was well received by the respondents. For instance, the respondents said "Likely" (30.3%) and "Very likely" (51.3%) to a question that asked whether the respondents, their family & their friends will become safe after ensuring that governments measures to COVID-19 prevention are observed

religiously. Similarly, in all the other questions such as "I now reduce contact with body parts like eyes, nose and mouth especially without washing hands, the awareness creation and advocacy on COVID-19 prevention strategies by the government will help me to know how to protect myself from contacting COVID-19", positive outcome likelihood was approved by approximately 80% of the respondents.

Similar to outcome likelihood, the outcome values measured shows how they think the various government response initiatives were important. To each of the questions mentioned earlier in outcome likelihood section, over 80% of them saw the importance by selecting either "important" or "very important". The responses from this segment indicate the outcome expectation of the residents on government initiative. It shows they have internalized the safety precautions and measures needed to prevent them from contacting COVID-19 which could have been from the health promotion made through various means of dissemination.

As should be expected, for residents to adhere voluntarily and positively to the measures put in place by the govt. in preventing the community transmission of COVID-19, there should be positive expectation from them. The finding in this study indicates that most of residents studied (52.7%) had positive expectations towards COVID_19 response preparedness initiative by the government. This result is another matter for concern as a considerably high proportion (47.3%) of the residents had negative expectations towards the initiative. This result can however be justified by the report in a study by smith (2006) "responding to global infectious disease outbreaks: lessons learnt from SARS" which proposed that the higher level of severity of some diseases from a new virus may indicate that unfamiliar diseases are perceived less severe. The study by smith (2006) elaborate further that the higher perceived vulnerability for some diseases (SARS, tuberculosis, HIV) may be based upon the fact that these are indeed more prevalent.

Level of satisfaction towards response preparedness initiative

Further findings were made to assess the level of satisfaction towards COVID-19 response preparedness initiative of residents in the study location. Questions generally assessed how satisfied they were with the various measures and initiatives put in place by the government. For instance, the level of satisfaction on govt. recommendation on the use of nose mask was assessed high by approximately 60% of the residents. In another question on training, capacity building and every preparation in the health sector, about 54% of them were not so satisfied. In general, just a little above half (51.8%) of the residents were satisfied with the response initiatives put in place by the government leaving behind almost another half (48.2%) who were not satisfied.

In a similar study (Oleribe et. al., 2020), on "public perception of COVID-19 management and response in Nigeria, COVID-19 response" questions like that which assessed govt. enforcement of a stay at home, physical distancing, face mask and hand-washing policies poor by half (49.6%), management of isolation centers was rated poor by (55%), readiness of govt. to manage the epidemic was rated by 65.5% and prevention messages from govt. by 30% of the respondents. The satisfaction by almost half of the respondents in the various questions indicates how little the residents absorbed the supposed effort to curb the community transmission of the disease.

Cumulatively, almost half (51.8%) of the residents were satisfied with all the govt. response preparedness initiative in the study location and the other (48.2%) were not satisfied. This unsatisfied population is not negligible and the government needs to put in greater effort to convince them so as to have almost all the population of the residents supporting govt. effort. In contrast to this study, in the study by Oleribe (2020), government response was generally perceived poor except for health communication and prevention messages. The difference in the findings could be the use of specific govt. response initiative in the scoring of their satisfaction level in this study.

Association between perceived threat and outcome expectancy

The finding in the study revealed an association between resident's perceived threat of COVID-19 and their outcome expectancy towards the response preparedness initiative by the govt. Residents who perceive low threat for COVID-19 show negative expectation towards the initiatives put in place by the govt. while those who perceive high threat for COVID-19 show positive expectation towards the initiatives. In this report, only residents who see a serious threat of COVID-19 transmission that will expect a positive outcome in measures meant at preventing its transmission. Those who do not see COVID-19 with high vulnerability may expect less of positive outcome (negative outcome) from the various measures meant at curtailing its spread.

Residents who perceive the threat of COVID-19 as high will 3 times likely have positive outcome towards the initiative compared to those who see less threat in COVID-19.

Association between outcome expectancy and level of satisfaction

Further finings in the study revealed an association between outcome expectancy towards COVID-19 response preparedness initiative and the level of satisfaction towards the initiative. It was revealed that residents who have negative outcome expectancy towards govt. response initiative will have low level of satisfaction towards the initiatives while those with positive outcome expectancy will have demonstrated high level of

satisfaction to the said initiative. There was also, four times likelihood of scoring high the level of satisfaction by residents who expected positive outcomes towards the initiative when compared to those who do not expect positive outcome (negative outcome).

IV.   CONCLUSION

Based on the finding of this study, lower but considerable proportions of residents in this study have low level of perceived threat for COVID-19. Also, sizeable proportions of the respondents have negative outcome expectancy and low level of satisfaction towards govt. response preparedness initiative. Furthermore, low perceived threat of COVID-19 was related to negative outcome expectancy of Govt. response preparedness initiative and negative outcome expectancy of govt. response preparedness initiative was related to low level of satisfaction of the initiative.

More efforts of government should be placed on health promotion and education to increase the level of awareness for COVID-19, its epidemiology and the safety precautions. Since breaking community spread of COVID is not limited to a region, Adoption of NGOs, CSOs and other private organizations to support govt. will be a better strategy.

V.   RECOMMENDATIONS

- More efforts of government should be placed on health promotion and education to increase the level of awareness for COVID-19, its epidemiology and the safety precautions.
- Since breaking community spread of COVID is not limited to a region, Adoption of NGOs, CSOs and other private organizations to support govt. will be a better strategy.
- The Ministry of Health; Department of Public Health in collaboration with the Ministry of Communication should ensure proper and effective dissemination of Public information on COVID-19 using every available strategies.
- Communities (gate-keepers, mobilizers and leaders) should be involved in the sensitization program and research to exhibit people driven strategies in combatting future outbreaks.

REFERENCES

[1].   Adepoju P. Nigeria responds to COVID-19; First Case Detected in sub-Saharan Africa. *Nat Med*. 2020; 26(4):444–8.
[2].   Africanews. Coronavirus: AfDB approves $2m package for WHO's Africa response. 2020. Available from: https://www.africanews.com/2020/04/02/economics-of-covid-19-impact-on-africa/.

[3].   Bagnoli F, Lio P, Sguanci L. Risk perception in epidemic modelling. *Phys Rev E*. 2007; 76:061904.
[4].   BBC News. Coronavirus: Why some Nigerians are gloating about covid-19. 2020. Accessed on https://www.bbc.com/news/amp/world-africa- 52372737
[5].   Center for Disease Control and Prevention (CDC). What you should know about COVID-19 to protect yourself and others. 2020. Retrieved from 2019-ncovfactsheet (2).
[6].   Cowper A. Covid-19: are we getting the communications right? BMJ. 2020;368:m919.
[7].   De Zwart O, Veldhuijzen IK, Elam G, Aro AR, Abraham T, Bishop GD, et al. Avian influenza risk perception. Europe and Asia. *Emerg Infect Dis*. 2007; 13 2:288–91.
[8].   Gates B. Responding to Covid-19; a once-in-a-century pandemic? *N Engl J Med*. 2020; 382:1677–9.
[9].   Human Right Watch. Protect most vulnerable in covid-19 response. Nigeria. 2020. Retrieved from https://www.hrw.org/news/2020/04/14/nigeriaprotect-most-vulnerable-covid-19-response
[10].   Ihekweazu C. Steps Nigeria is taking to prepare for cases of coronavirus. The Conversation. 2020. Available from: http://theconversation.com/steps-nigeria-is-taking-to-prepare-for-cases-of-coronavirus-130704
[11].   Ihekweazu, How Nigeria Prepared for Coronavirus and why it might just avoid a major outbreak. Retrieved from https://qz.com/africa/1810161/coronavirus-how-nigeria-prepared-and -lessons-from-Ebola. 2020.
[12].   Luszczynska A, Scholz U, Schwarzer R. The general self-efficacy scale: multicultural validation studies. *J Psychol*. 2005; 139 5: 439–57.
[13].   Ngwewondo A, Nkengazong L, Ambe LA, Ebogo JT, Mba FM, Goni HO, et al. Knowledge, attitudes, practices of/towards COVID-19 preventive measures and symptoms: A cross-sectional study during the exponential rise of the outbreak in Cameroon. *PLoS Negl Trop Dis* , 2020; 14(9): e0008700. https://doi.org/10.1371/journal.
[14].   Nigeria Centre for Disease Control. First Case of Corona virus Disease Confirmed in Nigeria. 2020. Available from: https://ncdc.gov.ng/news/227/first-caseof-corona-virus-disease-confirmed-in-nigeria.
[15].   Oleribe O, Ezechi O, Osita-Oleribe P, Olatayo Olawepo, Adesola Z Musa, Anddy Omoluabi, Michael Fertleman , Babatunde L Salako, Simon D Taylor-Robinson. Public perception of COVID-19 management and response in Nigeria: a cross-sectional survey. *BMJ Open* 2020; 10:e041936. doi:10.1136/ bmjopen-2020-041936
[16].   World Health Organization. Coronavirus Disease (COVID-19) Pandemic. Available online: https://www.who.int/emergencies/diseases/novel-coronavirus-2019.
[17].   World Health Organization. Coronavirus disease (COVID-2019). *R&D [Internet]*, 2020. Available from: http://www.who.int/blueprint/prioritydiseases/key-action/novel-coronavirus/en/
[18].   Worldometer. Coronavirus (COVID-19) Pandemic Update (Live) [Internet]. 2020 . Available from: https://www.worldometers.info/coronavirus/