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Knowledge, Attitude and Acceptability of COVID-19 Vaccination among Lecturers in Universities in Akwa Ibom State

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ABSTRACT: *This study examined knowledge, attitude and acceptability of COVID-19 vaccination among lecturers in universities in Akwa Ibom State. Descriptive survey design was used for this study. The design was aimed at collecting and analyzing data to describe the knowledge, attitude and acceptability of COVID-19 vaccination among lecturers in Akwa Ibom State. The population stood at 4,346 lecturers from University of Uyo and Akwa Ibom State University located in Akwa Ibom State. But 217 lecturers making 5% of the total population of lecturers was used as the sample size for this study. Convenience sampling technique was adopted in sampling the respondents across the four tertiary institutions. A 20-item instrument titled "Knowledge, Attitude and Acceptability of COVID-19 Vaccination Questionnaire" reliability index was 0.72 was used for data collection. Frequency and percentage were used in analyzing the collected data. Findings of the study revealed that participants had good knowledge about COVID-19 and its vaccine, but had negative attitude towards vaccination and low acceptability of vaccination. It was concluded that the participants in the study had satisfactory knowledge regarding COVID-19 and its vaccine but their negative attitude and low level of acceptability of the vaccine seemed to be influenced by insufficient clinical trials and fear of its side effects. Recommendations were made that the provision of sufficient information about the vaccines for COVID-19 is important as this would help to eliminate fear and doubts that people have against vaccines; regular and effective education is needed to improve public COVID-19 vaccine acceptability and reduce its hesitancy and appropriate COVID-19 vaccination strategies are necessary for wider coverage of the population for vaccine uptake campaigns.*

KEYWORDS: Knowledge, attitude, knowledge, COVID-19, vaccination

INTRODUCTION

Lecturers play several roles in tertiary institutions so that investment in the institutions can have the desired effect. Lecturers act as reservoir of knowledge that can be drawn for local and national activities. They are expected to render high-skill service globally. Doing so, lecturers ensure the survival of human and its life. In fact, by their training and dedication, lecturers become the key to quality education. Knowledge such as wisdom, moral and ethical values can be learnt through lecturers. For lecturers to continue to give their knowledge and be relevant in the society, they need to be healthy. The outbreak of COVID-19 has posted serious challenge to health of lecturers in tertiary institutions globally.

The outbreak of coronavirus (COVID-19) was first reported in December 2019, as a cluster of acute respiratory illness in Wuhan, Hubei Province, China, from where it spread rapidly to other countries of the world. It was declared as a global pandemic by World Health Organization (WHO) on 12th March 2020. The COVID-19 pandemic has caused a huge number of deaths. Globally, as of 5 July 2021, there have been 183,198,019 confirmed cases of COVID-19, including 3,971,687 deaths reported by WHO (2021). As of 8 July 2021, a total of 3,032,217,959 vaccine doses have been administered and are likely to continue to have significant impacts on healthcare communication (Carla and Johnson, 2021).

In addition to the health impact of COVID-19, it has a significant economic burden that cannot be underestimated because it has caused a substantial reduction in workforces and an increase in unemployment globally (Nicola, Alsafi, Sohrabi and Kerwan, 2021). Since COVID-19 pandemic is a major threat to public health and has had a significant impact on all aspects of life including education, vaccination seems to be the surest way of curbing its harmful effect. These negative impacts have encouraged pharmaceutical companies to develop a vaccine urgently. In December 2020, several vaccines were authorized to prevent COVID-19 infection, and more than 50 COVID-19 vaccine candidates were being developed (Nicola et al., 2021).

In the context of the current worldwide health and financial crisis from COVID-19, vaccines have become the primary anticipated means to end its effects (Fisher, Bloomstone, Walder, Crawford, Fouayzi and Mazor, 2021). So reducing the spread of new COVID-19 infection is anticipated through vaccination of all people, with particular concern for a risky population like lecturers who are exposed to crowded classrooms. Besides the efficient community-level health measures like wearing face masks, social distancing, avoidance of populated areas, awareness creation, and hand washing, effective vaccination is vital to prevent morbidity and mortality of the pandemic.

Vaccination has now begun in several countries around the world including Nigeria.
A WHO (2021) report showed that nearly all COVID-19 deaths in world are now of people who were not vaccinated, a staggering demonstration of how effective the shot has been. Following the announcement of the first emergency use authorization for COVID-19 vaccine in December 2020 by the Food and Drug Administration in United States of America, priority to get the vaccine was given for risky groups of populations such as healthcare workers and other public workers including lecturers (Mbaeyi, 2021). While immunization has effectively decreased the morbidity and mortality of infectious disease worldwide, a far-reaching trust of vaccines among general populations can be impaired by different factors contributing to the low uptake of the vaccine. According to Akarsu, Canbay, Duygu, Baser, Fidancı and Cankurtaran (2020), these factors include media demonstrating less trust in the vaccine, a low opportunity of getting the vaccination, perceived risk of infection, economic problems, presence of depression symptoms, fear of passing on the disease to family, and knowledge and attitude of healthcare workers toward vaccination.

Nevertheless, people in diverse sectors of life like teachers, lecturers and health workers, among others still have doubts about the safety and efficacy of vaccines, including the

longevity of protection against COVID-19, as several cases of re-infection have been reported (Akarsu et al., 2020). Moreover, the rapid development of vaccines casts doubt on safety. Previously, the rapid development of vaccines has been linked to adverse issues. For example, the swine flu vaccine increased the risk of Guillain-Barré syndrome (Szmyd, Bartoszek, Karuga, Staniecka, Błaszczyk and Radek, 2021).

Vaccines have been a successful measure of disease prevention for decades. However, vaccine hesitancy and refusal are significant concerns globally, prompting the World Health Organization (WHO) to declare this uncertainty among the top 10 health threats in 2019 (Geoghegan, O'Callaghan and Offit, 2020). The causes of vaccine hesitancy, as reported in different studies, include religious reasons, personal beliefs, and safety concerns due to wide-spread myths, including the association of vaccines and autism, brain damage, and other conditions (Geoghegan et al., 2020). In addition to the complex process of vaccine development and experimentation which was taken for not less than one and half years, dissemination and acceptance among the general population have been further headaches, with an understanding of attaining herd immunity by infection (Reiter, Pennell and Katz, 2020).

Results of a community-based study involving Italian undergraduate students reported a good level of knowledge and acceptance of COVID-19 vaccination, revealing a sufficient flow of information or an efficient communication campaign among this population (Gallè, Sabella and Roma, 2021). This supports an imperative role of the media campaign and public health communications in combating the pandemic via behavioural change and targeting a barrier to vaccine uptake (Anwar, Malik, Raees and Anwar, 2020). Earlier studies have shown that vaccination with influenza vaccine decreases patient mortality and staff absenteeism (Williams, Gallant and Rasmussen, 2020). It would be reasonable to expect a similar benefit with the COVID-19 vaccination. Taking this into consideration, it is generally assumed that creating an intellectual understanding of the use of COVID-19 vaccine and budding factors of healthcare workers behaviour is crucial for designing sustainable health communications to instigate the acceptance and fruitful intervention of COVID-19 vaccination.

Many groups and individuals recently started to spread rumours and conspiracy theories aimed against vaccination, intensifying the pressure on healthcare authorities and other critical workers like lecturers (Paterson, Meurice, Stanberry, Glismann, Rosenthal and Larson, 2016). However, low- and middle-income countries like Nigeria are at risk of vaccination delays due to several reasons: lack of public trust, shortage of resources, and scarcity of vaccination supply as many high-income countries secure a large amount of the new vaccines, without prioritizing other countries. Consequently, this inequality can leave low- and middle-income countries at a disadvantage, given their low ability to fight COVID-19 with their current status of healthcare system, leading to humanitarian crises (Elhadi, Msherghi and Alkeelani, 2020).

To achieve the necessary herd immunity to control viral transmission and stop the pandemic, vaccinating more than 82% of the population is crucial and requires strong acceptance and low hesitation levels throughout the world (Sanche, Lin, Xu, Romero-Severson, Hengartner, Ke, 2020). Therefore, identifying factors associated with vaccine acceptance and hesitancy is

needed to implement policy changes and help public health experts identify a conceptual framework and educational campaign aimed at increasing this awareness in the general population (Wong, Wong, Huang, Cheung, Law, Chong, 2021). Waning public confidence in vaccines due to rumours and conspiracy theories is a major challenge for public health experts and policymakers worldwide.

Mohammedamin, Mandaras, Firomsa, Zakir and Aman (2021) carried out a systematic review of attitude towards COVID-19 vaccination among healthcare workers. The study assessed healthcare workers' attitudes toward the COVID-19 vaccination and its contributing factor worldwide. Peer-reviewed surveys in English indexed via an electronic database in Google Scholar, Science Direct and PubMed were systematically searched. The review was carried out per the Preferred Reporting Items for Systematic Reviews and Meta-analyses (PRISMA-2009) and registered on PROSPERO. Originally 8039 articles were searched from three databases PubMed, Science direct, and Google scholar. Finally, 24 studies met the inclusion criteria and made the root for the estimates of the attitude of COVID -19 vaccinations. In about two-thirds of the studies, respondents showed a positive attitude (≥ 50%) toward COVID-19 vaccination. However, in about one-quarter of the studies, a negative attitude (< 50%) against vaccination was reported. Factors related to the attitude of healthcare workers toward COVID-19 vaccination include age, sex, profession, concerns about the safety of vaccines and fear of COVID-19, trust in the accuracy of the measures taken by the government, flu vaccination during the previous season, comorbid chronic illness, history of recommendation, and depression symptoms in the past week.

Al-Qerem and Jarab (2021) examined COVID-19 vaccination acceptance and its associated factors among a Middle Eastern population. Sample characteristics were gathered, and the participants were classified according to the degree of COVID-19 risk based on the categories of the Centers for Disease Control and Prevention (CDC). Participants' knowledge, acceptance and practice toward COVID-19 were assessed, and two scores were calculated as knowledge score and practice score. The association between different sample characteristics and these scores was identified using binary logistical regressions. The participants' vaccination intention was evaluated and multinomial logistic regression was applied to identify the predictors of vaccination intention. Finally, the reasons behind the participants' vaccination refusal/hesitation were determined and categorized into different groups. 1,144 participants were enrolled in the study (females = 66.5%). 30.4% of the participants were at high risk of COVID-19 complications, and 27.5% were at medium risk. Overall, participants' knowledge of COVID-19 symptoms, transmission methods, protective measures, and availability of cure were high (median of knowledge score = 17 out of 21). High protective practices were followed by many participants (median of practice score = 7 out of 10). 3.7% of participants were infected, and 6.4% suspected they were infected with the COVID-19 virus. 36.8% of the participants answered "No" when asked if they would take the vaccine once it becomes available, and 26.4% answered, "Not sure." The main reasons for the participants' vaccination refusal or hesitancy were concerns regarding the use of vaccines and a lack of trust in them.

Fakonti, Kyprianidou, Toumbis and Giannakou (2021) investigated attitudes and acceptance of COVID-19 vaccination among nurses and midwives in Cyprus. This study aimed to

determine the COVID-19 vaccination intention among nurses and midwives in Cyprus and reveal the influential factors that affected their decision. An Internet-based cross-sectional survey was conducted between December 8 and 28, 2020. Data collection was accomplished using a self-administered questionnaire with questions about socio-demographic characteristics, questions assessing general vaccination-related intentions and behaviours, and the intention to accept COVID-19 vaccination. A sample of 437 responders answered the survey, with 93% being nurses and 7% midwives. A small proportion of the participants would accept a vaccine against COVID-19, while 70% could be qualified as "vaccine hesitant." The main reasons for not receiving the COVID-19 vaccine were concerns about the vaccine's expedited development and fear of side effects. More females, individuals with a larger median age, and a higher number of years of working experience, intended to accept the COVID-19 vaccination, compared with those not intended to accept and undecided groups ($p < 0.01$). Having a seasonal flu vaccination in the last 5 years, receiving the vaccines recommended for health professionals, and working in the private sector were associated with a higher probability of COVID-19 vaccination acceptance. A considerable rate of nurses and midwives in Cyprus reported unwillingness to receive a COVID-19 vaccine due to vaccine-related concerns.

Hesitation, spreading rumours, and fake news can affect public mentality and vaccine decisions. A known example is the 2003–2004 Nigerian boycott of the polio vaccine that resulted in a surge of the disease (Ghinai, Willott, Dadari, Larson, 2013). Therefore, social endorsement and efforts against hesitation regarding the COVID-19 vaccination are essential, especially among critical stakeholders of the society like lecturers. This may help promote vaccination and establish trust between the general population and health authorities and policymakers, leading to better control of the pandemic and a reduction of lives lost. Therefore, ascertaining vaccine acceptance and hesitation among the general population is crucial to draw policy plans and assess available resources to meet COVID-19 and overall health challenges to lessen the acute pandemic burden. It is on this note that this study examined knowledge, attitude and acceptability of COVID-19 vaccination among lecturers in Akwa Ibom State.

Purpose of the Study

The purpose of this study was to examine knowledge, attitude and acceptability of COVID-19 vaccination among lecturers in Akwa Ibom State. Specific objectives of the study were to:

1. Assess the knowledge level of COVID-19 vaccination among lecturers in Akwa Ibom State.
2. Determine the attitude towards COVID-19 vaccination among lecturers in Akwa Ibom State.
3. Ascertain the level of acceptability of COVID-19 vaccination among lecturers in Akwa Ibom State.

Research Questions

The following research questions were raised to guide this study.

1. What is the knowledge level of COVID-19 vaccination among lecturers in Akwa Ibom State?
2. What is the attitude towards COVID-19 vaccination among lecturers in Akwa Ibom State?

3. What is the level of acceptability of COVID-19 vaccination among lecturers in Akwa Ibom State?

METHODOLOGY

Descriptive survey design was used for this study. The design was aimed at collecting and analyzing data to describe the knowledge, attitude and acceptability of COVID-19 vaccination among lecturers in Akwa Ibom State. The target population were all lecturers in four public tertiary institutions in Akwa Ibom State. The population stood at 4,346 lecturers from University of Uyo, Akwa Ibom State University, Akwa Ibom State Polytechnic, and Akwa Ibom State College of Education. But 217 lecturers making 5% of the total population of lecturers was used as the sample size for this study. Convenience sampling technique was adopted in sampling the respondents across the four tertiary institutions. A 20-item instrument titled "Knowledge, Attitude and Acceptability of COVID-19 Vaccination Questionnaire" was developed by the researchers and used for data collection. The instrument also has items on demographic variables like age, gender, qualification, status of COVID-19 test and shaving a chronic disease.

The instrument consisted of items on knowledge, attitude and acceptability of COVID-19 vaccination. The items were structured in a 2-point response scale of agree and disagree. The instrument was validated by experts in health education and educational evaluation. The internal consistency reliability index of the instrument was estimated using Kuder-Richard 21 formula and the reliability index was 0.72 which indicated the appropriateness of the instrument for the study. The instrument was administered to the respondents physically with strict physical distancing. Out of the 217 copies of instrument administered, 211 copies were appropriately responded to and returned to the researchers, and this same number was used for the analysis. Frequency and percentage were used in analyzing the collected data and their values were used to estimate the level of knowledge, attitude and acceptability of COVID-19 vaccination among lecturers in universities in Akwa Ibom State.

RESULTS

The analysis focused on the demographic variables as well as the research questions that were raised for this study.

Demographic Variables

Frequency and percentage were used in answering research question one as shown in Table 2 below:

Table 1: Frequency and percentage distribution of demographic variables of respondents

Demographic Characteristics	Categories	Frequency (%)
Age (in years)	≤40	61 (29)
	>40	150 (71)
Gender	Male	119 (56)
	Female	92 (44)
Qualification	Professor	31 (15)
	Ph.D	84 (40)
	Master degree	59 (28)
	First degree	37 (17)
Have you tested positive for COVID-19?	Yes	58 (27)
	No	153 (73)
Has any of your relatives/friends tested positive for COVID-19?	Yes	44 (21)
	No	167 (79)
Do you have any chronic disease?	Yes	27 (13)
	No	184 (87)

The demographic variables of the respondents are presented in Table 1 as shown above. Most respondents (71%) are more than 40 years of age while (29%) are below the age of 40. Majority of them are males (56%) whereas lesser number of them (44%) are females. Among the lecturers, 15% are professors, 84% are Ph.D holders, 59% are master degree holders while 17% are first degree holders. Similarly, 27% of the respondents have tested positive for COVID-19 while 73% have not tested. Also, 21% the respondents' relatives/friends have tested positive for the virus while 79% said theirs have not tested. Few of the respondents (27%) said they have chronic disease while most of them (87%) said no.

Research Question One

What is the knowledge level of COVID-19 vaccination among lecturers in universities in Akwa Ibom State?

Frequency and percentage were used in answering research question one as presented in Table 2 below:

Table 2: Frequency and percentage distribution of the knowledge level of COVID-19 vaccination among lecturers in universities in Akwa Ibom State

Knowledge level of COVID-19 vaccination	Responses Frequency (%)	
	Agree	Disagree
COVID-19 is a deadly disease	202 (96)	9 (4)
Good vaccines are available for COVID-19	131 (62)	80 (38)
Nigeria is making its own COVID-19 vaccine	3 (1)	208 (99)
Vaccination is mandatory for all Nigerians?	87 (41)	124 (59)
I Will wear a mask after getting the COVID-19 vaccine	68 (32)	143 (68)
I Will follow hand hygiene practices after getting vaccinated for COVID-19	65 (31)	146 (69)
I Will maintain social distancing after getting vaccinated for COVID-19	53 (25)	158 (75)
I Will wear full PPE after getting vaccinated for COVID-19	42 (20)	169 (80)

The result of the knowledge level of COVID-19 vaccination among lecturers is indicated in Table 2. Majority of the respondents (96%) agreed that COVID-19 is a deadly disease while very little number (4%) disagreed. Many respondents also agreed that (62%) there are good vaccines for COVID-19 whereas a lesser number (80%) disagreed. The majority (99%) of respondents disagreed that Nigeria is making her own vaccine while a very little number of the respondents (1%) agreed in the reverse direction. Many of the respondents (59%) disagreed that vaccination is mandatory for all Nigerians but a good number (41%) agreed that vaccination is not mandatory. A larger number of the respondents (68%) agreed that they will wear a mask after getting the COVID-19 vaccine while a lower number (32%) disagreed. Similarly, many respondents (69%) disagreed to follow hand hygiene practices after getting vaccinated for COVID-19 but a lower number (31%) agreed in the opposite direction. In the same vein, majority of the respondents (75%) disagreed to maintain social distancing after getting vaccinated for COVID-19 while a lesser number agreed in the reverse direction. Also, a lot of the respondents (80%) disagreed to wear full PPE after getting vaccinated for COVID-19 but a few respondents (20%) agreed to wear. Hence, these responses show that most of the lecturers have good knowledge of COVID-19 vaccination in universities in Akwa Ibom State.

Research Question Two

What is the attitude towards COVID-19 vaccination among lecturers in universities in Akwa Ibom State?

Frequency and percentage were adopted in answering research question two as presented in Table 3 below.

Table 3: Frequency and percentage distribution of the knowledge level of COVID-19 vaccination among lecturers in universities in Akwa Ibom State

Attitude towards COVID-19 vaccination	Responses Frequency (%)	
	Agree	Disagree
I believe that the COVID-19 vaccine is very safe	74 (35)	137 (65)
I can rely on the COVID-19 vaccine to prevent serious infection with COVID-19	68 (32)	143 (68)
I worry about the unknown effects of the COVID-19 vaccine in the future	176 (83)	35 (17)
Natural immunity will last longer than the COVID-19 vaccination	158 (75)	53 (25)
Natural exposure to viruses gives the safest protection against COVID-19	160 (76)	51 (24)
Being exposed to COVID-19 naturally is safer for the immune system than being exposed through vaccination	169 (80)	42 (20)

The result of the knowledge level of COVID-19 vaccination among lecturers is shown in Table 3. Most respondents (65%) disagree that the COVID-19 vaccine is very safe while a fewer number (35%) agree that it is safe. Similarly, majority of the respondents (68%) said they cannot rely on the COVID-19 vaccine to prevent serious infection with COVID-19 but a lesser number (32%) agreed on the reverse direction. Also, a lot of respondents (83%) worry about the unknown effects of the COVID-19 vaccine in the future whereas a small number (17%) have no worry. However, a large number of respondents (75%) agree that natural immunity will last longer than the COVID-19 vaccination but a fewer number (25%) responded in the reverse direction. Also, majority of the respondents (76%) agree that natural exposure to viruses gives the safest protection against COVID-19 but a small number (24%) disagree. In the same vein, most of the respondents (80%) agree that being exposed to COVID-19 naturally is safer for the immune system than being exposed through vaccination while a fewer number (20%). Hence, these responses indicate that most of the lecturers have negative attitude towards COVID-19 vaccination in universities in Akwa Ibom State.

Research Question Three

What is the level of acceptability of COVID-19 vaccination among lecturers in universities in Akwa Ibom State?

Frequency and percentage were utilized in answering research question three as presented in Table 4 below.

Table 4: Frequency and percentage distribution of acceptability level of COVID-19 vaccination among lecturers in universities in Akwa Ibom State

Level of acceptability of COVID-19 vaccination	Responses Frequency (%)	
	Agree	Disagree
If a good COVID-19 vaccine is available, I would take it	102 (48)	109 (52)
I have made up my mind to take COVID-19 vaccine	98 (46)	113 (54)
I am ready to take any available COVID-19 vaccine	43 (20)	168 (80)
I can only take a vaccine from a reputable manufacturer	207 (98)	4 (2)
I am willing to receive COVID-19 vaccine any moment from now	106 (50)	105 (50)
I would never take COVID-19 vaccine	41 (19%)	170 (81%)

The result of the acceptability level of COVID-19 vaccination among lecturers is indicated in Table 3. About half of the respondents (48%) agreed to be vaccinated if a good COVID-19 vaccine is available while similar number (52%) disagreed to be vaccinated even if a good COVID-19 vaccine is available. On the other hand, majority of the respondents (54%) have made up their mind to take COVID-19 vaccine while a lower number (46%) are still contemplating about the vaccination. Few respondents (20%) are ready to take any available COVID-19 vaccine whereas a lot of them (80%) are not ready to take any vaccine. Most of the respondents (98%) agreed that they can only take a vaccine from a reputable manufacturer but just a minute number (2%) responded in the opposite direction. About half of the respondents (50%) are willing to receive COVID-19 vaccine any moment from now while similar number (50%) disagreed. Few respondents (19%) said they would never take COVID-19 vaccine whereas many of them (81%) responded in the reverse direction. Therefore, these responses reveal that there is high acceptability level of COVID-19 vaccination among lecturers in universities in Akwa Ibom State.

DISCUSSION OF FINDINGS

The COVID-19 pandemic is still threatening the world. The availability of vaccines is a great hope to find a solution to control the infection. Many COVID-19 vaccines are now available. However, to be effective, a vaccine must be acceptable and usable among the majority of the population. Knowledge about COVID-19, attitude towards COVID-19 and acceptability of vaccines influenced vaccination. Majority of the respondents (96%) agreed that COVID-19 is a deadly disease while very little number (4%) disagreed. Many respondents also agreed that (62%) there are good vaccines for COVID-19 whereas a lesser number (80%) disagreed. The majority (99%) of respondents disagreed that Nigeria is making her own vaccine while a very little number of the respondents (1%) agreed in the reverse direction. Many of the respondents (59%) disagreed that vaccination is mandatory for all Nigerians but a good number (41%) agreed that vaccination is not mandatory. A larger number of the respondents (68%) agreed that they will wear a mask after getting the COVID-19 vaccine while a lower number (32%) disagreed. Similarly, many respondents (69%) disagreed to follow hand hygiene practices after getting vaccinated for COVID-19 but a lower number (31%) agreed in the opposite direction.

In the same vein, majority of the respondents (75%) disagreed to maintain social distancing after getting vaccinated for COVID-19 while a lesser number agreed in the reverse direction. Also, a lot of the respondents (80%) disagreed to wear full PPE after getting vaccinated for COVID-19 but a few respondents (20%) agreed to wear.

Most respondents (65%) disagreed that the COVID-19 vaccine is very safe while a fewer number (35%) agreed that it is safe. Similarly, majority of the respondents (68%) said they cannot rely on the COVID-19 vaccine to prevent serious infection with COVID-19 but a lesser number (32%) agreed on the reverse direction. Also, a lot of respondents (83%) worry about the unknown effects of the COVID-19 vaccine in the future whereas a small number (17%) have no worry. However, a large number of respondents (75%) agree that natural immunity will last longer than the COVID-19 vaccination but a fewer number (25%) responded in the reverse direction. Also, majority of the respondents (76%) agree that natural exposure to viruses gives the safest protection against COVID-19 but a small number (24%) disagree. In the same vein, most of the respondents (80%) agree that being exposed to COVID-19 naturally is safer for the immune system than being exposed through vaccination while a fewer number (20%).

About half of the respondents (48%) agreed to be vaccinated if a good COVID-19 vaccine is available while similar number (52%) disagreed to be vaccinated even if a good COVID-19 vaccine is available. On the other hand, majority of the respondents (54%) have made up their mind to take COVID-19 vaccine while a lower number (46%) are still contemplating about the vaccination. Few respondents (20%) are ready to take any available COVID-19 vaccine whereas a lot of them (80%) are not ready to take any vaccine. Most of the respondents (98%) agreed that they can only take a vaccine from a reputable manufacturer but just a minute number (2%) responded in the opposite direction. About half of the respondents (50%) are willing to receive COVID-19 vaccine any moment from now while similar number (50%) disagreed. Few respondents (19%) said they would never take COVID-19 vaccine whereas many of them (81%) responded in the reverse direction.

Knowledge in the areas of disease transmission, preventive considerations and vaccine information are important to promote vaccine acceptance and decrease the vaccine hesitancy among the population to eradicate the COVID-19 infection. The main reasons for the non-acceptability of vaccines among lecturers were insufficient knowledge of vaccine safety, concerns regarding future side effects after getting vaccinated, chronic illnesses, and absence of enough availability of safety and clinical trial data about COVID-19 vaccinations. The main factor that might increase vaccine acceptability among the participants is to provide sufficient and accurate information about the available vaccines, their trial data, and their possible side effects. Lecturers are more concern about the side effects of vaccines.

CONCLUSION

This study examined knowledge, attitude and acceptability of COVID-19 vaccination among lecturers in universities in Akwa Ibom State. The participants in the study had satisfactory knowledge regarding COVID-19 and its vaccine but their negative attitude and low level of

acceptability of the vaccine seemed to be influenced by insufficient clinical trials and fear of its side effects.

Recommendations

1. The provision of sufficient information about the vaccines for COVID-19 is important as this would help to eliminate fear and doubts that people have against vaccines.
2. Regular and effective education is needed to improve public COVID-19 vaccine acceptability and reduce its hesitancy.
3. Appropriate COVID-19 vaccination strategies are necessary for wider coverage of the population for vaccine uptake campaigns.

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