



Impediments To Acceptance of Covid-19 Vaccine in Ifon Town, Ose Local Government, Ondo State, Nigeria

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Abstract. This study sought to investigate impediments to acceptance of Covid-19 vaccine in Ifon town, Ose local government, Ondo State. One research question was raised to guide the study. Descriptive research design was used for this study. The population of this study consists of 11,985 all males and females above eighteen (18) years old representing fifty-one percent (51%) of the whole population of Ifon town. The sample size used for this study consisted of three hundred and ten (310) unvaccinated respondents. The research instrument for data collection that used for this study was a structured closed ended survey questionnaire tagged "Questionnaire on Impediments to Acceptance of COVID-19 Vaccine" and was in two sections. Completed copies of the questionnaire was collected and analyzed using descriptive statistics of frequency count, percentage to explain the research questions raised and Chi-square inferential statistics was used to test the formulated hypotheses at a significant level of 0.05. Majority of the respondents cited concerns about vaccine safety, the vaccine not being properly tested, fear of rumors against the vaccine, and the belief that they cannot contract COVID-19 as reasons for their reluctance. Additionally, many participants expressed skepticism about the necessity of the vaccine, viewing the COVID-19 issue as mere propaganda or suggesting that reported cases of COVID-19 in Nigeria are fabricated lies. Concerns about potential side effects, fear of the unknown, and discomfort with injections were also prevalent among the respondents. Age was found to have a significant influence on several impediments to vaccine acceptance, including uncertainty about where to get vaccinated, belief in personal invulnerability to COVID-19, fear of social repercussions such as neighbors laughing or parents scolding, concerns about the vaccine's effects on men. It was recommended that given the diverse concerns identified among different demographic groups, targeted and tailored public health education

campaigns should be developed to address specific misconceptions and concerns. These campaigns should address vaccine safety, efficacy, and the importance of vaccination in preventing the spread of COVID-19.

1. Introduction

1.1 Background to the Study

One of the most significant historical public health achievements is discovery of vaccines which have resulted in reduction and eradication of so many vaccine-preventable infectious diseases burden globally by providing active immunity against infectious diseases. Vaccine coverage is an essential determinant that has helped in achieving reduction in those vaccine preventable diseases, hence widespread vaccine acceptance is crucial for achieving sufficient vaccination coverage. Vaccination is a simple, safe, and effective way of protecting people against infectious diseases, before they come into contact with the causative Organism. Vaccination coverage is highly influenced by its acceptability and the overall perception of its benefit and safety profile leading to good utilization. Increasing access to COVID-19 vaccines is key to reaching the World Health Organization's goals of getting 40% of the world's population vaccinated with COVID-19 vaccines by the end of 2021 and 70% vaccinated by mid-2022 (Centre for Disease Control and prevention, 2022).

As of today, vaccine is the most economical and effective intervention for preventing and controlling infectious diseases such as Coronavirus disease but unfortunately, vaccine hesitancy is a contributing factor to low acceptance of vaccination coverage. A survey conducted to explore the intention to accept COVID-19 among doctors in Nigeria reported that only about 38 per cent of respondents were willing to

accept the COVID-19 vaccination (Nomhwange, Wariri, Nkereuwem, Olarewaju, Nwosu, Adamu et al. 2022). From the report above, the remaining 62% doctors that are not willing to accept the vaccine may be as a result of so many factors including newness of the vaccine because from history, there is always a kind of hesitancy towards new vaccine, not that those doctors did not know the importance of the vaccine.

The risk associated with COVID-19 pandemic has exacerbated the need for an effective vaccine and vaccination process. Therefore, an understanding of impediment that contributes to vaccination hesitancy is essential. Many factors such as misconceptions surrounding any vaccine, safety of the vaccine, fear of possible side effects, belief of the people etc can negatively influence the intentions and implementation of vaccination campaigns/exercises, which can have devastating effects not only on the health of individuals but also on society as a whole. Since the emergence of this new corona virus, numerous organizations around the globe have conducted substantial research in an effort to create a vaccine that will protect people from this deadly new virus in a safe and efficient manner (Thartwat, Nassar, Nassar, Saad & Hamdy, 2022). COVID-19 vaccination was launched in Nigeria 5th March, 2021 following an outbreak of COVID-19 infection. COVID-19 is a global issue that has affected almost all sectors and every country in the world, it started just like play in Wuhan China towards the end of 2019, by 30th January, 2020 it was declared a disease of Public Health Emergency of International Concern (PHEIC) with 7700 confirmed cases and 170 death in China and additional 82 cases in 18 countries (Pan American Health Organization, 2020). On 11th March, 2020, as a result of rapid increase in the number of covid-19 cases outside China, the World Health Organization Director-General announced that the outbreak could be characterized as a pandemic by then more than 118,000 cases had been reported in 114 countries, and 4,291 deaths had been recorded (World Health Organization, 2020).

Nigeria recorded the first case of COVID-19 on 27th February, 2020 and as at 30th January, 2023, there have been 266,463 confirmed cases of COVID-19 with 3,155 deaths in Nigeria (World Health Organization, 2023). Coronavirus disease 2019 (Covid-19) is highly infectious, globally as of 3rd February, 2023, there have been 754,018,841 confirmed cases of COVID-19, including 6,817,478 deaths (World Health Organization, 2023). Covid-19 is a respiratory illness that can spread from person to person, by direct contact with infected people and indirect contact with surfaces in the immediate

environment or with objects used on the infected person. It has caused a serious threat to human globally, it has effect on almost all facets of life, it affected both rich and poor, old and young, caused enormous public health crisis globally with increased mortality and serious economic and social impact, in fact the tension and devastation created by the virus can never be forgotten in history of Nigeria and international world.

Several preventive and therapeutic measures was attempted such as regular hand washing, wearing of face mask, social distancing to partial and total lockdown. In addition, the Nigeria government provided the necessary logistics and regulations to curb the spread of COVID-19, such as the provision of isolation centres and Personal Protective Equipment (PPEs) to health workers, mandatory 14-day quarantine of travellers arriving the country and contacts tracing of infected people but little can be done in it prevention with all these measures, the start of COVID-19 vaccination was a beacon of hope for normal activities to return.

Covid-19 vaccines are considered a means of protection that will help to curb the spread of COVID-19 and reducing its related hospitalization, mortality and other devastating effects. To achieve this, vaccination coverage is a defining factor for successful herd immunity. According to Donard (2021), the herd immunity threshold (HIT) for coronaviruses is tagged at about 60% to 70% by some experts. To achieve herd immunity against COVID-19, Nigeria had made available COVID-19 vaccines free of charge and set an ambitious goal of vaccinating 40 per cent of its over 200 million population before the end of 2021 and 70 per cent by the mid of 2022. However, availability of vaccines does not necessarily translate to its acceptance because there are many factors that may serve as impediments to acceptance of vaccination and some of these are well documented in literature.

Nawas, Zeidan, Edwards & De-Soky, (2022) identified lack of knowledge, fear, accessibility, mistrust in the healthcare system, and systemic and operational obstacles as an Impediments. To some extent religion play a vital role in acceptance of vaccine, that is why in the actual sense whenever there is any vaccination program religious leaders are always being carried along. When it comes to decision making some aspects of religion and culture gave men (husbands) power over women (wives) so wives opinion does not matter and this can also influence the decision of any woman when it comes to accepting the vaccine. Age can also influence the decision of accepting Covid-19 vaccine because the younger age may likely want to show a kind of non-challant attitude

towards the vaccine than the matured adult who assumed more responsibility. Accessibility to right information about Covid-19 as disease and its vaccine may also be an impediment since right information are more opened to the literate than the illiterate. Farah, Hala, Abdul, Unaiza, Mohammed, Najeeb et al (2021) conducted a study in United State "where we can tagged 'the center of COVID-19" and documented that; Several factors were identified as leading to low vaccine acceptance: From the 65 studies, sex was mentioned in 22 surveys, race in 31, age in 16, education level in 19, and income status in 4. The study went further to identify other factors that contributed to vaccine hesitancy which include: uncertainty about the vaccine safety and side effects entailing after its administration, religious reasons and lack of trust in the healthcare system. Other identified impediments are vaccine effectiveness, booster dose, attitude towards the disease and its vaccine etc.

In Nigeria just like other countries where vaccine hesitant are recorded due to some impediments statistically, the National Primary Health Care Development Agency could not meet up with the targeted 70% of herd immunity that was set to achieved at the mid of 2022 probably due to some impediments, therefore it is important to investigate and understand the impediments that predict vaccine hesitancy among the people due to the inability of not being able to achieve the targeted vaccination coverage despite the availability and affordability of the vaccines.

1.2 Statement of the Problem

Covid-19 is a newly emerged disease in 2019 that have set almost all the countries in the world on their toes it affects about 225 Countries with global estimate of 754,018,841 confirmed cases and 6,817,478 number of deaths as of 3rd February, 2023 and in Nigeria 266,463 confirmed cases of COVID-19 with 3,155 deaths as at 30th January, 2023 (World Health Organization, 2023). It paralyzed each country economically in which Nigeria was not exempted, it has rendered many jobless, turns many husbands to widowers and many wives to widows, affect the academic calendar of students and many more damages. Many measures had been put in place to reduce the transmissibility of the disease; vaccine is the current key intervention with the motives of increasing level of herd immunity in each person in the community and the global world through Covid-19 vaccination of eligible individual. In view of the above the Nigeria National Primary Health care development agency (NPHCDA) joined the race of achieving 70%

held immunity set by WHO to be achieved towards the mid of 2022.

Statistically, globally as of 15th January, 2023 about 66% of the world had been fully vaccinated, percentage varying from country to country, In Africa, while vaccine supplies have been on the rise, the rate of vaccination remains low, with just 46.5% of the continent's population fully vaccinated (Africa Centre for Disease Control COVID-19 Vaccine, 2023). In Nigeria as of 9th January, 2023 only about 55.3% have been full vaccinated and this falls below the goal of World Health Organization of getting 70% vaccinated by the end of 2022 despite all the efforts. The achievement thus far, keeps the researcher working by asking several questions. Why the low vaccination? Are there factors militating against vaccination? It was on this background that the researcher wants to embark on this study to determine impediments to COVID-19 vaccine among eligible individual in Ifon, Ose Local Government. This is so important because it will help to validate if the factors that impede COVID-19 in literature are also peculiar to the ones in Ondo State. Therefore, the need for the study.

1.3 Research Questions

The following research question was raised to guide the study:

- What are the impediments to acceptance of COVID-19 vaccine?

1.4 Purpose of the Study

The main purpose of the study was conducted to investigate impediments to acceptance of COVID-19 vaccination in Ifon town, Ose Local Government, Ondo State.

2. Research Methodology

Descriptive research design was used for this study. This research design was adopted because it helps the researcher to elicit information without manipulation from the respondents on some identified variables on impediments to COVID-19 vaccine acceptance in Ifon, Ose local government, Ondo state.

2.1 Population of the Study

The population of this study consisted of 11,985 all males and females above eighteen (18) years old representing fifty-one percent (51%) of the whole population of Ifon town (Source: National primary

health care triangulated population census, 2016; Oludare, 2024).

2.2 Sample and Sampling Technique

The sample size used for this study consisted of three hundred and ten (310) unvaccinated respondents. Firstly, simple random sampling techniques was used to select name of location where respondents were surveyed, that is sixteen streets was randomly selected out of the 38 streets in the study area. Secondly on getting to the selected streets, systematic random sampling technique was used to select those who actually participated in the study. On entering each house, the researcher assistant will assign number to the people as they are coming out while the research explained to them the purpose of the survey after which the instrument was applied on every 1st, 3rd, 5th etc (as it may be applicable) member of the family that are above eighteen years who gave their consent.

2.3 Research Instrument

The research instrument for data collection that was used for this study is a structured closed ended survey questionnaire tagged "Questionnaire on Impediments to Acceptance of COVID-19 Vaccine" and it was in two (2) sections. Section A consisted of six (6) items designed to elicit information on the demographic variables of age, gender, marital status, religion

affiliation, educational level and employment status. Section B which is divided into three parts consisted of thirty-five (35) items based on the variables identified in the literature as an impediment against acceptance of COVID-19 Vaccine.

2.4 Validity of the Instrument

Three experts did validity of the instrument from the Department of Health, Safety and Environmental Education, university of Benin for construct and content validity, while the reliability was established using the test-re-test method of reliability. The instrument was first administered to twenty (20) participants who were not part of the study. The instrument was later re-administered to same group of people after interval of two weeks. Scores obtained from the first and second administration of the instrument was subjected to Pearson Product Moment Correlation coefficient (r) and coefficient of 0.85 was obtained.

The researchers personally administered the instrument alongside two trained assistants who were trained for the purpose. Participation in the study was voluntary and participants gave their consent before the application of the instrument. Collected data were analyzed using descriptive statistics of frequency count and percentage to explain the research question.

3. Result

Research Question: What are the impediments to acceptance of COVID-19 vaccination?

Table One: Frequency and percentage on impediments to acceptance of COVID-19 vaccination

s/n	Items	Agree	Disagree
1	I am not sure of the vaccine safety	194(62.4%)	116(37.4%)
2	the vaccine was not properly tested.	164(52.9%)	146(47.1%)
3	The vaccine is said to have a short time protection against the disease.	144(46.5%)	166(53.5%)
4	They said I can still contract the disease despite being vaccinated.	118(38.1%)	192(61.9%)
5	I am scared of those rumours against the vaccine.	200(64.5%)	110(35.5%)
6	I can contract COVID-19 from the vaccine.	85(27.4%)	225(72.6%)
7	I don't know where to get the jab.	56(18.1%)	254(81.9%)
8	I don't even know If I can take since I did not have the disease.	122(39.4%)	188(60.6%)
9	I don't know much about the vaccine.	150(48.4%)	160(51.6%)
10	I believe I cannot contract COVID-19.	189(61.0%)	121(39.0%)
11	I believed my immune system as a Nigerian is too strong for any COVID-19 to penetrate.	129(41.6%)	181(58.4%)
12	I don't see any need for it.	164(52.9%)	146(47.1%)
13	My neighbour will laugh at me.	47(15.2%)	263(84.8%)
14	I believed COVID-19 issue is nothing but a mere 'propaganda'	157(50.6%)	153(49.4%)
15	To say the fact those cases of COVID-19 in Nigeria are fabricated lie.	168(54.2%)	142(45.8%)
16	My parents will scold me.	23(7.4%)	287(92.6%)
17	I am too small/ too old to receive the vaccine.	37(11.9%)	273(88.1%)
18	I don't know if it will affect me as a man.	48(15.5%)	262(84.5%)
19	My partner (opposite) has me not to take the vaccine.	50(16.1%)	260(83.9%)
20	My religion affiliation did not permit me to take the vaccine.	30(9.7%)	280(90.3%)
21	My faith will not protect me from COVID-19.	125(40.3%)	185(59.7%)
22	It is only compulsory for government workers not for me.	59(19.0%)	251(81.0%)
23	I am scared of possible side effects.	218(70.3%)	92(29.7%)
24	I am scared of needle.	121(39.0%)	189(61.0%)

25	My friend/relative experienced COVID-19 side effect.	109(35.2%)	201(64.8%)
26	Of fear of unknown.	192(61.9%)	118(38.1%)
27	Vaccination centre is far from my house.	84(27.1%)	226(72.9%)
28	I don't like being picked with injection many times	163(52.6%)	147(47.4%)
29	I am scared of traditional arrow.	95(30.6%)	215(69.4%)

The table one showed the frequency and percentage on impediments to acceptance of COVID-19 vaccination. It can be observed that majority of the respondents agreed that the following are impediment to their acceptance of COVID-19 vaccination: vaccine safety (62.4%), the vaccine was not properly tested (52.9%), scared of those rumours against the vaccine (64.5%), believe they cannot contract COVID-19 (61.0%), don't see any need for it (52.9%), believed COVID-19 issue is nothing but a mere 'propaganda' (50.6%), to say the fact those cases of COVID-19 in Nigeria are fabricated lie (54.2%), they are scared of possible side effects (70.3%), of fear of unknown (61.9%) and don't like being picked with injection many times (52.6%). But majority of the respondent disagreed that the following are impediments to acceptance of the COVID-19 vaccination: scared of traditional arrow (69.4%), the vaccine is said to have a short time protection against the disease (53.4%), they said they can still contract the disease despite being vaccinated (61.9%), they can contract COVID-19 from the vaccine (72.6%), they don't know where to get the jab (81.9%), they don't even know If they can take since they did not have the disease (60.6%), they don't know much about the vaccine (51.6%), they believed their immune system as a Nigerian is too strong for any COVID-19 to penetrate (58.4%), their neighbour will laugh at them(84.8%), their parents will scold them (92.6%), they are too small/ too old to receive the vaccine (88.1%), they don't know if it will affect them as a man (84.5%), their partner (opposite) ask them not to take the vaccine (83.9%), their religion affiliation did not permit them to take the vaccine (90.3%), their faith will not protect them from COVID-19 (57.9%), it is only compulsory for government workers not for them (81.0%), they are scared of needle (61.0%), their friend/relative experienced COVID-19 side effect (64.8%) and vaccination centre is far from their house (72.9%).

4. Discussion of findings

The main purpose of the study was to investigate Impediments to Acceptance of COVID-19 Vaccine in Ifon town, Ose Local Government, Ondo State. It was discovered that majority of the respondents agreed that the following are their impediments to their acceptance of COVID-19 vaccine: vaccine safety, the vaccine was not properly tested , scared of those rumours against the vaccine, believe that they cannot contract COVID-19, don't see any need for it,

believed COVID-19 issue is nothing but a mere 'propaganda', to say the fact those cases of COVID-19 in Nigeria are fabricated lie, they are scared of possible side effects, of fear of unknown and don't like being picked with injection many times. This is supported by Olu-Abiodun, Abiodun and Okafor (2022) who revealed that the factors that were reported for non-acceptance of the COVID-19 vaccine were disbelief, lack of trust in the government, conspiracy theories, vaccine side effects COVID-19 fear of the unknown. The hesitancy rate was said to be high in a study conducted in one of Nigeria universities as follows 42.98% (150/349) of the respondents were not willing to receive the COVID-19 vaccine while 22.06% (77/349) were undecided, thus yielding a hesitancy rate of 65.04% despite the fact almost everybody has heard about the vaccine 97.3% (339/349).

5. Conclusion

The study conducted to assess the factors influencing the acceptance of COVID-19 vaccine among respondents revealed several significant impediments to vaccine acceptance. Majority of the respondents cited concerns about vaccine safety, the vaccine not being properly tested, fear of rumors against the vaccine, and the belief that they cannot contract COVID-19 as reasons for their reluctance. Additionally, many participants expressed skepticism about the necessity of the vaccine, viewing the COVID-19 issue as mere propaganda or suggesting that reported cases of COVID-19 in Nigeria are fabricated lies. Concerns about potential side effects, fear of the unknown, and discomfort with injections were also prevalent among the respondents.

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