AWARENESS OF COVID-19 VACCINE AMIDST UNDERGRADUATE STUDENTS OF FEDERAL UNIVERSITY GUSAU, ZAMFARA STATE

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ABSTRACT

The study seeks to assess the awareness of Covid-19 vaccine amidst undergraduate students in Federal University Gusau, Zamfara State. In order to achieve the stated objective the study employed a descriptive Cross-sectional research design. A sample Size of 250 respondents was selected based on Cochran's formula of sample Size determination. A multistage random sampling technique was adopted for the selection of sample. A well-structured questionnaire were used for of data and SPSS was used for statistical analysis. Descriptive Statistical analysis which includes Frequency, Percentages and 5 Points Likert rating scale were used to analyze the data. The Study findings showed that 74% of respondents were aware of the pattern of covid-19 infection while 76% of individuals concurred to the fact that covid-19 vaccination could protect against covid-19 infection. The result revealed that most of the participants are well aware of the COVID-19 virus, the patterns of the COVID-19 virus. The study concluded that that awareness programs were the most common and trusted sources of information for covid-19 vaccination. It also found that most participants were aware of covid-19 infection and the protective role of covid-19 vaccination.
Keywords: awareness, Covid-19, vaccine, undergraduate student, Federal University

INTRODUCTION

The global community has undergone a profound shift with the emergence of the COVID-19 pandemic. As nations grapple with the challenges posed by the virus, vaccination has emerged as a crucial strategy in curbing the spread and severity of the disease. This study aims to delve into the awareness levels of COVID-19 vaccines among undergraduate students in Federall University Gusau, Zamfara State. The awareness of COVID-19 vaccines among undergraduate students in universities is a pivotal area of study, considering the role educational institutions play in shaping societal attitudes. This research seeks to investigate the level of awareness, knowledge gaps, and potential factors influencing vaccine acceptance among this demographic. Understanding these dynamics is essential for designing targeted educational campaigns and fostering a more informed and vaccinated university community.

The undergraduate student population represents a dynamic and diverse group, often serving as a microcosm of society. Understanding their awareness, attitudes, and perceptions towards COVID-19 vaccination is imperative, as universities play a pivotal role in shaping the future leaders and contributors to society. In this context, it becomes essential to explore how well-informed undergraduate students are about the available COVID-19 vaccines, their willingness to get vaccinated, and any potential barriers or misconceptions they might have. By gaining insights into these aspects, we can tailor communication strategies, educational programs, and public health initiatives to address specific needs and concerns within this demographic.

This study holds significance not only in the context of the ongoing pandemic but also as a contribution to the broader field of public health education. As universities continue to navigate the complexities of the pandemic, ensuring that the student body is well-informed and proactive in vaccination efforts becomes an integral component of community health and resilience.

Severe acute respiratory syndrome (SARS) corona virus SARS-COV-2 is the virus responsible for the corona virus disease 2019 (COVID-19) ongoing global pandemic (WHO, 2020). SARS-CoV-2 initially surfaced in late 2019 in Wuhan, Hubei, China, and swiftly evolved into a world wide threat, impacting J220 nations (Helmy et al, 2020). As of December 19, the COVID-19 pandemic has led to over 74.2 million cases and over 1.6 million mortality worldwide (Helmy et al, 2020). The world's impact of the pandemic has been devastating, necessitating the implementation of alleviation policies to control its spread. (Phua et al, 2019). The common approach adopted by numerous countries globally was to diminish the transmissibility of the infection, through Non-Pharmaceutical Interventions (NPIs). These interventions encompassed the enforcement of mask policies, promoting hand sanitization, implementing social distancing measures, imposing travel restrictions, closing schools, and enacting partial or comprehensive lock downs. (FDA, 2020).

In December 2019, an outbreak of the novel corona virus disease 2019 (COVID-19), caused by severe acute respiratory syndrome corona virus 2 (SARS-CoV-2), was initially detected in Wuhan city, Hubei province, China. Afterwards, on March 11, 2020, the World Health Organisation declared COVID-19 as a pandemic due to the frighting levels of spread and seriousness of the disease (WHO, 2019). SARS-CoV-2 infection has been connected with a wide spectrum of ill- ness which ranges from asymptomatic, mild to severe, or deadly (Richardson et al, 2020). Common clinical symptoms of COVID-19 include fever, fatigue, dry cough, shortness of breath, pneumonia, anosmia, and ageusia (Guan et al, 2020; & Tong et al, 2020). To curb the transmission of covid-19infection and lessen its health impact, countries globally have adopted various preventive measures which include practices like social distancing, as well as the implementation of both partial and complete lock downs, temporarily shuttering schools, businesses, and/or requiring the usage of face masks in public places are among the measures implemented. While these actions have played a role in mitigating the initial surge of COVID-19 cases, there have been reports of the virus resurging as societies and economies reopened. (Devi, 2020 & Shimiz et al, 2020).

As a result, there is an immediate requirement for implementing sustained preventive measures over long term. Some nations attempted to attain herd immunity, characterized by a population's immunity level that hinders outbreaks through natural infection. Nevertheless, this strategy has been labelled as both unethical and unattainable (Orlowski & Goldsmith, 2020). Vaccines have played a crucial role in enhancing health results, as well as extending life expectancy through managing and averting the onset of infectious diseases like smallpox, polio, and combating the plague. (Harrison, 2020). Due to the increased illness and death rates linked to COVID-19 infection, the creation of a harmless and efficient vaccine for the virus is a crucial measure to stop the pandemic.

Presently, the Food and Drug Administration (FDA) has granted approval to certain pharmacological treatment choices designed to aid in managing mild to serious instances of COVID-19. (FDA, 2021). Yet, preventive measures, in the form of vaccines, play a significant role in controlling the spread and mitigating the risk of future occurrences. (Liu and Zhou (2020)). Throughout the years, vaccines have consistently demonstrated their effectiveness as the most efficient strategy to keep infectious diseases from happening. They prove to be more cost-effective than treatment, decreases both morbidity and death rate without leaving long-lasting effects. Both preventive and curative vaccines hold an essential value as the most apparent means to safeguard world well-being. The tally of COVID-19 cases reported to the World Health Organization (WHO) has been increasing since the initial report of COVID-19 infection in December 2019. However, a consistent reduction in the number of new cases has been noted since January 2021. On September 1, 2021, Nigeria reported 582 recent confirmed cases and 11 mortalities, according to the Nigeria Centre for Disease Control (NCDC), has raised the sum total confirmed cases to 193,013, with a total of 2,480 deaths.

Nonetheless, the dissemination of misinformation and a covert plot or collusion theories concerning COVID-19 vaccinations can significantly impact the willingness of individuals to get vaccinated once the vaccines are accessible. Consequently, there may be an increase in vaccine hesitancy, termed to be a "delay in acceptance or refusal of vaccination despite availability of vaccination services" (MacDonald, 2015), which can impede future endeavours to vaccinate against COVID-19 infection. At present, limited information is available regarding the receptivity of a prospective COVID-19 vaccine and the agents influencing its acceptance. However, understanding such imparting knowledge is crucial for devising strategies to enhance vaccine acceptability in anticipation of its availability. Therefore, in an effort to enhance understanding and provide valuable insights for public health authorities, the present research aimed to evaluate the knowledge and perception of Covid-19 vaccine among undergraduate students of Federal University Gusau, Zamfara State.

Statement of Problem
The global outbreak of COVID-19 infection, which began in 2019, represents a significant worldwide health emergency in the current century. Roughly 2.3% of the world's inhabitants were affected and the death toll has surpassed 3.3 million individuals. (Woldometer, 2021). Furthermore, numerous persons who

have recuperated from the COVID-19 infection are now grappling with persistent difficulties referred to as "long COVID-19" and additional long length effects of COVID-19 signs, symptoms and behaviours (Halpin et al, 2021).

The morbidity and death rate associated with COVID-19 in high-risk persons, such as those with diabetes mellitus and cardiovascular diseases, are significant, and the available treatment choices are presently restricted (Moon et al, 2020). Luckily, with the worldwide roll-out rregarding the COVID-19 vaccines, there is developing facts suggesting that they can diminish the severity of infection and prevent fatalities. (Fauci, 2021). Recently, real-world data from a nationwide mass vaccination program in Israel, conducted in a not controlled setting, have demonstrated the effectiveness of the vaccine in preventing symptomatic COVID-19 sickness, COVID-19-related hospitalization, serious illness, and mortality. (Dagan, 2021).

Meanwhile, the controversies surrounding the worldwide acknowledgement of Covid-19 lingers as millions refuse to take the vaccine. Hence, the study aimed to contribute to literature on the awareness of COVID-19 vaccine within Nigeria. The research was under-seen the awareness of Covid-19 vaccine amidst undergraduate students in Federal University Gusau, Zamfara State.

Research Questions
For the aim of this research, the ensuing research queries is been drawn.
- What is the degree of awareness of Covid-19 vaccine amidst undergraduate students in Federal University Gusau, Zamfara State?

Methodology
A descriptive cross-sectional research design was employed. The study population comprises of students of faculty of sciences, federal University Gusau, Zamfara State, Nigeria. The size of the sample is 250 respondents and was selected based on Cochran formula of sample size determination. In determining the sample size, the study adopted 5 percent standard error and a 95% confidence level. The smallest possible sample size is determined using:

$$N = \frac{Z^2 PQ}{d^2} --------3.1$$

Where: N= Minimum sample size
Z= Standard Normal deviation corresponding to 95% confidence interval on the
Normal Distribution Curve = 1.96; P = percentage of responses that were favourable; Q= The percentage of responses that are negative.; d^2 = The percentage of inaccuracy
Substituting the values into above formula to solve for N,

$$N = \frac{(1.96)^2 \times 0.80 \times 0.20}{(0.05)^2}$$

$$N = 245.862$$

Adjusting for non-response at 5%, 250 were adapted as the sample size.
This suggests the administration of 63 questionnaires in each department, to make a total of 252 respondents.

A multi-stage random sampling technique was used in the sample selection process. The initial phase involved the division of the faculty into the known four departments. At the second stage, 63 students were selected from each department. Questionnaires were used for collection of data. Descriptive statistics such as frequency, percentage and 5point Likert rating scale was used to analyse the data.
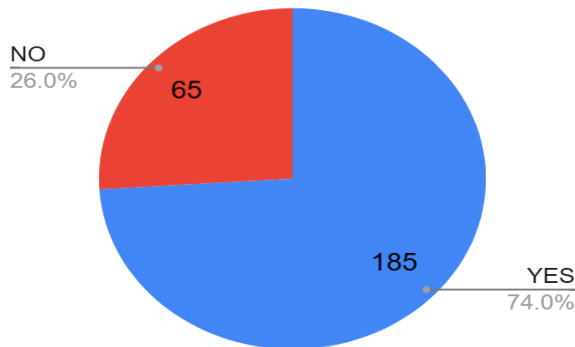
Results
In this section, the information obtained from the research and the results of the data analysis are shown below.
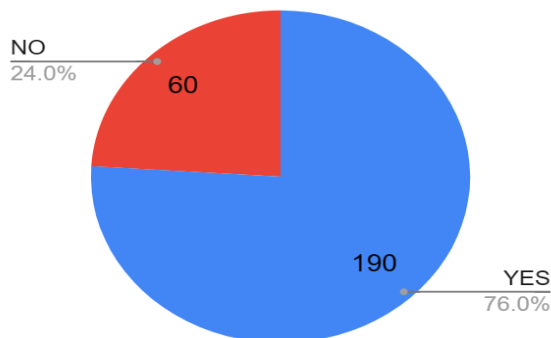
Awareness of Covid-19 Vaccine.
This work deciphers the level of awareness of the participant with relation to the COVID-19 vaccination. It has already been said that the participants of the study are informed of Covid-19 and its vaccines. Awareness with respect to pattern of covid-19 infection and whether the participants had any idea of the

actions of the vaccine was sought out. To that end questions were asked of the students and the answers were analysed as shown in the double pie chart below. Details are shown in the figure below.

Figure 1: Awareness of covid-19 vaccine
The result showed that awareness of pattern of covid-19 infection, 74% of respondents were aware of the pattern of covid-19 infection while 76% of individuals concurred to the fact that covid-19 vaccination could protect against covid-19 infection.
The result showed that most of the participants are well aware of the COVID-19 virus, the patterns of the COVID-19 virus and most of them also affirm that covid-19 vaccination protects against covid-19 infection.

Discussion of finding
The result showed that majority of respondents knew about the COVID-19 infection and the fact that the vaccine is effective in preventing COVID-19 infection. This finding is encouraging, as it indicates that the participants have a basic understanding of the nature and purpose of covid-19 vaccine. However, awareness does not necessarily translate into acceptance or uptake of covid-19 vaccine, as there may be other factors that influence the decision to get vaccinated, such as perceived risk, perceived efficacy, perceived safety, perceived necessity and perceived social norms (Brewer et al., 2017; Betsch et al, 2017).

Conclusion
This research examined the awareness of Covid-19 vaccine amidst undergraduate students in Federal University Gusau, Zamfara State. It found that awareness programs were the most common and trusted

sources of information for covid-19 vaccination. It also found that most participants were aware of covid-19 infection and the protective role of covid-19 vaccination.

Recommendation

Based on the finding of the study, it is recommended to strengthen the role and capacity of health professionals and awareness programs as reliable and credible sources of information for covid-19 vaccination.

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