



Student Nurses and Midwives' Experiences of COVID-19 Vaccines

Thomas Boansi Gyamerah¹, Samuel Adusei², Benjamin Twiri Ampah³, Hope Smith Lomotey³ and Albert Abaka-Yawson^{3*}

¹Nursing and Midwifery Training College, Asankrangwa, Ghana

²Department of Obstetrics and Gynecology, University of Cape Town, South Africa

³Department of Biological, Environmental and Occupational Health Sciences, University of Ghana, Ghana

Abstract

COVID-19 is an irresistible infection. The genetic sequence of SARS-CoV-2, the coronavirus that causes COVID-19, sparked a surge in global research and development to create a vaccine. The study investigated the experience of student nurses and midwives on the first dose of COVID-19 vaccine. This report showed that students know something about COVID-19 and its vaccine. These students got their information through various ways such as social media, television as well as through their friends. They had also received the first dose of the COVID-19 vaccine. Moreover, upon their first shot of the vaccine they experienced headache, fever, weakness, slept a lot, pain at the injection site and hunger. All these subsided within a few days. It is suggested that taking part in the vaccination of the COVID-19 will strengthen individual's immune system, offer protection and also reduce the contraction of the virus. Also, the doses can be made one. Moreover, education should be more to enhance the vaccination program to clear the myth about the vaccine and help in prompt management of the side effects as they occur. People should be able to voice out about their readiness for the vaccine, about their immune system, and any underlying conditions they might have.

Keywords: COVID-19; COVID-19 vaccine; Student nurses and midwives; Qualitative research; Nursing training college

OPEN ACCESS Introduction

*Correspondence:

Albert Abaka-Yawson, Department of Biological, Environmental and Occupational Health Sciences, University of Ghana, Legon, Ghana, E-mail: aabakayawson@uhas.edu.gh

Received Date: 10 Jun 2022

Accepted Date: 04 Jul 2022

Published Date: 08 Jul 2022

Citation:

Gyamerah TB, Adusei S, Ampah BT, Lomotey HS, Abaka-Yawson A. Student Nurses and Midwives' Experiences of COVID-19 Vaccines. *Am J Med Public Health.* 2022; 3(1): 1032.

Copyright © 2022 Albert Abaka-Yawson. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

COVID illness (COVID-19) is an infection brought about by a newfound Coronavirus [1]. Coronavirus keeps on spreading internationally, with expanding horribleness and mortality, with some control in the African landmass contrasted with different pieces of the world [2]. In November 2020, the mainland of Africa, involving 1.3 billion individuals, had recorded 2,070,953 instances of COVID-19 and 49,728 deceases, signifying 3.6% of absolute worldwide cases [3]. Around April 2020, an expected 86,000 individuals had been followed and 68,591 tests performed. Ghana is positioned to be the number one among African nations in overseeing tests per million individuals [4]. The advantage of building up a viable immunization is high and surprisingly more prominent in the event that it tends to be conveyed on schedule to forestall rehashed or persistent pestilences [5]. The genetic sequence of SARS-CoV-2, the coronavirus that causes COVID-19, sparked a surge in global research and development to create a vaccine. There are 115 vaccine candidates in the global COVID-19 vaccine R&D landscape, with 78 confirmed as active and 37 unconfirmed [6]. COVID-19 vaccines can cause side effects such as fever, pain at the injection site, fatigue, muscle ache, headache, chills and diarrhea [7]. The side effects of the COVID-19 vaccination are individualistic experience. There is the need to search for these experiences within the Ghanaian context.

Methodology

This study employed the explorative descriptive research design using qualitative research approach. The study was carried in Ghana, West Africa, with an estimated population of more than 31 million [8]. The researcher sampled student nurses and midwives since they had been vaccinated and they being the nearest population to be use. The researcher employed an interview tactics to get the needed data for the study.

Sample size and sampling technique

The researcher employed the use of purposive sampling to select the sample for the study. A total

sample size was made up of 8 student nurses and midwives from the nursing training college as the researcher reached a saturation height where there was no added information from the participants. A purposive sampling is a sort of non probability test to deliver a sample that can be intelligently thought to be illustrative of the populace [9].

Research instruments

Semi-structured interview guide was used as the research instrument for gathering the data. It was made up of closed and opened ended questions for the students to respond to. The interview tries to depict the implications of focal topics in the existence universe of the subjects. The fundamental assignment in interviewing is to comprehend the importance of what the interviewees say [10].

Results

The results were analyzed using a simple percentage method and Chart. The data for the study has been collected using an interview. The interview reached it saturation on the 8th participants.

Biographic information of participants (Tables 1-3).

Knowledge of COVID-19

All the participants knew something about COVID-19. Most of them heard such information through the news, internet, radio, and in books. Some indicated that COIVID-19 is a pandemic disease which is caused by a virus. This virus is very dangerous and affects the lungs. Few informed that COVID-19 started from the advanced countries like China, United States, Germany and Australia. This gradually spread to Ghana. One participant labeled that COIVID-19 was an airborne infection and another also said it was a droplet infection.

Awareness of COVID-19 vaccine

Most of the participants were aware of COVID-19 vaccine but some did not know the number of types in existence. They got such information through WhatsApp, News (when the president announced it), and Facebook. One of the participants said she knows of only two types (Johnson-Johnson) but had forgotten the one she was vaccinated with. All the participants pointed out that they had been vaccinated against the COVID-19 in the month of March, 2021.

Other vaccination

Most of the participants had been vaccinated before in their lives, but few mention of being vaccinated against yellow fever and hepatitis B. One mentioned that she was vaccinated against syphilis. All the participants indicated that they did not know if they were vaccinated during their childhood.

COVID-19 vaccine experience

Many of the participants had aftermath effects of the vaccine. Some became weak, slept a lot, temperature rose, headache for 3 to 4 days before they felt well again. One indicated during the he was hungry. Another said for the first day she took the vaccine, she was normal, but on the second day, she felt a bit weak, pain at the left arm (the one used for the vaccination) but felt normal on the next day. One of participants indicated that she was a known asthmatic patient and upon taking the vaccine, she started to have difficulty in breathing and rashes on the skin. She was sent to the hospital and was nebulized and also given some medications to be taken.

Why people should vaccinate

Some participants pointed out that people should partake in the vaccination to make their immune system strong, to help offer

Table 1: Participants age.

AGE	Number of Participants	Percentage (%)
20-25	7	87.5
26-30	0	0
31-35	1	12.5
Total	8	100%

Inference: From the above results gathered from the students, it was observed that 87.5% of the students were between the ages of 20 to 25 years, 12.5% between 31 to 35 years and none 0% were between the ages of 26 to 30 years

Table 2: Gender of participants.

Gender	Number of Participants	Percentage (%)
Female	7	87.5
Male	1	12.5
Total	8	100%

Inference: The Table 2 indicates that out of the 8 participants, 7 representing 87.5% were females whilst 1 (12.5%) was a male

Table 3: Course study of participants.

Course Study	Number of Participants	Percentage (%)
Registered General Nursing	3	37.5
Registered Midwifery	2	25
Registered Nursing Assistant Clinical	3	37.5
Total	8	100%

Inference: The Table 3 depicts that 3 (37.5%) of the participants are studying registered general nursing and the same number of participants are reading registered nursing assistant clinical, and also 2 (24%) of the participants read registered midwifery

protection and to help subside COIVID-19 transmission among people. Some of the participants specified that it will depend on the individual immune system, underlying conditions, and the decision of the person in order to vaccinate.

Concern on future vaccination

Most of the participants suggested that there should be more education (such as the side effects, types of vaccines, and management and who to call for help during crisis) on the COVID-19 vaccination before it should be taken. One participant said it important to educate to clear the myth (such as for reduction of fertility, the virus is the vaccine) surrounding the COVID-19 vaccine. Another participant voiced that the doses of the vaccine should be made a single dose because of the experience of the first dose they might not know what will happen for the second dose. Some also stressed on that the vaccine is good and everyone should be encouraged to be vaccinated. One participant specified that we should have faith in ourselves and in God to sail as through, and that Ghanaians should not have fear for there is no COVID-19.

Discussion

This is the first study to explore the experiences of COVID-19 vaccine among student nurses and midwives. Targeting this group, who are part of the workforce within the healthcare of Ghana when they are on their various clinical schedule are vital to bring out information. This will help better the general populace. Most of the participants had heard of COVID-19 spreading from advanced countries like China, United States of America, and Germany. This finding is consistent with the results of the work of Lake [11], which showed that health specialists in Wuhan, China, identified a new coronavirus, SARS-CoV-2.

The current study revealed that participants do associate COVID-19 as an airborne infection and also as a droplet infection. This in line with the outcome of the study of Zhang, Zhang, Wang & Molina [12], indicating that airborne transmission represents the central route to spread the infection. Likewise Jones [13], findings showed that droplet transmission route dominates in the spread of the disease.

The present study specified that participants were aware of the existence of COVID-19 vaccines and had been vaccinated. However, Schoch-Spana et al. pointed out that if vaccines can be successfully being developed [14], a considerate vaccination campaign is significant to ensure COVID-19 vaccine acceptance. Moreover CDC [15], specified that three vaccines (Pfizer-BioNTech, Moderna, and Johnson & Johnson's Janssen) which are presently authorized and commended.

The prevailing paper pointed out that majority of the participants had been vaccinated even though some could not remember whether they had been vaccinated during their childhood. Hence Williams et al. [16] stipulated that vaccination is advised during one's life to avoid vaccine-preventable diseases and their complications.

WHO [7] states that side effects of COVID-19 vaccines which had been reported have frequently been mild to moderate and had persisted not longer than few days. These include fever, fatigue, and pain at the injection site, headache, diarrhea, muscle pain, and chills. This can be confirmed in the present study as participants voiced out that they experienced side effects of the vaccine such as pain, fever, weakness and headache which all lasted for few days.

The most common motives for people to vaccinate according to Dodda et al. [17], is to protect themselves and others, to believe in vaccination and research, and to help stop the virus from spreading. This is related to the current research, in which participants stated that vaccines should be given to people to provide immunity and to help people avoid contracting the COVID-19.

This present work finding suggest that people should be informed about potential vaccinations in order to dispel the COVID-19 vaccine's theory. According to the findings of Elkin, Pullon, and Stubbe's [18], negative vaccine information remains and is easily accessible online, so vaccine-promoting organizations and agencies must continue to make every effort to maximize their online presence.

Conclusion

The level of knowledge on the COVID-19 vaccine must be well informed before the initiation of the vaccination. Education should be stressed on the COVID-19 vaccine and the myth surrounding it should be clarified so as to make the populace become aware of the various side effects that are bound to occur and the proper management to employ when the effects occur. The individual immune system should be taken into account in the course of the vaccination.

Acknowledgement

The author would like to acknowledge Jessie Asieduaa Aduako (CHT) for her support.

References

1. WHO. Coronavirus. 2021.
2. Lone SA, Ahmad A. COVID-19 pandemic-an African perspective. *Emerg Microbes Infect.* 2020;9(1):1300-8.
3. Maeda JM, Nkengasong JN. The puzzle of the COVID-19 pandemic in Africa. *Science.* 2021;371(6524):27-8.
4. Afriyie DK, Asare GA, Amponsah SK, Godman B. COVID-19 pandemic in resource-poor countries: Challenges, experiences and opportunities in Ghana. *J Infect Dev Ctries.* 2020;14(8):838-43.
5. Graham BS. Rapid COVID-19 vaccine development. *Science.* 2020;368(6494):945-6.
6. Le TT, Andreadakis Z, Kumar A, Román RG, Tollefsen S, Saville M, et al. The COVID-19 vaccine development landscape. *Nat Rev Drug Discov.* 2020;19(5):305-6.
7. WHO. Side effects of COVID-19 vaccines. 2021.
8. Worldometer. Ghana Population (LIVE). 2021.
9. Lavrakas PJ. *Encyclopedia of survey research methods.* SAGE Publications. 2008.
10. Valenzuela D, Shrivastava P. Interview as a method for qualitative research. Southern Cross University and the Southern Cross Institute of Action Research (SCIAR). 2002.
11. Lake MA. What we know so far: COVID-19 current clinical knowledge and research. *Clin Med (Lond).* 2020;20(2):124-7.
12. Zhang R, Li Y, Zhang AL, Wang Y, Molina MJ. Identifying airborne transmission as the dominant route for the spread of COVID-19. *Proc Natl Acad Sci USA.* 2020;117(26):14857-63.
13. Jones RM. Relative contributions of transmission routes for COVID-19 among healthcare personnel providing patient care. *J Occup Environ Hyg.* 2020;17(9):408-15.
14. Schoch-Spana M, Brunson E, Long R, Ruth A, Ravi SJ, Trotochaud M, et al. The public's role in COVID-19 vaccination: Human-centered recommendations to enhance pandemic vaccine awareness, access, and acceptance in the United States. *Vaccine.* 2021;39(40):6004-12.
15. CDC, (2021). Different COVID-19 Vaccines.
16. Williams WW, Lu PJ, O'Halloran A, Bridges CB, Kim DK, Pilishvili T, et al. Vaccination coverage among adults, excluding influenza vaccination-United States, 2013. *MMWR Morb Mortal Wkly Rep.* 2015;64(4):95-102.
17. Dodd RH, Pickles K, Nickel B, Cvejic E, Ayre J, Batcup C, et al. Concerns and motivations about COVID-19 vaccination. *Lancet Infect Dis.* 2021;21(2):161-3.
18. Elkin LE, Pullon SRH, Stubbe MH. 'Should I vaccinate my child?' comparing the displayed stances of vaccine information retrieved from Google, Facebook and YouTube. *Vaccine.* 2020;38(13):2771-8.