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A QUALITATIVE ASSESSMENT OF THE PERCEPTION, MISCONCEPTION, MYTHS AND FEARS TOWARDS COVID-19 AND THE VACCINATION AMONGST WOMEN ATTENDING ANTENATAL CARE CLINICS IN JOS, PLATEAU STATE; NIGERIA.

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ABSTRACT

The aim of this study was to qualitatively assess the perception, misconception, myths and fears towards covid-19 and the covid-19 vaccination amongst women attending antenatal clinics in Jos, plateau state; Nigeria. This was done utilizing a cross-sectional study that utilized a validated data tool with over 250 participants. The predominant false perception of the vaccine is that it was not effective enough to keep the recipients safe from the COVID-19 infection. Also, the most concerning misconception amongst the participants are those regarding fertility, death and the vaccine causing the corona virus infection amongst its recipients.

KEYWORDS: Perception, Misconception, Myths, fears, COVID-19, Vaccination, Nigeria.

INTRODUCTION

As of 21 September 2021, the confirmed cases of COVID-19 globally was 228,807,631(including 4,697,099 deaths), African's situation was 5,926,202 confirmed cases.^[1] However, at this time, the WHO had already given approval for the covid-19 vaccines to begin circulating, in fact by this time, it was already in Africa and Nigeria being given to citizens for free.^[2]

World Health Organization defines vaccination as a simple, safe and effective way of protecting people against harmful diseases, before they come into contact with them. It uses the body's natural defenses to build resistance to specific infections and makes your immune system stronger.^[3] The covid-19 vaccine works by teaching the immune system to naturally recognize and prevent the virus that causes COVID-19. The following are potential covid-19 vaccine currently in development; Inactivated or weakened virus vaccines, Protein-based vaccines, viral vector vaccines, RNA and DNA vaccines.^[4]

Vaccine hesitancy is viewed by the World Health Organization as the world's top threat to public health, particularly in low- and middle-income countries. This can be due to a lack of knowledge, false religious beliefs, or anti-vaccine misinformation.^[5]

Furthermore, a cross-sectional study done across nine low- and middle-income countries Malaysia, Thailand, Bangladesh, Brazil and five African countries (Democratic Republic of Congo, Benin, Uganda, Malawi, and Mali) on factors affecting acceptance on COVID vaccine revealed that vaccine acceptance was also positively associated with COVID-19 knowledge, worry/fear regarding COVID-19, higher income, younger age, and testing negative for COVID-19 amongst 95% of 10,183 respondents. However, 15% refused acceptance due to concern about the effectiveness of the vaccine and 41.2% due to side effect. This showed that there was a positive link between knowing the virus, knowing the vaccine and accepting the vaccine.^[6]

The aim of this study is to qualitatively assess the perception, misconception, myths and fears towards covid-19 and the covid-19 vaccination amongst women attending antenatal clinics in Jos, plateau state; Nigeria.

MEHTODOLOGY

STUDY AREA

Plateau is the twelfth -largest state in Nigeria. Approximately at the center of the country. It is geographically unique in Nigeria due to its boundaries of elevated hills surrounding the Jos plateau its capital, and the entire plateau itself. Plateau state is celebrated as "The Home of Peace and Tourism". With natural formations of rocks, hills and waterfalls, it drives its name from the Jos plateau and Jos a population of around 4.2 million people. Bukuru is a city located on the Jos Plateau in Nigeria. It was previously considered separate city from the city of Jos close by, but like every other form of urbanization, the city of Jos merged with the town of Bukuru to form the Jos-Bukuru metropolis. It is the headquarters of Jos South LGA.

The major forms of transportation connecting in and out of Bukuru is by road and rail. The rail ways connect Bukuru with Bauchi, Zaria, Lago and Port Harcourt. Mainly used for business, import and export of natural minerals.^[7]

Although it has a mix of Christians and Muslims, there is a Christian majority. There is also a central mosque in Bukuru.^[8]

STUDY SITE

The study sites are three (3) Primary HealthCare Centres (PHCs) in Bukuru. According to data obtained from the Ministry of Health and utilization of scientific tools of remote sensing GPS and GIS for a better update, there are about twenty-one (21) health facilities in Bukuru. Of these, one (1) is a tertiary facility, four (4) are PHCs and the others are health center levels.^[9]

Of these 4 Primary healthcare centres, we conducted our study amongst three (3). They are, Bukuru Express Primary Healthcare Centre, Bukuru Central Primary Healthcare Centre and Ecwa Comprehensive Healthcare Centre. Both Bukuru Express and Bukuru central are Government owned primary healthcare facilities that are equipped with about 8 and 6 bed spaces, respectively. Their healthcare team comprises of a public health nurse, a Midwife and a Community Health Worker (CHEW). However, the ECWA comprehensive Healthcare Centre has 14 bed spaces and a larger facility. They have doctors (consultants) who come to run clinics on some days. It is a privately owned facility, charges more, better kept environment and has less patients visiting. They are all located within a 3-5 minutes Motorcycle or Tricycle ride away from each other, and costs about N50. Bukuru Express is located about 5 minutes from the tertiary facility, Bukuru Specialist Hospital. While Bukuru central and ECWA comprehensive Healthcare Centre is located about 15 minutes from the specialist hospital. Hence, have a longer time to patient transfer in emergency referrals.

STUDY POPULATION

The study population are the pregnant women currently attending Antenatal. These facilities are PHC Bukuru Central (BC), PHC Bukuru Express (BE), ECWA Comprehensive Health Centre (ECHC).

Inclusion Criteria

1. A Pregnant woman who is registered at a Primary Healthcare facility in Bukuru for her Antenatal care

Exclusion Criteria

- 1. Any man
- 2. Any woman who does not fall within the inclusion criteria
- 3. Any woman who did not consent to participating in the study.

Sampling Technique for the Focus Group Discussion

A focus group discussion was conducted for 8 pregnant women per domain. They were selected using convenient sampling methods. There were 5 domains. 2 from the Bukuru express and Bukuru Central, and 1 from the ECWA CHC, respectively.

Instrument of Data Collection Questionnaire

Data was collected using a focused group discussion. The questionnaire was written in English and comprises of two (2) sections, A and B.

Section A: Questions on their perception of the vaccine Section B: Questions on misconceptions, myths and fears they have towards the vaccine

Focus Group Discussion Guide

A structured focus group discussion guide will be used to examine the knowledge, acceptance and side effects of covid-19 and the vaccination amongst women attending the ANC at Bukuru express PHC, Bukuru central PHC and ECWA CHC, respectively. A researcher facilitated the discussion using the FGD guide while the other 2 researchers took notes and recorded the responses using a recorder.

The FGD participants were picked by purposive selection and they were interviewed in a quiet environment to ensure privacy. They were 40 participants. Participation was voluntary and the session was conducted in English. The sitting arrangement in the FGD was such that there was easy eye contact and hearing between the researcher who was the principal facilitator and the participants. The participants were encouraged to talk freely and spontaneously and the session lasted for about 1 hours (30 minutes per session) as allowed by the participants. Within 24 hours after the session, the recordings were carefully translated and transcribed.

Preparation for Data Collection

Prior to data collection, permission was sought and obtained from the ethical committee Bingham University Teaching Hospital. Further consent was verbally sought from heads of each of the Primary Health Care Centers. Informed verbal consent was sought and obtained from each of the respondents after the purpose of the study was clearly explained to them. They were also informed that participation in the study was voluntary and that they could decide to withdraw their participation at any point in the interview.

ETHICAL CONSIDERATION

Ethical clearance was obtained from the Bingham University ethical committee before the commencement of the study. In addition, informed consent was taken from each study participant after purpose of the study has been clearly explained. Data collected from the study was also kept confidential.

3.8 LIMITATIONS TO STUDY AND HOW THEY WERE OVERCAME

1. Language barriers

- We utilized the aid of the public health Nurses, CHEWs and CHOs who were present to help us interpret the questions were asked them. They also helped us with interpretation of the responses the respondents gave. However, some of the women understood some level of English, though mostly vernacular.

2. Financial constraints

- To cut down on transportation costs, we travelled together to the study site. Mobile phone recorders were also used and audio files labelled. However, these and other cost demanding activities were catered for by inpocket funding.

RESULTS

Perception of the COVID-19 vaccination

This domain addresses reasons behind their willingness or unwillingness to accept the vaccines in view of how they feel about it. Here they expressed a lot of concerns about the vaccine due to things they had heard or observed in respect to those who had taken the vaccines. There were some who believed that they were better off without it.

"The vaccine is meant to protect us from getting the corona virus, but it is not that effective" ... a 24year old housewife in her first pregnancy.

"I do not think the vaccine will prevent me from getting the infection. it will only reduce the effect and the spread. But if I continue with the preventive measure, it helps together with the vaccine" a 25year old housewife

"I do not believe it will protect me completely, but at least it won't hit me hard like some who haven't gotten the vaccine A 31-year-old Civil servant

"I don't even know if it will protect me" A 23-year-old "I feel like it will cause my body to have more infection" a 37-year-old.

"if I know someone that take the vaccine right now I will take even if it does not work" a 34 year old.

"I think the vaccine will stop me from getting covid 19" A 25-year-old.

"the vaccine will not protect me 100%" a 32 year old

"People used to cough is not just corona dat dey cause am na the people wey take the vaccine go fit tell us if it goes protect" A 37-year-old. "if the vaccine is safe then there is no problem. I will even give it to my children." A 32-year-old.

Some of the pregnant women were willing to allow N200 (0.4USD), some of them are not willing to allow deduction from their mobile card recharge card and preference for charges through their bank accounts.

Misconceptions, myths and fears.

This domain addresses their contradictory knowledge about the vaccines. It evaluated some false information they had heard concerning the vaccination. Although we had conversations and contributions about things such as it being unsafe and from the antichrist, we paid special focus to the fear of this women as in the vaccine being a cause of infertility.

"I cannot say whether the vaccine protects people from getting pregnant or not." a 24year old housewife

"I do not know if it causes infertility. I have not heard about it causing problems with belle." a 24year old Polytechnic student

"No, this vaccine caN not cause infertility" a 25year old housewife

"No, I do not believe it causes infertility" A 31year-old Civil servant

"As we age the rate of pregnancy reduces and I think is because of the vaccine."A 32-year-old woman

"Some people say if you take the vaccine your hand will be shinning, if iron touch your hand e go stick for your hand."A 34-year-old

"I think it can cause infertility for me oh!" A 32-year-old. "The vaccine killed one of my uncle like that, no body for my family go take am again"A 37 year old trader.

"My Pastor has warned us in our church"A 21year-old student

"I heard that the people who take the vaccine die and that is my fear."A 23-year-old.

Most of the respondents were not of the opinion that it may cause infertility, however they had other forms of significant misconceptions about the make, aim and administration of the vaccines.

DISCUSSION

The aim of this study was to qualitatively assess the perception, misconception, myths and fears towards covid-19 and the covid-19 vaccination amongst women attending antenatal clinics in Jos, plateau state; Nigeria. This was done using Focused Group Discussions (FGD).

The FGD was done amongst 40 women from 5 domain discussion groups. 2 groups were done at the Bukuru express PHC and Bukuru central PHC respectively, with 1 domain at the ECWA CHC. In respect to knowledge, the women showed good knowledge of the virus. They showed both basic and exaggerated knowledge of the

corona, such as a lady who said it caused bleeding. In respect to knowledge on the vaccine, they showed good knowledge of the vaccine. However, there were those who did not know how to access the vaccination centres, while there was one who had not heard about the vaccine at all.

Spirituality was shown as an important factor in deciding whether or not one was to accept the vaccine. When asked about their perception, the overall trust in the vaccine efficacy was poor as they all had reservations. In fact, one of them believed that the vaccine was going to cause more infection for her. Their misconceptions were basically centered around fears of death and other information gotten from social media. Such as the vaccine causing magnetic abilities.

Primarily, most of them had the perception that the vaccines were ineffective. Some others believed it was an additional means to safety from the virus, however they had to continue with the normal preventive measures if they really wanted to be free from getting infected. There was one who asked if we knew any one or place where it was currently being taken. This was to show a poor knowledge in the vaccination scheme. Furthermore, there were the minute group that emphasized that the vaccine in itself was a secret cause of the infection.

As regards their misconceptions, myths and fears, they are mostly hear says. They expressed fears regarding infertility and its role in it. furthermore, they lamented the role in the vaccine leading to death. However, there were a healthy few who believed that the vaccine was not going to cause infertility, kill them or lead to the corona virus infection.

The limitation of this study was the small amount of participants who contributed during the conversation, and hence has a limited pool of discussants and thus diverse opinion to help make a deductive inference.

CONCLUSION

Generally, the predominant false perception of the vaccine is that it was not effective enough to keep the recipients safe from the COVID-19 infection. Also, the most concerning misconception amongst the participants are those regarding fertility, death and the vaccine causing the corona virus infection amongst its recipients.

CONFLICT OF INTEREST

The authors declare no conflict of interests.

AUTHORS CONTRIBUTION

Conceptualization, Data collection and Writing = OTOBO Daniel David

Data analysis and Final editing = OKORO Ngozi Ijeoma

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