



Challenges of Pregnant Women Accessing Focused Antenatal Clinic During Covid-19 Pandemic Lockdown in Wuse District Hospital, Abuja, Nigeria

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Abstract

Background: Most maternal deaths are linked to pregnancy and childbearing. In an attempt to improve maternal and child health, World Health Organisation introduced focused Antenatal care (ANC). All the activities of the world were at a standstill at the outbreak of COVID-19 in 2020, including obstetric care. **Aim:** To explore pregnant women's challenges in accessing ANC in Wuse district hospital Abuja during the COVID-19 lockdown. **Methods:** A descriptive cross-sectional survey was conducted among mothers attending ANC at Wuse District Hospital. A purposive sampling technique was employed to select 99 participants for the study. Data were collected via a semi-structured questionnaire and analyzed using descriptive statistics. **Results:** More than one-quarter (25.3%) were between the age range of 25-30 years, while 57.6% had tertiary education. Also, 80.8% of the participants lived outside the hospital environment, and 62.6% were either civil servants or self-employed. The findings reveal that most (78.8%) of the participants could not attend antenatal appointments as scheduled while only 21.2% could receive ANC at the appropriate time. Challenges of the participants in receiving ANC include closing down of the antenatal clinic because of COVID-19 (28.3%), the difficulty of movement due to COVID-19 lockdown (41.4%), unavailability of staff as they have been drafted into isolation centers (9%) and transport problem (21.2%). **Conclusion:** The majority of the participants could not attend ANC as recommended during the COVID-19 pandemic lockdown. Adequate provision needs to be provided for pregnant women to have access to quality healthcare during pandemics

Keywords: COVID-19, Pandemic, Lockdown, Focused antenatal care, pregnant mothers

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Introduction

The outbreak of Coronavirus disease 2019 (COVID-19), a respiratory infection caused by a new strain of the coronavirus genus known as Severe Acute Respiratory Syndrome Coronavirus- (SARS-CoV-2) (World Health Organisation, 2020). The virus reached pandemic proportions within a short period, recognizing no boundaries of geography, economy, or religion (Zangmo et al., 2020). Hence, the Nigerian government imposed a total lockdown in Abuja and two other states on the 30th of March 2020 to curtail the spread of the pandemic. The Nigerian health system has been operating on

in-person interaction between patients and health care providers. The health system activities were crippled down due to the pandemic and only emergency cases were attended to in many hospitals.

According to Tadesse (2020), 99% of maternal mortality globally occurs in Sub-Saharan Africa and Southern Asia. The maternal mortality ratio in Nigeria is 512 per 100,000 live birth (Akaba et al., 2020). Antenatal services aimed to promote pregnant women's physical and mental well-being throughout pregnancy (Ekott et al., 2017; Overbeck et al., 2020). Antenatal care helps to

reduce maternal morbidity and mortality by providing information about danger signs, health promotion, birth preparedness, and care for pregnancy complications (Woyessa & Ahmed, 2019). To improve the maternal and child health outcome in low and middle-income countries, World Health Organisation (WHO) 2001 began the promotion of the Focused Antenatal Care (FANC) model (McHenga et al., 2019).

The FANC model reduced the antenatal visit to four visits compared to the traditional model of 7 to 16 visits. Hospitals that used the FANC model see the pregnant women first between 8 and 12 weeks, then between 24 and 26 weeks, third at 32 weeks, and last between 36 and 38 weeks (McHenga et al., 2019; Zangmo et al., 2021). Activities in FANC are directed at clinical assessment and specific decision-making processes when rendering care to the pregnant woman while also maintaining targeted and individualized care. Focused antenatal care is the antenatal care model used at Wuse District Hospital, which informs the choice of the hospital as the research setting.

Pregnancy alters a woman's immune system due to physiological changes associated with pregnancy, which may predispose the woman to severe disease if infected with COVID-19. Also, the healthcare providers attending to pregnant women stand the risk of contracting the diseases from infected pregnant women (Zangmo et al., 2020). Pregnant women could be categorized without doubt as a vulnerable group to contracting COVID-19, with the potential risk of vertical transmission to their unborn child being a major concern; results in a conflict of interests and a difficult decision to make whether to protect the pregnant woman and her unborn child from COVID-19 by compliance to the stay-at-home order and provision of skeletal health care services in the hospital or grant their fundamental human rights to receive regular and optimum prenatal care and safe delivery. These were some of the challenges associated with the COVID-19 pandemic lockdown, which can jeopardize the lives of mothers and their unborn children

(Esegbona-Adeigbe, 2020). Tadesse (2020), reported on a study conducted in the US that ANC coverage reductions of 39.3–51.9%, due to the pandemic, would result in 56,700 additional maternal deaths. Hence, this study explores the challenges of antenatal care among pregnant women in Wuse district hospital Abuja during the pandemic lockdown. There is limited literature reporting on the challenges encountered by pregnant women during COVID-19 in Abuja, Nigeria. This study is essential as findings can be used to develop a guideline for managing pregnant women during a pandemic lockdown.

Methods and Materials

A descriptive, cross-sectional survey was conducted among mothers who were between 12 weeks and 16 weeks pregnant during the pandemic lockdown period and had given birth with their babies between ages 6 weeks and 14 weeks during the data collection period in January 2021. The study setting was the immunization clinics in Wuse District Hospital (WDH), located at Conakry Street, Off Herbert Macaulay Way, Zone 3, Wuse, Abuja. Wuse district hospital is a government-owned hospital with various wings and multi-specialists dedicated to providing quality, accessible and affordable healthcare services. The setting for data collection was the immunization clinic of Wuse district hospital Abuja. This setting was selected as mothers whose babies were between six (6) and fourteen (14) weeks of age at the time of this study were between twelve (12) and twenty (20) weeks pregnant during the COVID-19 pandemic lockdown.

The study adopted a purposive sampling technique to select all the 99 mothers who met the inclusion criteria and attended the antenatal clinic during the COVID-19 pandemic lockdown period. A semi-structured interviewer-administered questionnaire was developed following an extensive literature search to explore the challenges of receiving antenatal care among mothers that attended ANC at Wuse district hospital. The questionnaire was designed in the English

language, and it consists of two (2) sections. Section A consists of seven (7) questions on respondents biodata, and Section B consists of twenty (20) open and closed-ended items on FANC during Covid-19 pandemic lockdown. Experts established the validity of the questionnaire via face and content validity, while Cronbach's Alpha Coefficient was used to establish the internal consistency of the study instrument. The Cronbach's Alpha Coefficient = 0.80, which shows the instrument reliability. A pilot study was conducted among ten mothers attending the immunization clinic of National Defence College clinic, Abuja.

A trained research assistant administered the pre-tested semi-structured questionnaire written in English, who could communicate in the local language, to elicit information regarding the participants' demographic characteristics, challenges experienced, and their perception of how the COVID-19 pandemic lockdown shaped their access to

focused antenatal care services. The assistants and the participants ensured strict observance of the COVID-19 safety protocols during data collection. The data collected were sorted out, coded, and entered into the Statistical Package for Social Sciences (SPSS) version 27. Data were analyzed using descriptive statistics such as frequency count and percentages

Ethical Consideration

The researcher obtained Ethical approval from Federal Medical Centre, Jabi, Abuja Health Research Ethics Committee (HREC) with protocol HREC number: FMCHREC/2021/026. Gatekeeper permission was granted by the matron-in-charge of the antenatal/immunization units of Wuse District Hospital Abuja to collect data for the study. The participants of the study completed an informed consent form. The researcher did not need the participants' identities, and the participants' information was treated as confidential.

Results

Table 1: Socio-demographic variable of the participants (n=99)

Socio-demographic	Frequency	Percentage
Mothers' Age		
18-24	12	12.1
25-30	38	38.4
31-35	25	25.3
Above 35	24	24.2
Marital Status		
Single	5	5.1
Married	94	94.9
Religion		
Christianity	72	72.7
Islam	27	27.3
Education		
Primary	1	1.0
Secondary	41	41.4
Tertiary	57	57.6
Residence		
Around Wuse environ	19	19.2
Outside Wuse environ	80	80.8
Mother Employment		
Not working/seeking for job	26	26.3
Working/Self-employed	62	62.6
Husbands' Employment		
Not working/seeking for job	8	8.1
civil servants or self-employed	91	91.9

Table 1 above shows that the majority (25.3%) of the participants were between the ages of 31-35 years. A large proportion (94.9%) of the participants were married, 72.7% were Christians, and 57.6% had tertiary education.

The majority of the participants (80.8%) reside outside the hospital environment, 62.2% were either working class or self-employed and 90.9% of their husbands were either civil servants or self-employed.

Table 2: Participants LMP and Date Booked for ANC

LMP(Month)	MAR 2020	APR 2020	MAY 2020	JUL 2020	AUG 2020	SEP 2020	Total
NOV 2019	8	0	0	0	0	0	8
DEC 2019	24	2	1	2	0	0	29
JAN 2020	14	10	4	4	9	2	43
FEB 2020	0	2	6	0	1	10	19
Total	46	14	11	6	10	12	99

Table 2 reveals that 8 participants whose LMP was in November 2019, booked in March 2020, 29 had their LMP in December 2019, and twenty-four of them booked for ANC in March. Those whose LMP was in January

2020 were 43, and 14 of them booked for ANC in March 2020, 19 had their LMP in February 2020, and 10 booked for ANC in September 2020.

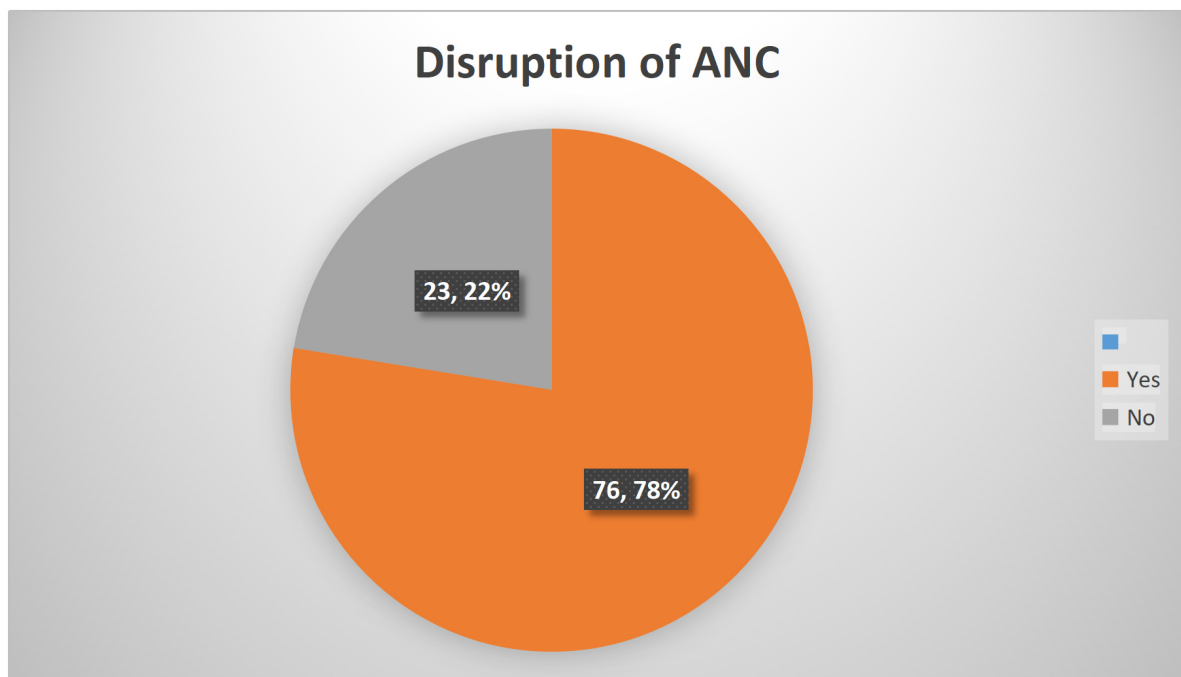


Figure 1: Participants who had their ANC visit disrupted during COVID-19 pandemic lockdown

Figure 1 above further reveals that over two-thirds 76 (78%) of the participants had their antenatal care disrupted due to COVID-19

pandemic lockdown, and 23 (22%) did not have their antenatal care disrupted.

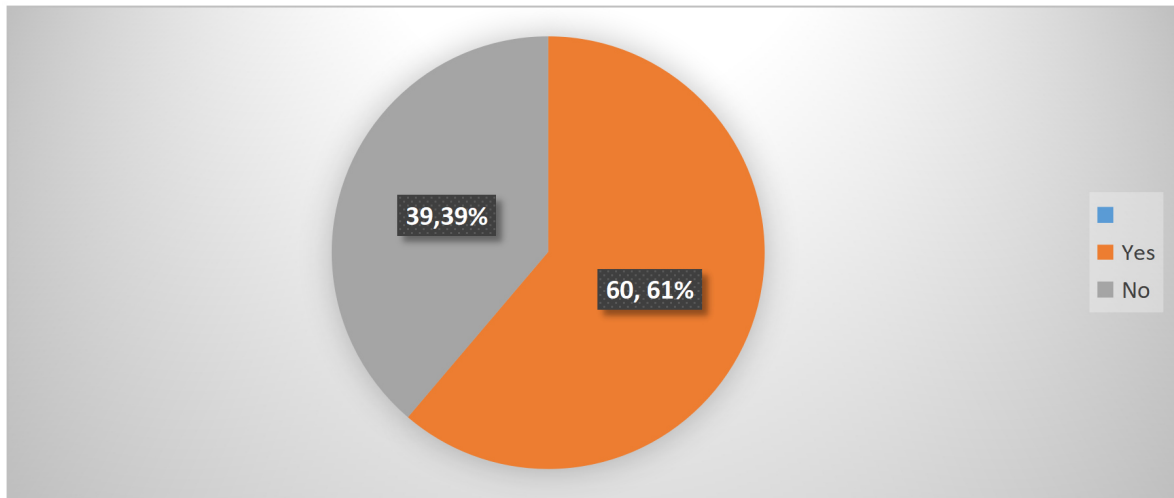


Figure 2: Participants who started ANC during COVID-19 pandemic lockdown

Figure 2 shows the majority of the participants, 60 (61%) commenced ANC during the COVID-19 pandemic lockdown,

while 39 (39%) could not start ANC during the lockdown period.

Table 3: Participants' challenges in attending ANC at an Appropriate time (n=99)

Challenges in attending ANC at the appropriate time	Frequency	Percentage
Attended ANC at the appropriate time		
Yes	21	21.2
No	78	78.8
ANC started late due to the COVID-19 pandemic lockdown	41	41.4
ANC was stopped because of COVID-19	28	28.3
Unavailability of staff and PPE	9	9.1
Transport problems	21	21.2
Total	99	100.0

Table 3 shows that 78.8% of the participants did not attend ANC at the appropriate time due to the following identified challenges: antenatal clinic was stopped because of COVID-19 lockdown (28.3%), movement restriction due to the lockdown (41.4%), Unavailability of staff and PPE (9.1%) and transport problems (21.2%).

Discussion

The study's findings show that the date booked for ANC got more distorted when the COVID-19 pandemic lockdown was introduced (Table 2). However, 61.0% of the participants commenced their ANC during the lockdown period (Figure1). This implies that the COVID-19 pandemic has a significant

influence on pregnant women attending ANC. The WHO (2002) focused antenatal care (FANC) model with a minimum of four (4) visits, with the first visit scheduled between 8 to 12 weeks after conception but not later than 16 weeks; and, a further three visits between 24 and 38 weeks of gestation (McHenga et al., 2019; World Health Organization, 2002) was operational in the study setting. The FANC model emphasizes quality of care and provides a package of services that contributes to the health and well-being of women throughout pregnancy, childbirth, and the post-natal period (McHenga et al., 2019). This evidence-based model is the best approach for resource-limited countries with few health professionals and limited infrastructure, as

may be the case in a pandemic due to quarantine of exposed health care providers (Zangmo et al., 2020).

ANC is a critical opportunity for healthcare providers to deliver necessary support and educate pregnant women on unexpected events. Effective ANC visits are essential for both maternal and foetal health. The ANC visits help promote a healthy lifestyle, including informing patients about sources of good nutrition, detecting and treating any pre-existing diseases, counseling, and supporting women who may be encountering domestic violence (Thembehle, 2018). Furthermore, the study's findings reveal that 78.8% of the participants could not attend their antenatal care at the appropriate time, while only 21.2% could attend their antenatal when due. This inferred that the COVID-19 pandemic disrupted the normal pattern of FANC in Wuse District Hospital.

The study reported the challenges of pregnant women in attending antenatal care during the COVID-19 (Table 3). During the lockdown, FANC that ought to have started not later than 16 weeks of conception was reported delayed in 41.4% of the participants. The delay in starting ANC due to movement restriction, the closing of the antenatal clinic, unavailability of personnel, transport problems could lead to complications in pregnancy as timely and adequate ANC is essential in promoting the health of mothers and their unborn babies. A study conducted in the United States reported that the reduction in ANC coverage due to the COVID-19 pandemic could result in an additional increase of 56,700 maternal death (Tadesse, 2020). This study collaborates with findings reported from Kenya, Tanzania, and Uganda, revealing high maternal and neonatal mortality rates with COVID-19 pandemic grossly affected antenatal care services (Pallangyo et al., 2020).

The advent of the COVID-19 pandemic has brought great challenges to the health sector all over the globe. Nurses and midwives saddled with caring for pregnant women need

to prioritize the healthcare and services provided to pregnant women during any pandemic. Failure to give quality care to pregnant women can increase Nigeria's maternal and child mortality and morbidity rate. Robertson et al. (2020) reported that the COVID-19 pandemic resulted in widespread disruption to health systems, increasing maternal and child deaths. Also, diverting resources away from essential pregnancy care because of prioritizing the COVID-19 response is expected to increase maternal morbidity and mortality (Esegbona-Adeigbe, 2020). A study conducted in Nepal reported that maternal and newborn health is being reduced due to COVID-19 restrictions in low-income and middle-income countries like Nigeria. Quality of care might be deteriorating, risking deaths and reversals of hard-won gains over the past two decades (Ashish et al., 2020). Despite the restrictions and COVID-19 protocol globally, countries and hospitals develop protocols and guidelines on managing pregnant women as they were aware that there were social, psychological, and emotional implications of COVID-19 on pregnant women. Hence, a telephone consultation can be done by health practitioners if a face-to-face consultation is not possible.

The study limitation comprises generalization of the study findings as the study was conducted in only one hospital in Abuja. Hence, the study findings can only be used by Wuse district hospital, Abuja, and cannot be generalized.

Conclusion

This study showed that pregnant women attending ANC at Wuse District hospital had challenges accessing antenatal care during the lockdown as the majority of the participants were not able to commence ANC at the appropriate time.

Recommendation

Government and hospital management should provide healthcare providers with the necessary provision to carry out effective antenatal care without fear of infection in any pandemic. Nurses and midwives attending to

pregnant women required infection control and management training in preparedness for any future pandemic.

Conflict of Interest: Competing interests: None

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