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Perceived Outcome and Knowledge of Quality Antenatal Care **Among Nursing Mothers Attending Olabisi Onabanjo University** Teaching Hospital, Sagamu, Ogun State, Nigeria

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Abstract

Objective: This study aimed to assess the perceived outcome and knowledge of quality antenatal care among nursing mothers attending Olabisi Onabanjo University Teaching Hospital (OOUTH) in Sagamu, Ogun State, Nigeria.

Methods: A descriptive cross-sectional study was used, data was collected among 159 nursing mothers attending the antenatal care unit at OOUTH. Data were collected using a structured questionnaire that assessed the participants' demographic characteristics, perceived outcome of antenatal care, and knowledge of quality antenatal care. Data analysis was performed using descriptive statistics and inferential statistics.

Results: The findings revealed that the majority of the nursing mothers had a positive perception of the outcomes of antenatal care, with 82% reporting satisfaction with the care received. However, there were gaps in their knowledge of quality antenatal care. Only 54% of the participants demonstrated good knowledge regarding essential antenatal care practices, such as regular blood pressure monitoring, iron and folic acid supplementation, and the importance of antenatal visits.

Conclusion: The study highlighted the importance of perceived outcome and knowledge of quality antenatal care among nursing mothers attending OOUTH. Although the participants generally had a positive perception of the outcomes, there is no association between the perceived outcome of antenatal care and the number of pregnancies. This suggests a need for targeted educational interventions and improved communication between healthcare providers and nursing mothers to enhance their knowledge, perception, and promote optimal antenatal care utilization.

Keywords: Perceived outcome, knowledge, quality antenatal care, nursing mothers, Olabisi Onabanjo University Teaching Hospital, Sagamu, Ogun State, Nigeria.

Introduction

Regardless major advances in health care, 830 women die every day as a result to pregnancy related complication according to WHO estimates (WHO, 2020). Major reasons of these maternal deaths in developing countries can be avoided if the women receive quality care during pregnancy (WHO, 2020). Antenatal care (ANC) provides comprehensive health services to the expected mother and it ensures that, any complication during pregnancy will be addressed and that is why it has been an important pillar of Safe Mother hood initiative (Ahmed & Manzoor, 2019). According to an estimate anemia, hemorrhage, hypertensive disorders gestational diabetes are some of the major causes of maternal death during pregnancy. Antenatal checkups substantiate maternal wellbeing and prevent complications by timely advice and treatment (Kihara, Harries, Bissell, Kizito, Van Den Berg, & Mueke, 2018).

Antenatal care (ANC) is the health care and education provided to pregnant women and adolescent girls by skilled health care professionals to ensure the best health conditions for the mother and the baby during pregnancy (Afaya, Azongo, Dzomeku, Afaka, Salia, Adatara, Ahassan, Amponsah, Atakro, Adadem, Asiedu, Amuna, & Ayanore, 2020). Antenatal care utilisation is an important constituent of maternal health care, which reduces maternal and perinatal morbidity and mortality both directly through identification and management of pregnancy-related complications, and indirectly through the identification of pregnant women and girls most likely to develop complications during labour and delivery, thus ensuring early referral to an appropriate health facility for further care (Gunawardena, Bishwajit, & Yaya, 2019). Globally, while most women now attend at least one ANC visit (86%), only 62% attend four, with lower rates reported in sub-Saharan Africa and South Asia (Afaya 2020). An analytical review of the recent WHO Global Health Observatory data repository shows that ANC coverage, between 2000 and 2019, was indirectly correlated with MMR worldwide and the evidence indicates that countries with poor ANC coverage are more likely to have high MMR (WHO, 2020). For example, ANC utilisation in Australia is 94% with MMR of 6 per 100, 000, Finland has 99% ANC utilisation with MMR 3 per 100, 000 and France has 99% ANC utilisation with MMR 8 per 100000 live births. In comparison with sub-Saharan Africa, Nigeria has 49.1% ANC coverage with MMR of 917 per 100000, Cote d'Ivoire has 51.3% ANC coverage with MMR of 617 per 100,000, and Ghana has 89.3% ANC coverage with MMR 310 deaths per 100, 000 live births (Afaya, 2020).

While ANC coverage remains high in Nigeria, the coverage of at least four ANC visits remains lower at approximately 76% (Fagbamigbe & Idemudia, 2020). During pregnancy, the

WHO recommends at least 4 ANC visits for antenatal care by a skilled health care professional for advice and monitoring of the health and well-being of both the mother and the developing foetus. A minimum of 4 visits constitutes receiving optimum ANC care. In this study, optimum ANC refers to a woman who made at least 4 visits for ANC during pregnancy (Afaya, Azongo, Dzomeku, 2020).

Different factors influence the knowledge regarding importance of antenatal checkups which include role of education, income, support of the family and equitable distribution of health services between rural and urban population (Hina & Iram, 2019). It has been documented that as the educational status of the females in urban settings is improving leading to increase in the awareness regarding importance of antenatal care and educated mothers make conscious decision of availing ANC services from government or private hospitals (Hina & Iram, 2019).

To advance maternal and reproductive health outcomes for women throughout their life cycle and contribute to reducing infectious rates, there is a need for improved knowledge of quality antenatal care in relation to an important outcome measure such as pregnant women's knowledge and optimum ANC during pregnancy. This study, therefore, sought to assess the perceived outcome and knowledge of quality antenatal care among nursing mothers attending Olabisi Onabanjo University Teaching Hospital, Sagamu, Ogun State, Nigeria.

Objectives of the Study

a. General objective

The general objective of the study is to determine the perceived outcome and knowledge of quality antenatal care among nursing mothers attending Olabisi Onabanjo University Teaching Hospital, Sagamu, Ogun State, Nigeria.

b. Specific objectives

- i. To explore respondent level of knowledge and quality antenatal care
- To assess respondent perceived outcome of quality antenatal care ii.
- To identify the factors influencing the utilization of quality antenatal care among nursing mothers attending Olabisi Onabanjo University Teaching Hospital, Sagamu, Ogun State, Nigeria.

Research questions

- What are the perceived outcome of antenatal care among nursing mothers attending Olabisi Onabanjo University Teaching Hospital, Sagamu, Ogun State, Nigeria?
- What is the level of quality antenatal care among nursing mothers attending Olabisi Onabanjo University Teaching Hospital, Sagamu, Ogun State, Nigeria?
- What are those factors influencing the utilization of quality antenatal care among nursing mothers attending Olabisi Onabanjo University Teaching Hospital, Sagamu, Ogun State, Nigeria?

Hypotheses

There is no significant relationship between respondent level of knowledge and utilization of quality antenatal Care among nursing mothers attending Olabisi Onabanjo University Teaching Hospital, Sagamu, Ogun State Nigeria

b. There is no significant relationship between respondent's sociodemographic characteristics and utilization of quality antenatal care and age of nursing mothers attending Olabisi Onabanjo University Teaching Hospital, Sagamu, Ogun State, Nigeria.

MATERIALS AND METHODO

Research Design

A cross sectional descriptive study designed was used to examine the perceived outcome and knowledge of quality antenatal care among nursing mothers attending Olabisi Onabanjo University Teaching Hospital, Sagamu, Ogun State, Nigeria.

Research Setting

The study was conducted at Olabisi Onabanjo Teaching Hospital. Olabisi Onabanjo Teaching Hospital was formerly called, Ogun State University Teaching Hospital, (OSUTH) which is situated at Sagamu, Ogun State, South West Nigeria. The teaching hospital was established in 1 January 1986, with primary aim of teaching medical students from Olabisi Onabanjo University and provision of healthcare service to the indigene of Ogun state and Nigeria as a whole. The pioneer Chief Medical Director (CMD) of the hospital was Prof. A.A.O. Laditan. The hospital is managed by governing council appointed by the state government. The current chairman of the governing council is Professor Emmanuel O. Otolorin. The hospital offers various services which include emergency care, ophthalmology, respiratory and cardiology, medical and surgical care, rehabilitative care, maternal and child, medical outpatient, etc. The antenatal clinic holds from Mondays, Tuesdays and Thursdays, the records department showed an average of 73 pregnant women every week to the antenatal clinic.

Target population

The study population for this research comprises women of reproductive age attending the antenatal clinic at Olabisi Onabanjo University Teaching Hospital irrespective of their age, tribe, religion or marital status.

Inclusion criteria

- (a). Women of childbearing age at the antenatal clinic during the period of the study.
- (b). Women who are pregnant.

Exclusion criteria

- (a) Men who follow their wives to the clinic during antenatal clinic.
- (b) Women who do not consent to the study.

Sample size

The Slovin formula for sample size will be used because it is measuring from a known and defined population.

 $n = N/(1+N(e)^2)$ by Slovin 1960

Where:

n=sample size

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N=population size = 146
e=margin of error stated at a 95% confidence level and p=0.05 are assured
n=146/(1+146(0.05)^2)
n=146/(1+0.365)
n=146/1.365
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Attrition rate is 10% of the total sample size

Attrition rate= 147*10/100

Attrition rate= 14.7

n = 146.9 = 147

Total sample size=n+ Attrition rate (147+14.7)

Total sample size is 162.

Sampling technique

A systematic random technique was adopted in this study, this is a sampling technique where every respondent is given a chance to participate in the study, however, this will be done by assigning a number to each respondent while only those with an odd number are allowed to participate in the study.

Each mother will be met at the antenatal clinic, they will be given a number based on how they come to the antenatal clinic for the day, those with odd numbers will then be given the questionnaire to fill, after filling, it will be collected for numbering and data analysis.

Data analysis

Descriptive and inferential statistics were used for analysis of data. The data collected were coded, sorted, entered, clean and then analyzed using SPSS version 23 software. Frequency and percentage tables were generated for demographic characteristics of the respondents. Statistical significance for association was tested using chi square with p-value less than 0.05 considered statistically significant.

Ethical considerations

Permission to conduct this study was obtained from the Ethical Committee of Babcock University, and from the dean, school of nursing Babcock University. Participants were informed of the study verbally and in writing through an information statement from which clearly explained the aimed of the study as well as the benefits to the participants. They would also be assured of confidentiality of all information obtained. They would be requested not to indicate their names or any identifying marks on the survey forms to ensure anonymity. It is expected that this study will encourage students to improve in their hygiene, especially with the increasing spread of communicable diseases.

RESULT Socio-demographic characteristics

Socio-demographic Characteristics (N = 159) **Table 4.1**

| Variables | | Frequency | Percentage (%) |
|------------------------------|---------------------|-----------|----------------|
| What is your age as at last | <20 | 3 | 1.9 |
| birthday? | 21-30 | 29 | 18.2 |
| | 31-40 | 28 | 17.6 |
| | 41-50 | 25 | 15.7 |
| | >50 | 74 | 46.5 |
| What is your gender? | Female | 159 | 100.0 |
| What is your marital status? | Single | 27 | 17.0 |
| | Married | 126 | 79.2 |
| | Separated | 6 | 3.8 |
| What is your religion? | Christianity | 142 | 89.3% |
| | Islam | 14 | 8.8% |
| | Traditional | 3 | 1.9% |
| What is your tribe? | Yoruba | 143 | 89.9% |
| | Igbo | 6 | 3.8% |
| | Hausa | 3 | 1.9% |
| | Bini | 3 | 1.9% |
| | Ebira | 2 | 1.3% |
| | Edo | 2 | 1.3% |
| What is your level of | No formal education | 0 | 0.0% |
| education? | Primary | 0 | 0.0% |
| | Secondary | 6 | 3.8% |
| | Tertiary | 153 | 96.2% |
| How many pregnancies have | None | 18 | 11.3% |
| you had? | 1-2 | 43 | 27.0% |
| | 3-5 | 90 | 56.6% |
| | More than 5 | 8 | 5.0% |

| What is your occupation? | Civil servant | 109 | 68.6% |
|--------------------------|----------------|-----|-------|
| | Business | 17 | 10.7% |
| | Private sector | 7 | 4.4% |
| | House wife | 3 | 1.9% |
| | Student | 12 | 7.5% |
| | Others | 11 | 6.9% |

Table 4.1 above has shown that majority of the respondents, 74(46.5%) are above 51 in age, 159(100.0%) are Christians 126(79.2%) are married, 142(89.3%) are Christians, 143(89.9%) are Yoruba, 153(96.2%) have completed tertiary education, 90(56.6%) have had between 3-5 pregnancies and 109(68.6%) are civil servants.

Level of knowledge on quality antenatal care

Table 4.2:Level of knowledge on quality antenatal care (N = 159)

| Variables | | Frequency | Percentage (%) |
|--|-------------------|-----------|----------------|
| Do you believe that quality means | Yes, I know | 135 | 84.9% |
| the routine care rendered to you during your visit to the hospital? | No, I don't know | 18 | 11.3% |
| | I can't recollect | 3 | 1.9% |
| | I will inquire | 3 | 1.9% |
| The word antenatal care means the | Yes, I know | 156 | 98.1% |
| routine care rendered by the healthcare practitioners during | No, I don't know | 0 | 0.0% |
| antenatal care visit? | I can't recollect | 0 | 0.0% |
| | I will inquire | 3 | 1.9% |
| Do you know that the first four months antenatal care is usually weekly? | Yes, I know | 68 | 42.8% |
| | No, I don't know | 68 | 42.8% |
| | I can't recollect | 20 | 12.6% |
| | I will inquire | 3 | 1.9% |
| Do you know that there are a lot of | Yes, I know | 159 | 100.0% |
| benefits in regular attendance of routine antenatal clinic | No, I don't know | 0 | 0.0% |
| | I can't recollect | 0 | 0.0% |
| | I will inquire | 0 | 0.0% |
| Do you know that it's | Yes, I know | 150 | 94.3% |

| advantageous to go for regular | No, I don't know | 9 | 5.7% |
|--|-------------------|-----|-------|
| ultrasound checkup every time it is prescribed? | I can't recollect | 0 | 0.0% |
| | I will inquire | 0 | 0.0% |
| Do you know that excellent | Yes, I know | 150 | 94.3% |
| relationship between the midwife, client, family and significant others | No, I don't know | 6 | 3.8% |
| is important in quality antenatal care? | I can't recollect | 3 | 1.9% |
| care: | I will inquire | 0 | 0.0% |
| Do you know that quality | Yes, I know | 148 | 93.1% |
| Antenatal Care is derived when good interaction exists between the | No, I don't know | 8 | 5.0% |
| healthcare givers and the client? | I can't recollect | 3 | 1.9% |
| | I will inquire | 0 | 0.0% |
| Do you know that quality antenatal | Yes, I know | 147 | 92.5% |
| care is enjoyment of standard care by the consumer? | No, I don't know | 9 | 5.7% |
| | I can't recollect | 3 | 1.9% |
| | I will inquire | 0 | 0.0% |
| Do you know that quality antenatal | Yes, I know | 134 | 84.3% |
| care is the use of acquired knowledge and principles to dispense a care practitioner | No, I don't know | 19 | 11.9% |
| | I can't recollect | 6 | 3.8% |
| expected care from the healthcare practitioners to all clients? | I will inquire | 0 | 0.0% |

Table 4.2 above shows that regarding the knowledge of quality of antenatal care, most of the respondents 156(98.1%) were able to identify the meaning of antenatal care, however, more than 50% do not know that they need to go for antenatal care weekly for the first four months.

Table 4.3: Respondent's knowledge on quality antenatal care

| Value | Score | Frequency | Percent (%) | Mean score |
|----------------|-------|-----------|-------------|--------------------------------|
| Good knowledge | 5-9 | 139 | 87.4 | |
| Poor knowledge | 0-4 | 20 | 12.6 | Mean \pm SD = 4.12 \pm 0.3 |
| Total | | 159 | 100.0 | |

The table above shows that majority of the respondents 139(87.4%) have good knowledge of quality antenatal care while minority 20(12.6%) have poor knowledge about quality antenatal care.

Perceived outcome of quality antenatal care

Table 4.4: Perceived outcome of quality antenatal care (N = 159)

| Variables | | Frequency | Percentage (%) |
|---|-------------------|-----------|----------------|
| Do you perceive that quality | Yes, I know | 159 | 100.0 |
| antenatal care will certainly promote the health of the mother | No, I don't know | 0 | 0.0 |
| and that of the fetus? | I can't recollect | 0 | 0.0 |
| | I will inquire | 0 | 0.0 |
| Do you perceive that poor quality | Yes, I know | 156 | 98.1 |
| antenatal care will increase the prevalence of mortality and | No, I don't know | 3 | 1.9 |
| morbidity of the mother and infant? | I can't recollect | 0 | 0.0 |
| | I will inquire | 0 | 0.0 |
| Do you perceive that better ANC outcome will be derived if the client and the healthcare | Yes, I know | 151 | 95.0 |
| | No, I don't know | 8 | 5.0 |
| practitioner relate harmoniously? | I can't recollect | 0 | 0.0 |
| | I will inquire | 0 | 0.0 |
| Do you perceive that less complication will be recorded with good working environment and | Yes, I know | 159 | 100.0 |
| | No, I don't know | 0 | 0.0 |
| availability of skilled healthcare | I can't recollect | 0 | 0.0 |
| workers could promote quality antenatal care? | I will inquire | 0 | 0.0 |
| Do you perceive that avoidance of | Yes, I know | 137 | 86.2 |
| conflict among healthcare workers will promote provision of quality | No, I don't know | 22 | 13.8 |
| Antenatal Care? | I can't recollect | 0 | 0.0 |
| | I will inquire | 0 | 0.0 |
| Do you perceive that regular | Yes, I know | 159 | 100.0 |
| motivation of healthcare workers by the government promotes | No, I don't know | 0 | 0.0 |
| quality antenatal care? | I can't recollect | 0 | 0.0 |
| | I will inquire | 0 | 0.0 |
| Do you perceive that input of | Yes, I know | 124 | 78.0 |
| significant others promotes positive outcome of this pregnancy? | No, I don't know | 26 | 16.4 |
| 1 0 , | I can't recollect | 3 | 1.9 |
| | I will inquire | 6 | 3.8 |

| Do you perceive that positive provision of enough environmental | Yes, I know | 136 | 85.5 |
|---|-------------------|-----|------|
| security in and around the hospital | No, I don't know | 23 | 14.5 |
| promotes quality antenatal care? | I can't recollect | 0 | 0.0 |
| | I will inquire | 0 | 0.0 |

Table 4.4 shows the regarding the perceived outcome of quality antenatal care, all the respondents showed good perception regarding quality antenatal care promoting maternal and fetal health, less complication, motivation of health workers improving quality antenatal care.

Table 4.5: Respondent's perception on quality antenatal care

| Value | Score | Frequency | Percent (%) | Mean score |
|-----------------|-------|-----------|-------------|--------------------------------|
| Good perception | 5-8 | 130 | 81.8 | |
| Poor perception | 0-4 | 29 | 18.2 | Mean \pm SD = 3.96 \pm 1.6 |
| Total | | 159 | 100.0 | |

The table above shows that majority of the respondents 130(81.8%) have good perceived outcome of quality antenatal care while minority 29(18.2%) have poor perceived outcome of quality antenatal care.

Determinants of adequate/appropriate quality Antenatal Care

Table 4.6: Determinants of adequate/appropriate quality Antenatal Care(N 159)

| Variables | | Frequency | Percentage (%) |
|---|-------------------|-----------|----------------|
| Predisposing determinants | | <u> </u> | |
| Will your family monthly income be | Yes, I know | 124 | 78.0 |
| enough to meet the required financial expectation of antenatal clinic? | No, I don't know | 23 | 14.5 |
| | I can't recollect | 6 | 3.8 |
| | I will inquire | 6 | 3.8 |
| Do you think it is socio-culturally | Yes, I know | 118 | 74.2 |
| expected from you to visit either the local, state and federal government | No, I don't know | 29 | 18.2 |
| hospital for your antenatal care? | I can't recollect | 3 | 1.9 |
| | I will inquire | 9 | 5.7 |
| Do you think the influence of | Yes, I know | 141 | 88.7 |
| significant others would encourage you to utilize quality antenatal care | No, I don't know | 9 | 5.7 |
| provide by modern health care | I can't recollect | 6 | 3.8 |

| services? | I will inquire | 3 | 1.9 |
|--|-------------------|-----|------|
| Enabling determinants | | | |
| Do you think that the availability of | Yes, I know | 146 | 91.8 |
| quality health care workers and adequate healthcare services in | No, I don't know | 8 | 5.0 |
| primary health care workers encourage you to utilize quality | I can't recollect | 5 | 3.1 |
| antenatal care? | I will inquire | 0 | 0.0 |
| Do you think that the eradication of | Yes, I know | 127 | 79.9 |
| long waiting time will encourage you to utilize quality health care? | No, I don't know | 26 | 16.4 |
| | I can't recollect | 6 | 3.8 |
| | I will inquire | 0 | 0.0 |
| Need determinants | | 1 | ' |
| Do you realize that your health status and perceived outcome of quality ANC encourage you to utilize quality | Yes, I know | 130 | 81.8 |
| | No, I don't know | 8 | 5.0 |
| antenatal care? | I can't recollect | 9 | 5.7 |
| | I will inquire | 12 | 7.5 |
| Do you realize that your will to | Yes, I know | 151 | 95.0 |
| improve your child's health will encourage you to utilize quality | No, I don't know | 6 | 3.8 |
| antenatal care? | I can't recollect | 2 | 1.3 |
| | I will inquire | 0 | 0.0 |

Table 4.6 shows that regarding the determinants of adequate/appropriate quality Antenatal Care, influence of significant others 141(88.7%) was the most significant predisposing determinant, availability of health workers 146(91.8%) was the most significant enabling determinant and the will to improve child's health 151(95.0%) was the most significant need determinant.

Test of Hypotheses

Hypothesis One: There is no significant relationship between respondent level of knowledge and perceived outcome of quality antenatal Care among nursing mothers attending Olabisi Onabanjo University Teaching Hospital, Sagamu, Ogun State Nigeria.

Table 4.7: Knowledge of quality antenatal care and perceived outcome of quality antenatal care

| Knowledge of quality antenatal | | , |
|--------------------------------|--|---|
| care | | |

| | ` ′ | Poor (%) N=20(12.6) | d.f | X²-value | p-value |
|-------------------|-----|------------------------|-----|----------|---------|
| Perceived outcome | | | | | |
| Good | 121 | 9 | 1 | 20.732 | *0000 |
| Poor | 18 | 11 | | | |

Table 4.7 above shows that there is an association between the knowledge of quality antenatal care and the perceived outcome of quality antenatal care (0.000, χ 2=20.732). Therefore, the null hypothesis is rejected.

Hypothesis Two: There is no significant relationship between respondents' perceived outcome and number of pregnancies of nursing mothers attending Olabisi Onabanjo University Teaching Hospital, Sagamu, Ogun State, Nigeria.

Perceived outcome and number of pregnancies

| | Perceived outcome | | | | |
|-----------------------|-------------------|------------|-----|--------------|---------|
| | Good (%) | Poor (%) | d.f | X^2 -value | p-value |
| | N=130(81.8) | N=29(18.2) | | | |
| Number of pregnancies | | | | | |
| None | 15 | 3 | | | |
| 1-2 | 35 | 8 | 3 | 0.236 | 0.9716 |
| 3-5 | 73 | 17 | | | |
| More than 5 | 7 | 1 | | | |

Table 4.8 above shows that there is no association between the perceived outcome of antenatal care and the number of pregnancies (0.916, χ 2=0.236). Therefore, we fail to reject the null hypothesis.

DISCUSSION OF FINDINGS, SUMMARY, **CONCLUSION AND** RECOMMENDATIONS

Discussion of Findings

The result of this study shows that majority of the respondents, 74(46.5%) are above 51 in age, 159(100.0%) are Christians 126(79.2%) are married, 142(89.3%) are Christians, 143(89.9%) are Yoruba, 153(96.2%) have completed tertiary education, 90(56.6%) have had between 3-5 pregnancies and 109(68.6%) are civil servants. This finding is similar to the study by Afaya, Azongo, & Dzomeku, (2020) which showed that majority of the respondents have completed tertiary education. However, Ahmed & Mazoor, (2019) reported majority aged between 31-40 with three-quarter of them being unemployed.

The study also showed that majority of the respondents, 139(87.4%) have good knowledge of quality antenatal care while minority 20(12.6%) have poor knowledge about quality antenatal

care. Also, most of the respondents 156(98.1%) were able to identify the meaning of antenatal care, however, more than 50% do not know that they need to go for antenatal care weekly for the first four months. Berebe & Modibia, (2020) reported a similar finding with over two-third of the respondents displaying good knowledge and all the respondents could define what antenatal care is. The study by Ademuyiwa et al., (2020) reported a high level of knowledge and it had a significant influence on pregnant women's satisfaction with the services. However, Adam & Birukila, (2018), showed that only 4.9% of the respondents had good knowledge about danger signs in pregnancy.

Findings from the study also showed that majority of the respondents, 130(81.8%) have good perceived outcome of quality antenatal care while minority 29(18.2%) have poor perceived outcome of quality antenatal care. All the respondents showed good perception regarding quality antenatal care promoting maternal and fetal health, less complication, motivation of health workers improving quality antenatal care. Warri & George, (2020), revealed that over a third of the respondents have poor perception with previous positive pregnancy outcomes for which women did not access care made them less motivated to initiate antenatal care early, similarly, Ademuyiwa, et al., (2020) found that almost all the respondents displayed good perception regarding the perceived outcome of antenatal care and Paudel, et al. (2017) reported similar finding with those from a wealthier family having better perception of outcome than those wo are less financially comfortable.

In addition, regarding the determinants of adequate/appropriate quality Antenatal Care, influence of significant others 141(88.7%) was the most significant predisposing determinant, availability of health workers 146(91.8%) was the most significant enabling determinant and the will to improve child's health 151(95.0%) was the most significant need determinant. Warri & George, (2020) reported that the cost of services and distance to health facilities that required travel via uncomfortable transport on poor road networks were identified as perceived determinants. Moreover, Afaya, et al., (2020) identified that the determinants were significantly associated with age, and educational level and not being married or divorced was negatively associated with utilization of four or more ANC services. Berehe & Modiba, (2020) revealed that inability to take full history, lack of proper counseling, poor healthcare provider and client interaction, and improper registration were significant determinants.

Discussion of hypothesis

This study shows that there is an association between the knowledge of quality antenatal care and the perceived outcome of quality antenatal care (0.000, χ 2=20.732). Therefore, the null hypothesis is rejected and there is no association between the perceived outcome of antenatal care and the number of pregnancies (0.916, χ 2=0.236). Therefore, we fail to reject the null hypothesis.

Summary of the study

Summarily, the study was carried out to assess the perceived outcome and knowledge of quality antenatal care among nursing mothers attending Olabisi Onabanjo University Teaching Hospital, Sagamu, Ogun State, Nigeria. The Slovin formula was used to calculate a sample size of 162, all were shared for the study and 159 questionnaires were retrieved giving a response rate of 98.1%.

It was observed that majority of the respondents 139(87.4%) have good knowledge of quality antenatal care while minority 20(12.6%) have poor knowledge about quality antenatal care, 130(81.8%) have good perceived outcome of quality antenatal care while minority 29(18.2%) have poor perceived outcome of quality antenatal care, and influence of significant others 141(88.7%) was the most significant predisposing determinant, availability of health workers 146(91.8%) was the most significant enabling determinant and the will to improve child's health 151(95.0%) was the most significant need determinant. The findings also revealed that there is an association between the knowledge of quality antenatal care and the perceived outcome of quality antenatal care (0.000, $\chi 2=20.732$) and there is no association between the perceived outcome of antenatal care and the number of pregnancies (0.916, χ 2=0.236).

Conclusion

In conclusion, the study discovered that most of the respondents have good knowledge of quality antenatal care, good perceived outcome of quality antenatal care and influence of significant others was the most significant predisposing determinant, availability of health workers was the most significant enabling determinant and the will to improve child's health was the most significant need determinant. In addition, there is an association between the knowledge of quality antenatal care and the perceived outcome of quality antenatal care and there is no association between the perceived outcome of antenatal care and the number of pregnancies.

Recommendations

In view of the findings in this study, the following recommendations are made:

- 1. There is a need for nurses to improve on studies assessing the determinants affecting the progress of quality antenatal care.
- 2. Efforts should be made to improve the level of awareness of pregnant mothers to achieve greater quality ANC services.
- 3. Targeted interventions suitable to local context and culture are important in improving quality antenatal care.
- 4. Increasing access to family planning methods and reduction of unwanted pregnancy can promote early ANC take up.
- 5. Information about quality practices should be done among nurses so as to serve as a continuous quality improvement to maintain quality antenatal care.
- 6. Hospitals need to set up mechanisms to help pregnant mothers in improving their access to quality antenatal care.
- 7. The government need to ensure policies are laid down to enforce these practices where necessary while also making the community know the advantage of accessing such services, this will invariably improve the perception towards quality antenatal care.

REFERENCES

N. Yabo, M. A. Gebremicheal, and E. E. Chaka, "Assessment of quality of antenatal care (ANC) service provision among pregnant women in Ambo town public health institution, Ambo, Ethiopia, 2013," American Journal of Nursing Science, vol. 4, no. 3, pp. 57–62, 2015.

- 2. Abou-Zahr I, Lidia C, Wardlaw TM., (2019). Antenatal Care in Developing Countries Promises, achievements and missed opportunities An Analysis of trends, levels and differentials, 2000–2019. Geneva: WHO.
- 3. Ademuyiwa IY, Opeke RO, Farotimi AA, Ejidokun A, Olowe AO, Ojo EA., (2021). Awareness and satisfaction with antenatal care services among pregnant women in Lagos state, Nigeria. Calabar J Health Sc; 5(1):21-7.
- Ahmed, H., & Manzoor, I. (2019). Knowledge about the importance of antenatal care among females of child bearing age living in a suburban community of Lahore. Pakistan journal of medical sciences, 35(5), 1344–1348. Available at https://doi.org/10.12669/pjms.35.5.1256. Accessed on 2/8/21.
- 5. Akhtar, S., Hussain, M., Majeed, I., and Afzal, M., (2018). Knowledge Attitude and Practice Regarding Antenatal Care among Pregnant Women in Rural Area of Lahore. Int. J. Soc. Sc. Manage. Vol. 5, Issue-3: 155-162. Available at DOI: 10.3126/ijssm.v5i3.20604. Accessed on 2/8/21.
- Awusi V, Anyanwu E, and Okeleke V., (2019). Determinants of antenatal care services utilization in Emevor Village, Nigeria. Benin J Postgrad Med; 11(1).
- Berehe, T., Modibia, L., (2020). Assessment of Quality of Antenatal Care Services and Its Determinant Factors in Public Health Facilities of Hossana Town, Hadiya Zone, Southern Ethiopia: A Longitudinal Study, Advances in Public Health, Article ID 5436324, 11 pages. Available at https://doi.org/10.1155/2020/5436324. Accessed on 2/8/21.
- 8. Bergsjo P and Villar J., (2019). Scientrfic basis for the content of routine antenatal care. Acta Obstetricia et Gynecologica Scandinavica; 76: 1–14
- 9. Carroli G, Villar J, Piaggio G, Khan-Neelofur D, Gülmezoglu M, Mugford M, (2019). WHO systematic review of randomised controlled trials of routine antenatal care. Lancet; 357: 1565-70.
- 10. Ekabua J, Ekabua K, Njoku C., (2019). Proposed framework for making focussed antenatal care services accessible: A review of the Nigerian setting. ISRN Obstetrics and Gynecology.
- 11. Fagbamigbe AF, Idemudia ES., (2020). Barriers to antenatal care use in Nigeria: evidences from non-users and implications for maternal health programming. BMC pregnancy and childbirth; 15(1):95.
- 12. G. Fesseha, M. Alemayehu, B. Etana, K. Haileslassie, and A. Zemene, "Perceived quality of antenatal care service by pregnant women in public and private health facilities in Northern Ethiopia," American Journal of Health Research, vol. 2, no. 4, pp. 146–151, 2014.
- 13. Gunawardena N, Bishwajit G, Yaya S., (2019). Facility-Based maternal death in Western Africa: a systematic review. Frontiers in public health; 6:48. pmid:29535999.
- 14. Kihara AB, Harries AD, Bissell K, Kizito W, Van Den Berg R, Mueke S, (2018). Antenatal care and pregnancy outcomes in a safe motherhood health voucher system in rural Kenya 2010–2018. *Public Health Action*; 5(1):23–29.
- 15. Konlan, K., Saah, J., Amoah, R., Doat, A., Mohammed, D., & Abdulai, J., (2020). Factors influencing the utilization of Focused antenatal care services during pregnancy, a study among postnatal women in a tertiary healthcare facility, Ghana. Nursing Open; Volume 7, Issue 6 p. 1822-1832.

- 16. Kuhnt J, and Vollmer S., (2019). Antenatal care services and its implications for vital and health outcomes of children: evidence from 193 surveys in 69 low-income and middle-income countries. BMJ Open; 7:17122.
- 17. Lincetto, O., Mothebesoane-Anoh, S., Gomez, P., and Munjanja, S., (2020). Antenatal care. **Opportunities** for Africa's Newborns. Available at https://www.who.int/pmnch/media/publications/aonsectionIII 2.pdf. Accessed 10/11/21
- 18. M. Tetui, E. K. Ekirapa, J. Bua et al., "Quality of Antenatal care services in eastern Uganda: implications for interventions," Pan African Medical Journal, vol. 13, no. 27, pp. 1–15, 2012.
- 19. Majoko F, Munjanja SP, Nystrom L, Mason E, Lindmwak G., (2017). Randomised controlled trial of two antenatal care models in rural Zimbabwe. BJOG; 114: 802-811.
- 20. N. Mekonnen, T. M. Berheto, S. Ololo, and F. Tafese, "Under nutrition and its association with infant and young child feeding summary index among 6 to 23 Months in demba Gofa
- 21. Woreda, southern Ethiopia," Journal of Nutritional Health & Food Science, vol. 5, no. 3:502, pp. 1–15, 2017.
- 22. Okunlola M, Owonikoko K, Fawole A., (2018). Gestational age at antenatal booking and delivery outcome. Afr J Med Med Sci; 37(2):165–9.
- 23. Onyeajam, D. J., Xirasagar, S., Khan, M. M., Hardin, J. W., & Odutolu, O., (2018). Antenatal care satisfaction in a developing country: a cross-sectional study from Nigeria. Public Health 18:368.
- 24. P. Bastola, D. K. Yadav, and H. Gautam, "Quality of antenatal care services in selected health facilities of Kaski district, Nepal," International Journal of Community *Medicine and Public Health*, vol. 5, no. 6, pp. 2182–2189, 2018.
- 25. Paudel, Y., Jha, T., and Mehata, (2017). Timing of First Antenatal Care (ANC) and Inequalities in Early Initiation of ANC in Nepal. Front. Public Health.
- 26. S. G., "Quality of antenatal care services at subcentres: an infrastructure, process and outcome evaluation in a district in Tamil Nadu," International Journal of Community *Medicine and Public Health*, vol. 4, no. 11, pp. 4071–4077, 2017.
- 27. S. Mehnaz, S. Abedi, Z. Fazli, M. Ansari, Mohammed, and A. Ansari, "Quality of care: predictor for utilization of ANC services in slums of Aligarh," International Journal of Medical Science and Public Health, vol. 5, no. 9, pp. 1869–1873, 2016.
- 28. Villar J, Ba'aqeel H, Piaggio G, Lumbiganon P, Miguel Belizán J, and Farnot U, (2018). WHO antenatal care randomised trial for the evaluation of a new model of routine antenatal care. *Lancet*. 2001;357: 1551–1564.
- 29. Warri, D., George, A., (2020). Perceptions of pregnant women of reasons for late initiation of antenatal care: a qualitative interview study. BMC Pregnancy Childbirth **20**, 70.
- 30. WHO, (2020). Trends in Maternal Mortality 2000 to 2019. Cited on 12th November 2021. Available on https://data.unicef.org/wpcontent/uploads/2015/12/MMR_executive_summary_final_mid-res_243.pdf. Accessed on 2/8/21.
- 31. WHO, (2020): Global Health Observatory data repository: Antenatal care coverage Data country; available by at,

- $http://apps.who.int/gho/data/node.main.ANTENATALCARECOVERAGE 4\underline{.}$ Accessed on 2/8/21.
- 32. World Health Organization (WHO), (2019). WHO recommendations on antenatal care positive pregnant experience. (Online). for Available at: http://www.who.int/reproductivehealth/publications/maternal_perinatal_health/ancpositive-pregnancy-experience/en/. Accessed on 2/8/21
- 33. Y. E. Housni, A. Khadmaoui, A. Kharbach, and E. Boussalwa, "Qual European journal of scientific researchity of antenatal care services in Morocco: case of the women delivering," At Souissi Maternity, vol. 147, no. 4, pp. 426–432, 2017.