



KNOWLEDGE AND PRACTICE OF PREVENTION OF ANAEMIA IN PREGNANCY AMONG WOMEN ATTENDING ANTENATAL CLINIC AT OLABISI ONABANJO UNIVERSITY TEACHING HOSPITAL, OGUN STATE

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ABSTRACT: *Anaemia in pregnancy is a significant public health concern and is common among pregnant women and children. The study examined the knowledge of anaemia in pregnancy and preventive practices among pregnant women attending antenatal clinic at Olabisi Onabanjo University Teaching Hospital Sagamu. This study adopted descriptive survey design and 150, sample size was calculated. The same number of questionnaire was distributed following an informed consent. The data for the study were analyzed using descriptive statistics such as frequency/percentages and inferential statistics such as correlation analysis. The findings revealed that there is a significant relationship between the level of knowledge and practice of prevention of anaemia in pregnancy by the pregnant women at p-value of 0.000 which is significant at 5%. Also, the study revealed that there is a significant relationship between the perceived causes of anaemia in pregnancy and its preventive practices among the pregnant women attending antenatal clinic at Olabisi Onabanjo University Teaching Hospital Sagamu at p-value of 0.000 which is significant at 5% level. The implication of this is that the level of knowledge and practice of prevention of anaemia in pregnancy by pregnant women has influence on pregnant women attending antenatal clinic at Olabisi Onabanjo University Teaching Hospital Sagamu especially those affected by the menace. In conclusion, it was clear that anaemia in pregnancy is prevalent in Nigeria contemporary society whose quick prevention should be taken into prompt consideration. It is however recommended that the government should employ more public health nurses in order to ensure at least a visit to help increase the knowledge of pregnant women on anaemia in pregnancy and lay more emphasis on the preventive practices.*

KEYWORDS: Anemia, Pregnancy, Knowledge, Prevention, Preventive Practices



INTRODUCTION

Background of the Study

Anaemia is one of the most common nutritional problems among women, especially during pregnancy (Admad, Saeid, & Leila, 2018). It is defined as a shortened amount of haemoglobin (Hb) in the blood. It is also seen as a shortage in the size or number of red blood cells (RBCs) or the quantity of haemoglobin they contain. (Mahan, Escott-stump & Raymond 2015). Anaemia in pregnancy is defined by the Center of Disease Control and prevention (CDC) and World Health Organization WHO as a haemoglobin concentration less than 11g/dl or a packed cell volume (PCV) of less than 33%. It is considered severe when haemoglobin concentration is less than 7.0g/dl, moderate when haemoglobin falls between 7.0 and 9.9g/dl and mild when haemoglobin is from 10.0 to 10.9g/dl (Journal of Nutrition and Metabolism, 2015).

Anaemia is a significant public health problem and the most susceptible group are pregnant women and children. The causes of anaemia consist of genetic factors, nutritional deficiencies and infectious agents. Considering the nutritional causes of anaemia, iron deficiency is considered the most common and important because the physiological changes associated with pregnancy put forth a demand for additional iron needed for transfer to the fetus. (Madden & Holdsworth, 2017). Apart from the physiological process of hemodilution, women often become anaemic during pregnancy because the demand for iron and other vitamins is increased due to the physiological burden of pregnancy. The inability to meet the required level for these substances either as a result of dietary deficiencies or infection gives rise to anaemia.

Fredonna & Drolet (2017) revealed that few respondents were able to identify the causes and prevention of anaemia in pregnancy, as 38% reported knowledge of benefit of iron during pregnancy but do not consume iron supplement because of its side effect and 5% do not use preventive measure. A descriptive study on knowledge of respondents on anaemia in pregnancy showed 38% had poor knowledge and 54% had satisfactory knowledge about anaemia during pregnancy, (Ashly, Jeeval, D'silva, Chako, Vineesta & Yinaya, 2014). Similarly, Ekwere & Anyiekere, (2015) findings on the maternal knowledge of the causes, preventive strategies on food restriction related to anaemia in pregnancy showed good knowledge (77%) with respect to simple definition of anaemia such as low packed cell volume (PCV) and shortage of blood. 90% reported good knowledge about the causes, vulnerable groups and the effects of anaemia in pregnancy. (Kalimbira, Mtimuni & Chilima, 2018)

Iron supplement in pregnancy has become a standard and routine practice as a preventive treatment for anaemia in pregnancy (Kayode & Adeolu 2018). Factors that limit the success of iron supplementation include inadequate supply, delivery, and distribution systems, poor utilization of prenatal health care services, ineffective social providers and overall poor monitoring and evaluation of supplementation programs, cultural beliefs against consumption of medications during pregnancy (Rae, Erin, Leslie, Endang, Ruben & Chitra, 2017). Maternal knowledge of anaemia is important because of its potential to encourage women to take iron supplements during and after childbirth, affecting the iron status of the mother and the child. (Elie, Kai, Saskia, Klaus, Jae-Hyun & Richard, 2016).



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The knowledge of anaemia, its causes and practices of prevention among pregnant women is very important as it will contribute to reduction in morbidity, mortality and fetal or maternal complications. This is because pregnant women are often anaemic but they are not aware until signs and symptoms are evident. Because anaemia is the most frequent maternal complication of pregnancy, antenatal care should therefore be concerned with its early detection and management as anaemia in pregnancy, to a large extent, can be controlled and monitored by good antenatal care and appropriate action, including referral, in accordance to the level of severity of the anaemia.

In light of these, this study aims at providing information about the knowledge and practice of prevention of anaemia in pregnancy among women attending antenatal clinic at Olabisi Onabanjo University Teaching hospital (OOUTH)

General Objective of the Study

Specific objectives of the study are to:

- i. assess the level of knowledge of anaemia in pregnancy among the pregnant women attending antenatal clinic at Olabisi Onabanjo University Teaching Hospital Sagamu.
- ii. identify the perceived causes of anaemia in pregnancy among the pregnant women.
- iii. assess the pregnant women's level of practice of prevention of anaemia in pregnancy.

RESEARCH METHODOLOGY

A descriptive survey was used for this study. This design was chosen because it is useful in gathering quantitative data which could be analyzed and interpreted in order to measure the type of relationship which exist between the variables.

Research Setting

This research study was conducted in Olabisi Onabanjo University Teaching Hospital, Sagamu.

Olabisi Onabanjo University Teaching Hospital is a tertiary health institution located in Sagamu, Ogun state. It is a 300-bed hospital which was established on 1st January, 1986. The various departments include; female surgical ward, male surgical ward, ear nose and throat clinic, eye clinic, family planning clinic, male medical ward, female medical ward, pediatrics ward, labour ward, theater, accident and emergency, virology, intensive care unit, children



emergency unit, neonatal ward, renal unit, lying-in ward, obstetrics and gynecology and antenatal clinic.

In Olabisi Onabanjo University Teaching Hospital Sagamu, 391 pregnant women attend antenatal clinic in the month of April. The clinic is scheduled for four times a week, Mondays, Tuesdays, Thursdays and Fridays. The instrument for data collection was administered on one of the four days and pregnant women in attendance took part in this study. They were selected based on their presence, availability, and readiness to participate in the study.

Target Population

The target populations for this research were pregnant women attending antenatal clinic at Olabisi Onabanjo University Teaching Hospital, Sagamu.

Sample Size Determination

The formula used for getting the sample size was Yamane's formula. The total population of pregnant women in the research setting was 391.

To calculate the sample size,

$$n = \frac{N}{1 + N(e)^2}$$

Where,

n= sample size

N= finite population

1= constant

e= level of significance taken to be 0.05

$$n = \frac{391}{1+242 (0.05^2)}$$

$$n = \frac{391}{1+242(0.0025)}$$

$$n = \frac{391}{1+(0.605)}$$



$$n = \frac{391}{1+(1.605)}$$
$$n = 150$$

Sampling Techniques

A non-probability convenience sampling technique was used to select 150 antenatal pregnant women from the selected hospital in Sagamu for this study.

Validity and Reliability of Instrument

To ensure validity of the instrument, a drafted copy of the developed self-structured questionnaire and the research questions was presented to the researchers' supervisor and other experts in the school of Nursing sciences for face and content validity, comments, suggestions and modification of the instrument were studied carefully and used in improving the quality of the instruments. Reliability is the ability to measure the same thing consistently. To ensure the reliability of the research instrument, the corrected and the validated version of the instrument were subjected to test and retest using 10 pregnant women, at Babcock university teaching hospital in Ilishan Remo Ogun state to determine its reliability. The 10 women were selected at random on an antenatal clinic day and data was collected and recorded. After two weeks, the questionnaire was administered to 10 women at the same clinic to test for consistency. Cronbach Alpha was used to determine the reliability. Meaning that any result of 0.70 and above confirmed the reliability of the study.

Method of Data Collection

A letter was obtained from the School of Nursing sciences' Dean's office, and was taken to the Babcock University Health Research Ethical Committee (BUHREC) to regulate the procedures that were carried out in administering the questionnaire. Consent was sought from the hospital management and the CNOs of the unit to administer questionnaire to the respondents. Subsequently, the researcher went to the hospital on the appointed days that the clinics were holding. Prior administration of the questionnaire, the purpose of the research was explained to the participant and the questionnaire explained for clarity and to promote good cooperation. Consent was then obtained from the participant. Finally, the questionnaire was administered by the researcher to the participant at the antenatal clinic in Olabisi Onabanjo University Teaching Hospital, Sagamu, and retrieved on completion. Data collection was done over a period of one week.

Data Analysis Method

The completed questionnaire was collected. Data generated were coded and analyzed using Statistical Package for Social Sciences (SPSS v.21) and descriptive statistical of frequency count and tables was used in describing the demographic data and research questions. Test of Hypothesis was analyzed with the use of Inferential Statistic of Pearson correlation coefficient.

Ethical Consideration



Ethical issues confront every researcher who embarks on a study involving humans as subjects (Pearl, 2013). The researcher further explained to them that they had every right to refuse to participate in the research or discontinue participation when they felt uncomfortable about the kind of questions asked. Further, the researcher assured the respondents of their complete anonymity and confidentiality. The respondents were also fully informed about the nature of the study and that participation was voluntary. The information provided by the respondents was treated with confidentiality.

RESULTS/FINDINGS

Presentation of Data

The analysis of the data collected was done by the use of the Statistical Package for Social Sciences (SPSS). Descriptive statistics such as frequency distribution tables and percentages were used in the analysis of the data as well as the inferential statistics such as chi-square analysis was also used to determine the association of outcomes between the dependent variable and the independent variables. The observations which were arranged in tables were made based on the objectives of the study.

Percentage Distribution of the Respondents by Socio-Demographic Characteristics

Table 4.3 shows the percentage distribution of the respondents that were interviewed by socio-demographic information.

Table 1: Percentage Distribution of the Respondents by Age

Age	Frequency (N)	Percentage (%)
18-23	39	26
24-28	57	38
29-33	34	22.7
33-37	13	8.7
38- above	7	4.7
Total	150	100.0

Source: Field survey, 2019

Table 1 above shows the percentage distribution of the respondents by age. The table depicts that 26% of the respondents were within the ages of 18-23, a quarter (38%) of the respondents were within age 24-28 years, less than one-third (22.7%) of the respondents were within age 29-33, 8.7% of the respondents were within ages 33-37 and 4.7% of them lies within the ages of 38-above.

**Table 2: Percentage Distribution of the Respondents by Tribe**

Marital Status	Frequency (N)	Percentage (%)
Yoruba	102	68
Igbo	31	20.7
Hausa	13	8.7
Other specific	4	2.6
Total	150	100.0

Source: *Field survey, 2019*

Table 2 above shows the percentage distribution of the respondents by tribe. The table shows that more than a half (68%) of the respondents were Yoruba, below one-third (20.7%) of the respondents were Igbo, 8.7% of them were Hausa and 2.6% of the respondents were from the other tribes which is not stated. However, majority of the respondents within the study area were Yoruba.

Table 3: Percentage Distribution of the Respondents by Religion

Marital Status	Frequency (N)	Percentage (%)
Christianity	78	52
Islam	69	46
Traditional	3	2
Other specific	0	0
Total	150	100.0

Source: *Field survey, 2019*

Table 3 above shows the percentage distribution of the respondents by religion. The table shows that more half (52%) of the respondents were Christians, 46% of the respondents were Muslims, 2% of them were traditionalists and none of the respondent practiced other religion. However, majority of the respondents within the study area were Christians.

**Table 4: Percentage Distribution of the Respondents by Educational Status**

	Frequency(N)	Percentage (%)
Primary	25	16.7
Secondary	22	14.7
Tertiary	91	60.7
None	0	0
Other	12	8
Total	150	100.0

Source: Field survey, 2019

Table 4 shows the percentage distribution of the respondents by their educational status. The table shows that 16.7% of the respondents had primary education, 14.7% of the respondents had secondary education, 60.7% of the respondents had tertiary education and 8% of the respondents had other education but unspecified in the study.

Table 5: Percentage Distribution of the Employment Status

Employment Status	Frequency (N)	Percentage (%)
Employed	75	50
Unemployed	27	18
Self-employed	48	32
Total	150	100.0

Source: Field work, 2019

Table 4 above shows the percentage distribution of the respondents by employment status. The table depicts that 50% of the respondents were employed, 18% of the respondents were unemployed and 32% of the respondents were self-employed.

**Table 5: Percentage Distribution of the Marital Status**

Marital Status	Frequency(N)	Percentage (%)
Single	36	24
Married	93	62
Separated/ Divorced	14	9.3
Widowed	7	4.6
Total	150	100.0

Source: Field survey, 2019

Table 5 shows the percentage distribution of the respondents by marital status. The table shows that less than a quarter (24.0%) of the respondents were single, more than a half (62.0%) of them were married, 9.3% of the respondents were separated/divorced and 4.6% were widowed. However, majority of the respondents were married as shown above.

Table 6: Percentage Distribution of the Respondents by Trimester on pregnancy

Trimester	Frequency (N)	Percentage (%)
1-3 month	57	38
3-6	51	34
6- delivery	42	28
Total	150	100.0

Source: Field survey, 2019

Table 6 above shows the percentage distribution of the respondents by their trimester. The table shows that 38% of the respondents were within the first three months, 34% of the respondents were within the third to sixth month of their pregnancy stage and 28% of the respondents were between the sixth month and delivery month.



Knowledge of anemia in pregnancy

Table 7: Showing the knowledge of anemia in pregnancy

	Yes		No	
	N	%	N	%
Anemia means reduced white blood cells in the body	83	55.3	67	44.7
Anaemia means reduced red blood cells in the body	45	30.0	105	70.0
Anaemia is a common condition among pregnant women	75	50.0	75	50.0
White nails are features of anemia	82	54.7	68	45.3
Hematinics (routine antenatal blood tablets) help prevent anemia in pregnancy.	77	51.3	73	48.7
Even if you do not take your routine tablets as a pregnant woman, you are not likely to have anaemia in pregnancy	126	84.0	24	16.0
Good nutrition is the commonest prevention methods of anaemia in pregnant women	61	40.7	89	59.3
Green leafy vegetables are good sources of iron and eating them helps prevent anemia in pregnancy	105	70.0	45	30.0
Eating proteinous food can help in the prevention of anemia in pregnancy.	114	76.0	36	24.0
Weakness and dizziness can be signs of anemia in pregnancy	87	58.0	63	42.0
Anemia in pregnancy can affect the growth of the baby in the womb	32	21.3	118	78.7
Anemia in pregnancy can lead to problems during delivery	78	52.0	72	48.0

Source: Field survey, 2019

Table 7 shows the level of knowledge of anaemia in pregnancy among pregnant women. The table shows that above average of the respondents (55.3%) wrongly agreed to the statement that anaemia means reduction in white blood cells in the body while 44.7% of the respondents disagreed to the statement that anemia means reduces with blood cells in the body. Also 30% agreed that anemia means reduces red blood cells in the body while 70% wrongly disagreed to the statement anemia means reduces red blood cells in the body. From the results above, 50.0% agreed to the statement that anemia is a common condition among pregnant woman and 50.0% also disagreed. The analysis also shows that 54.7% of the respondents agreed to the statement that white nails are features of anemia while 45.3% of the respondents disagreed.

The findings of the study reveals that 51.3% of the respondents agreed to the statement that hematinics (routine antenatal blood tablets) help prevent anemia in pregnancy while 48.7% disagreed to the statement that hematinics (routine antenatal blood tablets) help prevent anemia in pregnancy. 84.0% of the respondent agreed to the statement that even if they do not make their routine tablets as a pregnant woman, they are not likely to have anemia in



pregnancy while 16% of the respondents disagreed. 40.7% of the respondents agreed to the statement that good nutrition is commonest prevention methods of anaemia in pregnant woman and 59.3% of the respondents disagreed with the statement that good nutrition is commonest prevention methods of anaemia in pregnant woman. 70.0% of the respondents agreed to the statement that green leafy vegetables are good sources of iron and eating them helps prevent anemia in pregnancy while 30.0% disagreed to the statement that green leafy vegetables are good sources of iron and eating them helps prevent anemia in pregnancy. 76.0% of the respondents agreed to the statement that eating proteinous food can help in the prevention of anemia in pregnancy, while 24.0% of the respondents disagreed.

In the same manner on the findings of this study, 58% of the respondents were of the view that weakness and dizziness can be signs of anemia in pregnancy while 42.0% of the respondents disagreed to the statement that weakness and dizziness can be signs of anemia in pregnancy. 21.3% of the respondents agreed to the statement that anemia in pregnancy can affect the growth of the baby in the womb while 78.7% of the respondent disagreed.

The Perceived Causes of Anemia in Pregnancy

Table 8: Perceived Causes of Anemia in Pregnancy

	Agree		Strongly Agree		Disagree		Strongly Disagree	
	N	%	N	%	N	%	N	%
Anemia in pregnancy can be inherited	72	48%	7	46.7%	35	23.3%	36	24%
It can be caused by spiritual factor eg. Spell or curse	53	35.3%	4	2.7%	69	46%	24	16%
Poor people are prone to anemia in pregnancy	12	8%	19	12.7%	86	57.3%	33	22%
Too much water intake can dilute your blood and cause anemia in pregnancy	17	11.3%	10	6.7%	101	67.3%	22	14.7%
Anemia is common in pregnancy because the whole blood in the body goes to the baby	99	66%	36	24%	15	10%	0	0%
Anaemia in pregnancy is caused by protein malnourishment	123	82%	26	17.3%	0	0	1	0.6%
Anaemia in pregnancy is caused by lack of water in the body	19	12.7%	0	0	97	64.7%	34	22.7%
Poor intake of iron	0	0	31	20.7%	69	46%	50	33.3%
Poor intake of folic acid	0	0	15	10%	110	73.3%	25	16.7%
Inability to treat malaria during pregnancy	35	23.3%	35	23.3%	23	15.3%	57	38%
Regular intake of native/ herbal drugs during pregnancy	97	64.7%	34	22.7%	9	6.0%	10	6.7%

Source: Field survey, 2019



Table 8 above explains the perceived causes of anemia in pregnancy. From the table, 48.0% of the respondents agreed that anemia in pregnancy can be inherited, 46.7% of the respondents strongly agreed that anemia in pregnancy can be inherited and 23.3% of the respondents disagreed to the statement that anemia in pregnancy can be inherited, while 24% of the respondents strongly disagreed to the statement that anemia in pregnancy can be inherited. 35.3% of the respondents agreed to the statement that it can be caused by spiritual factor e.g. spell or curse, 2.7% of the total respondents strongly agreed to the statement that it can be caused by spiritual factor e.g. spell or curse, 46% of the total respondents disagreed and 16.0% of the respondents strongly disagreed.

The table also deduced that 8.0% of the respondents agreed that poor people are prone to anemia in pregnancy, 12.7% of the respondents strongly agreed to the statement, 57.3% of the respondents disagreed, and 22.0% of the respondents strongly disagreed to the statement that poor people are prone to anemia in pregnancy. 11.3% of the respondents agreed that too much of water can dilute your blood and cause anemia in pregnancy, 6.7% of the respondents strongly agreed, 67.3% of the respondents disagreed and 14.7% of the respondents strongly disagreed to the statement that too much of water can dilute your blood and cause anemia in pregnancy. Also, 82.0% of the respondents agreed that anemia in pregnancy is caused by protein malnutrition and 17.3% of the respondent strongly agreed. None of the respondents agreed that poor intake of iron can result to anaemia in pregnancy, 20.7% of the represent strongly agreed to the statement, 46.0% of the respondents disagreed and 33.0% of the respondents strongly disagree that poor intake of iron can cause anaemia in pregnancy. None agreed to poor intake of folic acid as a cause of anaemia in pregnancy, 10.0% of the respondents agreed to the statement that anemia is caused by poor intake of folic acid, 73.3% of the respondents disagreed to the statement that anemia is caused by poor intake of folic acid and 16.7% of the respondents strongly disagreed to the statement that anemia is caused by poor intake of folic acid. 23.3% of the respondents agreed that anemia can be caused by the inability to treat malaria during pregnancy, 23.3% of the respondents strongly agreed to the statement that anemia can be caused by the inability to treat malaria during pregnancy.

Preventive Practices against Anemia in Pregnancy

Table 9: Preventive Practices against Anemia in Pregnancy

	Regularly		Once in a while		Never	
	N	%	N	%	N	%
I take my antenatal blood supplements	122	81.3	28	18.7	0	0.0
I go for antenatal appointment/ check ups	146	97.3	4	2.7	0	0.0
I check myself for sings of anaemia	99	66.0	51	3.04	0	0.0
I eat green leafy vegetables	76	50.7	40	26.7	34	22.7
I eat food rich in protein	147	98.0	1	0.6	2	1.3
I eat food rich in iron	74	49.3	76	50.7	0	0.0
I take herbal mixtures to prevent anaemia in pregnancy	64	42.7	57	38.0	29	19.3
I drink plenty of water to prevent anaemia in pregnancy	137	91.3	13	8.7	0	0.0

Source: Field survey, 2019



Table 9 examines the preventive practices against anemia in pregnancy. The result shows that 81.3% of the respondents takes antenatal blood supplement regularly for preventive practices against anemia in pregnancy, 18.7% takes antenatal blood supplements once in a while for preventive practices against anemia in pregnancy and none of the respondent do take antenatal blood supplements for preventive practices against anemia in pregnancy. 97.3% of the respondents go for antenatal appointment/check-ups regularly for preventive practices against anemia in pregnancy, 2.7% of the respondents go for antenatal appointment/check-ups once a while for preventive practices against anemia in pregnancy and none fell under the category of those who never went for antenatal appointment /check up. Also, 66.0% of the respondents check themselves for signs of anaemia regularly for preventive practices against anemia in pregnancy, 34.0% check themselves once in a while for preventive practices against anemia in pregnancy and none of them fell under the category of 'never' in checking themselves for signs of anemia. 50.7% of the respondents eats green leafy vegetables regularly for preventive practices against anemia in pregnancy, 26.7% of the respondents eats green leafy vegetables once in a while for preventive practices against anemia in pregnancy and 22.7% of the respondents never take green leafy vegetables. 98.0% of the respondents eat food that is rich in protein regularly for preventive practices against anemia in pregnancy, 0.6% of the respondents eat food that is rich in protein once in a while for preventive practices against anemia in pregnancy and 1.3% never eats food that is rich in protein for preventive practices against anemia in pregnancy.

DISCUSSION

This research work was established to examine the knowledge of anaemia in pregnancy and preventive practices among pregnant women attending antenatal clinic at Olabisi Onabanjo University Teaching Hospital Sagamu. Commencing from the research questions, it is observed that there were high levels of knowledge among the pregnant women attending antenatal clinic at Olabisi Onabanjo University Teaching Hospital Sagamu about anaemia in pregnancy. From the study, majority of the pregnant women said wrongly disagreed that anaemia means reduction of red blood cells in the body. These findings are in contrary with the findings of the World Health Organisation (2015) that anaemia connotes a deficiency in the number of red blood cells or haemoglobin content, which can lead to a decrease in oxygen-carrying capacity of the blood, causing unusual tiredness, pallor, shortness of breath and lack of energy.

Although, 82.0% of the respondents agreed that anemia in pregnancy is caused by protein malnutrition, the study showed that the respondents wrongly said anaemia could be inherited, majority also agreed that it could be caused by spiritual factors such as spell or curse. This shows there is need to further educate the pregnant women on the causes of anaemia in pregnancy as majority do not know what it means.

The study also illustrate that the level of practice towards the prevention of anaemia among respondent is high. From the findings of the result, it showed that pregnant take their routine antenatal blood supplements, go for antenatal appointment/checkups, check for signs of anaemia themselves, take leafy vegetables, eat food rich in protein, eat food rich in iron, take herbal mixtures and drink plenty of water to prevent anaemia in pregnancy.



Implication of Findings to Nursing

Even though the study showed that the respondents were aware of anaemia in pregnancy and has high level of knowledge of the preventive practices towards the disease, there is need for the nurses to still pay attention to some critical areas on knowledge when educating the women. The nurse should re-direct and re-package the contents of their health education, directing it more towards discouraging poor practices in terms of general health during pregnancy and sensitizing mothers on the prevention of anaemia in pregnancy as recommended by WHO.

RECOMMENDATIONS

1. The government should employ more public health nurses in order to ensure at least a visit to help increase the knowledge of pregnant women who are attending antenatal clinic at Olabisi Onabanjo University Teaching Hospital Sagamu about anaemia in pregnancy and their preventive practices.
2. Nurses should lay more emphasis on the preventive practices especially during antenatal clinic.
3. Community health nurses should ensure at least a visit to the pregnant women in order to give supportive supervision on the care of the newborn.
4. Traditional Birth Attendants (TBAs) should be trained and re-trained including those in various churches since a good number of deliveries were taken by them in the area of study.
5. Enlightenment on girl child education should be intensified by all tiers of government to improve future mothers.

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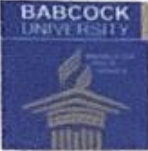
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APPENDIX

 **BABCOCK UNIVERSITY**
HEALTH RESEARCH ETHICS COMMITTEE

Our Ref. NHREC/24/01/2018 Your Ref. BUHREC134/20 Date March 04, 2020

NAME OF PRINCIPAL INVESTIGATOR: UGBODUME ANTHONIA D.

TITLE OF STUDY: KNOWLEDGE AND PRACTICE OF PREVENTION OF ANAEMIA IN PREGNANCY AMONG WOMEN ATTENDING ANTENATAL CLINIC IN A UNIVERSITY TEACHING HOSPITAL, OGUN STATE.

RESEARCH LOCATION: OGUN STATE, NIGERIA.

NOTIFICATION FOR ETHICAL APPROVAL

Babcock University Health Research Ethics Committee has approved your research proposal and other related materials after the necessary reviews and corrections.


The National code for Health Research Ethics requires that you comply with all institutional guidelines, rules and regulations. All forms and questionnaire must carry the assigned BUHREC number. No changes are permitted in the research without prior approval by the committee.

Please, note that the committee will monitor the research study. All data collection must be completed within twelve calendars months (One year), from the date stated on this approval.

You are expected to give a progress report of the investigation and submit a final copy of the research to the committee.

This approval is with effect from February 26, 2020

Thank you



Professor S. O. Fapohunda
Chairman, Babcock University Health Research Ethics Committee

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