ASSESSMENT OF FAMILY LEVELS OF FUNCTIONING AMONG CIVIL SERVANTS IN FEDERAL CAPITAL TERRITORY ABUJA

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ABSTRACT

The family is a social institution responsible for child upbringing and economic support for its members. This study assessed levels of family functioning among civil servants in Federal Capital Territory Administration (FCTA). The study is a descriptive cross-sectional survey. One hundred and sixty-six civil servants working in FCTA were assessed using questionnaire adapted from standardized Family Adaptability and Cohesion Evaluation Scales (FACES IV). Data was analyzed using descriptive and Pearson correlation test. Findings showed that 103 (62.1%) families are "connected", 133 (80.1%) families are "flexible", 85% of respondents reported very high levels of family communication and 56 % of respondents reported high levels of family satisfaction. There was significant positive correlation between family communication and family satisfaction (r= .676, p<.01). The families studied demonstrated high level of cohesion, flexibility and positive relationship between family satisfaction and family communication in a stressful capital city.

Keywords: Assessment, Family, Functioning, Cohesion, Flexibility, Communication

INTRODUCTION

Family can broadly be defined as the extent of closeness, attachment and emotional bonding that family members have towards one another (**R**oman, et al. 2016). In spite of the changing lifestyles and ever-increasing human mobility that characterizes the modern society; the family remains the central unit of contemporary life and the foundation of health human society (Ngale, 2009). Industrialization has however gone a long way in undermining the traditional structure of the family bringing about lack of role identity of men, changing role in women, peer group and mass media influence on children. All these have resulted in serious family conflicts and dysfunction. Furthermore, there is inadequate emotional bonding between parents and children (Cohesion), leadership and role conflicts (flexibility) and poor communication between members (Adebayo & Ogunleye, 2010).

Family functioning is concerned with how interactions among family members influence the relationship and functioning of the family unit as a whole (Haliday, Green & Renzaho, 2013). It is thus defined by levels of cohesion, flexibility, communication and overall satisfaction among family members (Openshaw, 2011). Cohesion among family members is described *a*s the emotional bonding that members have toward one another and the degree of individual independence (Jin, 2015). There are four levels of cohesion ranging from disengaged (very low) to separated (low to moderate) to connected (moderate to high) to enmeshed (very high) (Olson, 2000).

Family flexibility is the amount of change in family leadership, roles and rules (Matejevic, Todorovic, & Jovanovic, 2014). The four levels of flexibility range from rigid (very low) to structured (low to moderate) to flexible (moderate to high) to chaotic (very high) (Olson, 2000). Family Communication is defined as the act of making information, ideas,

thoughts and feelings known among members of a family unit and it can range from poor to very effective **(**Bailey, **2009;** Peterson,2009**).** Family functioning is an important factor that determines the health status and quality of life of an individual and family at large. Families that are united experience a higher level of wellbeing (Farajzadegan, Koosha, Sufi & Keshvari, 2013). It has been discovered that family functioning helps in building individual resilience (Walsh, 2012). Furthermore, there exist a strong relationship between poor family functioning and physical diseases such as sleep disorder, stress and some other mental illnesses. A family with appropriate family functioning will not only produces a healthy individual such procreate resilience individual who are able to cope and survive in the face of illnesses (Bahremand, et al. 2015).

Overall impact of family functioning is family satisfaction. Family satisfaction is defined as the degree to which family members feel happy and fulfilled with each other in area of family cohesion, flexibility and communication. The end result of family functioning on individual health is individual satisfaction of level of social support within the family (Roman, et al. 2016**)**.

The importance of family function and its effect on health is so clear and noticeable. In many countries, family nursing is used to promote the level of health of family and community as a whole (Farajzadegan, et al. 2013). Family health nursing is a branch of community health nursing which has received little or no attention in most developing nations of the world of which Nigeria is inclusive (Bell, 2010). Little or no studies have been carried out in developing countries on association between family functioning and family satisfaction, hence the researchers assess the level of family functioning in the Federal Capital territory of Nigeria and its relationship with family satisfaction.

METHODOLOGY

Cross sectional descriptive survey was adopted. The study was carried out among civil servants working within Abuja, Federal Capital Territory (FCT), the capital of Nigeria, West Africa. Multistage sampling technique was used in the selection of 189 civil servants in Federal Capital Territory Administration (FCTA). A self-designed questionnaire was used for the study. Ethical approval was obtained from Ethical Approval Review Board and consent was obtained from the participants. Descriptive statistics was used to analyze demographic characteristics of respondents. Dimensions of family functioning scores were analyzed using standardized FACES IV Excel programmed spreadsheet. Pearson correlation test was used to test for relationships between family communication and family satisfaction at 5% level of significance.

RESULTS

Socio-demographic variables

One hundred and sixty-six (166) questionnaires were adequately filled and returned. Response rate 87.8%. Respondents consist of seventy-two males (43.4%) and ninety-four females (56.6%). Sixty-one (36.7%) are single; eighty-five (51.2%) are in their first marriage; five (3.0%) are married but not in their first marriage; seven (4.2%) are living together or cohabiting; four (2.4%) claim to be in “live in partnership”; two (1.2%) are widowed and two (1.2%) are separated. Eighty-four (50.6%) of the participants responded to scales based on their Family of Origin, that is they provided information about the family they originated from. The remaining eighty-two (49.4%) of the participants provided information about their Family of Procreation, that is, the family they formed. Of the one hundred and sixty-six participants surveyed, forty-one (24.7%) are living alone; seventy-two (43.4%) are living

with partners and children; twenty (12%) are living with parents; twelve (7.2%) are living with others; twelve (7.2%) are living with partner while nine (5.4%) are living with children. Table 1 gives a summary of the frequency and percentage distribution of age, marital status, ethnicity, level of education and income.

Table 1: Frequency Distribution and Percentage of respondents' Demographic

Age Category	**Frequency N= 166**	**Percentage**
21-30years	60	36.1%
31-40years	67	40.4%
41-50years	28	16.9%
51-60years	11	6.6%
Mean Age ±SD	34.4 ± 9.1	
Ethnic Group:		
Yoruba	78	47.0%
Hausa	19	11.4%
Igbo	21	12.7%
Others	48	28.9%
Level of Education:		
Primary Education	8	4.8%
Secondary Education	24	14.5%
Tertiary Education	134	80.7%
Income Level per Month		
Less than N50,000 ($140)	25	15.1%
N51,000 – N100,000 ($141-$280)	58	34.9%
N101,000 – N150,000 ($281-$420)	45	27.1%
N151,000 - N200,000 ($421-$560)	18	10.8%
Above N201,000 (Above $1235).	20	12.0%

Findings about family structure showed that one hundred and thirty-three (80.1%) of the respondents were within "a two-parent biological structure"; four (2.4%) are under "a two parent same sex" family structure (Though, this is not legalized in Nigeria); three (1.8%) were from "a two parent stepfamily" structure. Twenty-four (14.5%) of respondents reported that they are from "a one parent" family structure. Two (1.2%) respondents reported that they are from a family structure of "two parents adoptive (Figure 1).

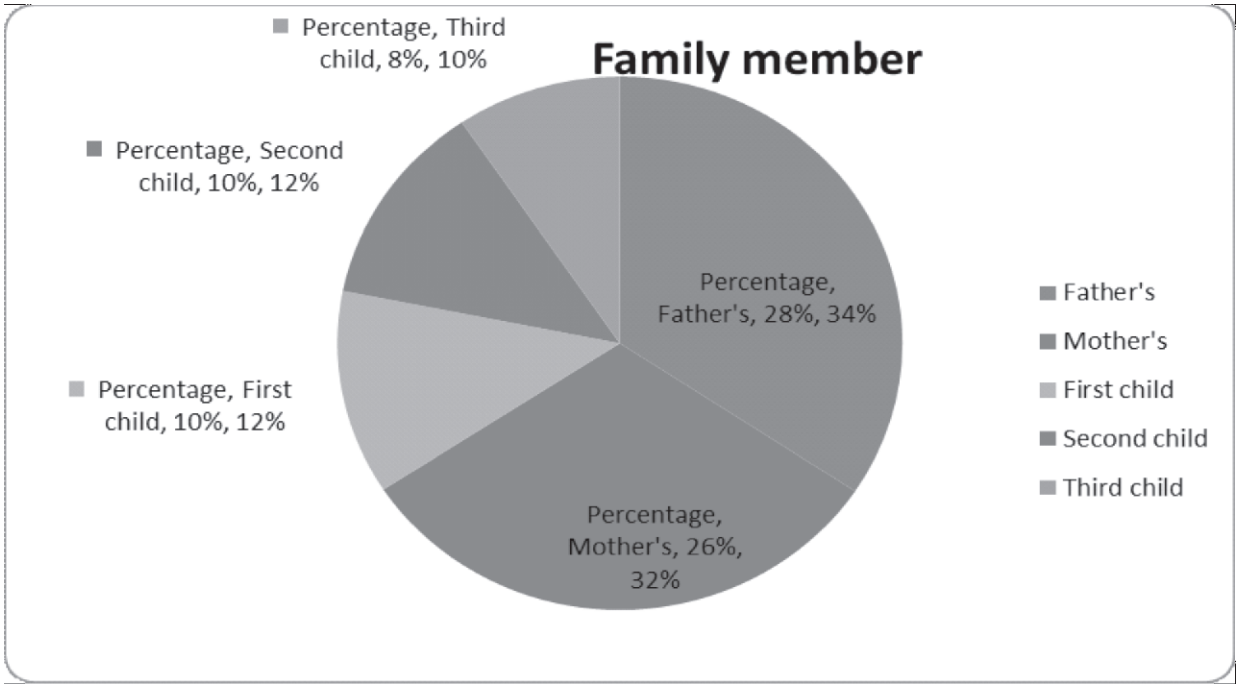

Figure 1: Frequency distribution of family members

Cohesion levels

The families that are Connected are one hundred and three (62.1%), 33 (58.9 %) exhibited low to very low levels of Enmeshed and Disengaged dimensions, very Connected families are fifty-eight (34.9%). Table 2 gives a summary of the frequency and distribution of levels of cohesion

Table 2 :Levels of Cohesion among Families

Cohesion Dimension			Enmeshed Dimension			Disengaged Dimension		
Levels	Frequency	%	Levels	Frequency	%	Levels	Frequency	%
Very Connected	58	34.9	Very Low	13	24.4	Very Low	37	63.8
			Low	20	34.5	Low	20	34.5
			Moderate	19	32.8	Moderate	1	1.7
			High	4	6.9	High	0	0
			Very High	2	3.4	Very High	0	0
			Total	58	100	Total	58	100
Connected	103	62.1	Very Low	24	23.3	Very Low	37	35.9
			Low	51	49.5	Low	48	46.6
			Moderate	22	21.4	Moderate	12	11.7
			High	6	5.8	High	6	5.8
			Very High	0	0	Very High	0	0
			Total	103	100	Total	103	100
Somewhat Connected	5	3.0	Very Low	2	40	Very Low	3	60
			Low	3	60	Low	1	20
			Moderate	0	0	Moderate	0	0
			High	0	0	High	0	0
			Very High	0	0	Very High	1	20
			Total	5	100	Total	5	100
Total	166	100						

Flexibility levels

Families that are “Very Flexible” are 13.9% and 78.3% of them showed very low levels of Chaotic Dimension. “Flexible families” are 80.1%, 85% of these families ranged from moderate to very low on Rigid dimension; and 95.5% families ranged from low to very low on the Chaotic dimension (table 3).

Table 3: Levels of Flexibility among Families

Flexibility Dimension			Rigid Dimension			Chaotic Dimension		
Levels	Frequency	%	Levels	Frequency	%	Levels	Frequency	%
Very Flexible	23	13.9	Very Low	1	4.3	Very Low	18	78.3
			Low	3	13.0	Low	2	8.7
			Moderate	11	47.8	Moderate	3	13
			High	7	30.4	High	0	0
			Very High	1	4.3	Very High	-	-
			Total	23	100	Total	23	100
Flexible	133	80.1	Very Low	15	11.3	Very Low	98	73.7
			Low	37	27.8	Low	29	21.8
			Moderate	61	45.9	Moderate	5	3.8
			High	15	11.3	High	1	.8
			Very High	5	3.8	Very High	-	-
			Total	133	100	Total	133	100
Somewhat Flexible	10	6	Very Low	4	40	Very Low	6	60
			Low	3	30	Low	3	30
			Moderate	2	20	Moderate	0	0
			High	1	10	High	1	10
			Very High	0	0	Very High	-	-
			Total	10	100	Total	10	100
Total	166	100						

Family Communication and satisfaction Scale: twenty-four of the respondents (14.46%) rated moderately on communication scale. Eighty of the respondents (48.19%) rated high on the scale and thirty-eight (22.89%) rated very high. Cumulatively over 85% of respondents reported moderate to very high levels of family communication.

Forty six of the respondents (27.1%) rated moderately on family satisfaction scale. Thirty-seven of the respondents (27.72%) rated high on the scale and ten respondents (6.02%) rated very high. Cumulatively over 56.02% of respondents reported moderate to very high levels of family satisfaction (Figure 2).

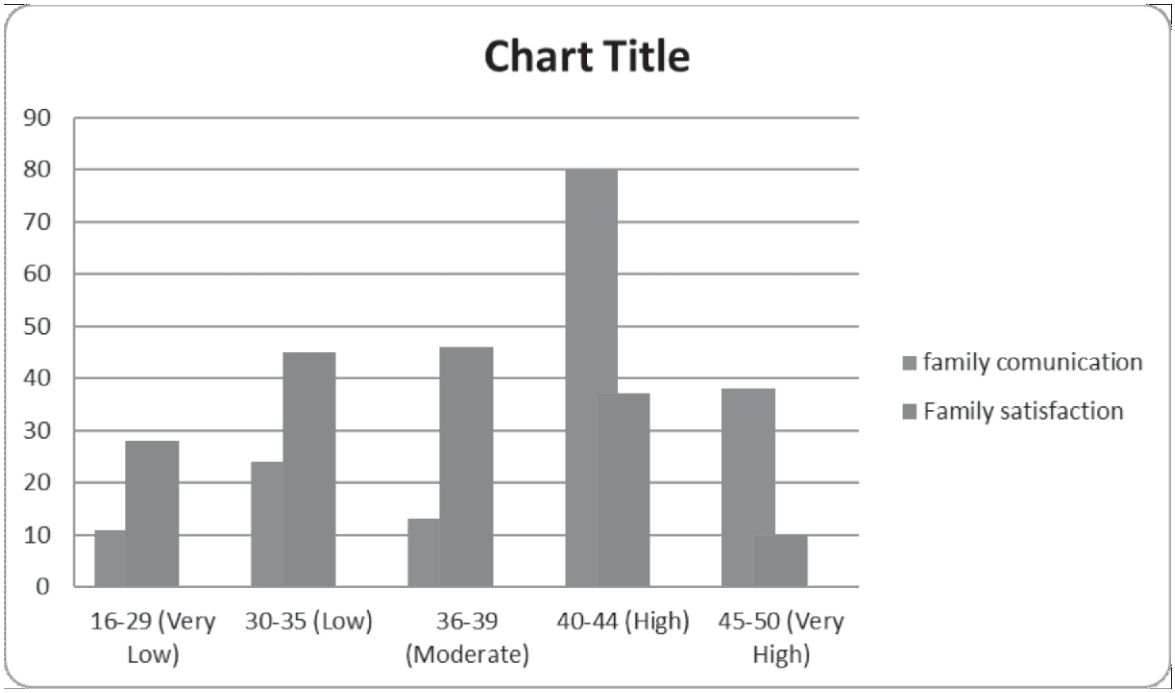

Figure 2: Frequency Distribu tion of participants Scores on Famil y Communication and satisfaction Scale

There was a significant correlation between family communication and family satisfaction($r= 0.676$, $p<.01$). This indicates that, as family communication increases, family satisfaction also increases.

DISCUSSION OF FINDINGS

Family functioning is a relational processed concerned by how a family attains its various functions (Openshaw, 2011). Few studies have assessed the major concepts of this variable. This study is unique in that it does not only assessed the family level of cohesion, flexibility and communication but also consider the relationship between family communication and satisfaction. Overall outcome of family functioning is family satisfaction.

The socio-demographic characteristics showed that the modal age group was 31-40years which implies that they were in their prime age in civil service and have ability to work. Most of the respondents were females, married, lived with partner and children with income ranging from fifty-one thousand naira ($141) to one hundred thousand naira ($280) monthly. This is not surprising as over the decades there has been a shift from an industrial to a service economy bringing about increase in female employment. The finding of the study is in line with Mandel & Stier (2009); Harkness (2010), submissions that wage differences and desires to meet family demands are major reasons why dual-wage earners in the family have become more common as there is growing need for women to financially support the family.

The past norm in Nigerian society in relation to family is extended family system whereby blood-related kin or relationships lives together with husband and wives and their children. However, in recent time the nuclear family is gradually becoming the dominant family type as it is evidenced in this study wherein majority of the respondents belong to the nuclear family system. A possible reason for this is a result of

urbanization and migration and associated economic factors (United Nations Economic Commission for Africa, 2017).

Findings in the study showed that majority of the family have a balanced family system has reflected in their score of level of connection. Connection or separateness that members have toward one another is the major parameter used in measuring cohesion in family. High level of connection observed among the study participants may be expected as majority of participants were from two parents biological family type (Ngale, 2009). This implies that individuals that live in high cohesion family will demonstrate warmth, autonomy and close emotional bonding (Choi, 2012).

Furthermore, findings in this recent study indicated that majority of the respondents had high score in level of flexibility with moderate scores and low scores in levels of rigidity and chaotic. As with cohesion, flexibility has a curvilinear relationship with family functioning (Walsh, 2012). This indicates that in majority of the families there is equalitarian leadership with a democratic approach to decision-making, negotiations are open and actively include the children. While the family works to avoid stressful situations, they likewise come together to solve problems amicably without necessarily blaming and criticizing each other. This contradict atypical Africa culture were men are the decision makers and the woman's main role is child bearing, child raising and domestic activities (Ijadunola, Abiona, Ijadunola, et al. 2010)

The findings of this study may be showing a trend of departure from what was considered as the norm.

This present study shows that most of the respondents reported moderate to very high levels of family communication. The significance of effective communication cannot be over emphasized, Adebayo and Ogunleye (2010) indicated that a crucial element in a healthy relationship is effective communication which helps in moulding well desired behaviour for a healthy relationship.

Majority of the participant reported moderate level of satisfaction in their families which indicates that family members are somewhat satisfied and enjoy some aspects of their family life. Family system works when its members feel good about the family, their needs are being met, and the development of relationships flows smoothly (Olson, 2000). Marital satisfaction and other dimensions of family functioning co-vary. Spouses/individuals who are satisfied with their family function maintain intimacy and good relationship with other members in the family and society at large (Roest, 2016). It has been reported that proximity and strong family ties has a strong relationship with individual happiness and satisfaction. Individuals living in balanced family types are more satisfied with life and happiness compared to those living in moderately dysfunctional families. Greater levels of cohesion, flexibility and communication are positively related to happiness and life satisfaction (Botha & Booysen, 2013).

The Pearson correlation analyses indicated that as family communication improves so also family satisfaction. Communication is of paramount importance in any relationship; therefore, effective communication is the foundation and facilitator upon which a stable and functioning family is built ultimately indicating family satisfaction (Wiley, 2007).

Assessment of family functioning helps the community health Nurse to understand the nature of relationships within the family. Family problem areas are identified and family strengths are emphasized as the building blocks for interventions. This will enable the family health nurse to offer guidance, provide information, and assist in the planning process in maintain family health and resolving any existing conflicts.

Conclusion and Recommendations

The family is the basic unit of the society one of whose major role is the inculcation of positive values. Healthy families promote the emotional, physical and social welfare of individual family members. A family system works when its members feel good about the family, their needs are being met, and everyone are satisfied with all the family functions (Olson, 2000). A healthy, happy family also benefits the whole society (Ngale, 2009). Hence, it is essential that nurses use their knowledge and competencies to take the lead role in assessing assets and needs of communities and populations and to propose solutions in partnership with other stakeholders. In addition, there is need for further research studies that will involve more population addressing family functions in a different Nigerian society.

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PERCEIVED CAUSES OF ANEMIA AND STRATEGIES OF PREVENTION AMONG PREGNANT WOMEN ATTENDING ANTENATAL CLINIC AT OLABISI ONABANJO UNIVERSITY TEACHING HOSPITAL SAGAMU, NIGERIA

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ABSTRACT

This study examined the perceived causes of anemia and strategies of prevention among pregnant women attending antenatal clinic at Olabisi Onabanjo University Teaching Hospital, Sagamu. A descriptive survey design was used for the study and a simple random sampling method was used to select 120 participants for the study. Data was collected using self-developed questionnaire. The result showed that 65.8% of the respondents have heard about anemia in pregnancy. 55.8% understood that anemia in pregnancy is referred to as shortage of blood during pregnancy. 72.5% of the respondents knew that anemia is a life-threatening situation and can lead to the death of the mother and fetus and 20% of the respondents agreed that poor knowledge of good nutrition and malnutrition can make them have anemia in pregnancy. The result of the analysis also showed that 68.3% of the respondents strongly agreed that adequate nutritious diet reduces the occurrence of anemia in pregnancy and 63.3% strongly agreed that adequate iron supplements can reduce anemia in pregnancy. The test of hypothesis revealed that, there is significant relationship between knowledge and preventive strategies among pregnant women attending OOUTH $r=0.421$, $df=119$, $p<0.05$. It was recommended that at all levels of health care, health care givers should make iron supplements and foods fortified with iron available to pregnant women.

INTRODUCTION

Anemia is defined as a decrease in the ability of blood to carry oxygen due to a decrease in the total number of erythrocytes (each having a normal quantity of hemoglobin), a diminished concentration of hemoglobin per erythrocyte, or a combination of both (Olatunbosun, Aniekan, Emem, Robert, Godwin & Anyiekere, 2014). It is considered severe when hemoglobin concentration is less than 7.0g/dl, moderate when hemoglobin falls between 7.0 and 9.9g/dl and mild when hemoglobin is from 10.0 to 10.9g/dl. Anemia is a most common nutritional problem among women and is rampant among pregnant women (Admad, Saeid, & Leila, 2008). Anemia is a significant public health problem and the most susceptible group are pregnant women and children. The causes of anemia consist of genetic factors, nutritional deficiencies and infectious agents, and of the nutritional causes of anemia, iron deficiency is perhaps 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 (Webster-Gandy, Madden & Holdsworth, 2012). Women often become anemic during pregnancy because the demand for iron and other vitamins is increased due to 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 anemia.

Anemia is associated with increased rates of maternal and prenatal mortality, premature delivery, low birth weight increased frailty risk in community-dwelling older adults, and other adverse effects due to impairment of oxygen delivery to placenta and fetus. Also recently, increased risk of psychiatric disorders among children and adolescents with iron deficiency anemia has also been documented. Precipitating factors may be genetic, such as hemoglobinopathies, infectious parasitic diseases, such as malaria and hookworm, intestinal helminthes, and chronic infection or nutritional deficiency, which includes iron deficiency as well as deficiencies of other vitamins and minerals, such as foliate, vitamin A and B12, and copper. The predisposing factors include grand multiparity, low socioeconomic status, malaria infestation, late booking, HIV infection, lack of compliance to iron and folic acid supplementation and inadequate child spacing among others.

The importance of good hemoglobin concentration during pregnancy for both the woman and the growing fetus cannot be overemphasized as anemia has a significant impact on the health of the fetus as well as that of the mother. Anemia in pregnancy may lead to premature births, low birth weight, fetal impairment and infant deaths. Besides, maternal-related complications, anemia has major consequences on human health and social and economic development. It adversely affects physical and cognitive development in children and is associated with increased frailty risk in community-dwelling older adults (WHO, 2008).

Anemia is a major cause of morbidity and mortality of pregnant women and has both maternal and fetal consequences (Alemayehu, Marelign &Aleme, 2016). Anemia has a variety of converging contributing factors including nutritional, genetic and infectious disease factors; however, iron deficiency is the cause of 75% of anemia cases. World Health Organization WHO (2008), estimated approximately 500 million women in the world are iron deficient and in addition, anemia affects so many women in the developing countries, including two-thirds of pregnant women. Globally, anemia contributes to 20% of all maternal deaths. The WHO estimates that anemia affects over half of the pregnant women in developing countries including Nigeria put the prevalence at 60.0% in pregnancy and about 7.0% of the women are said to be severely anemic (Olatunbosun, *et al* 2014).

Donald (2006) confirmed that malaria in pregnancy is the predominant cause of anemia in Nigeria. He further stated that malaria accounted for more than 56% anemic cases in pregnancy in Nigeria. While women frequently recognize signs and symptoms of anemia, they often do not consider it to be a priority health concern that requires action. Those women who access prenatal health services are often familiar with iron supplements, but commonly do not know why they are prescribed (Galloway, Dusch, Elder, Achadi, Grajeda, Hurtado *et al*, 2002).

The fact that anemia frequently does occur in pregnancy among women in developing countries is an indication that pre-existing iron stores are often inadequate and physiological adaptation to pregnancy are insufficient to meet the increased requirements, it is however, preventable when access to supplements is guaranteed and when they are provided with minimum, consistent and easily understandable information and counseling. 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 (Galloway, Dusch, Elder, Achadi, Grajeda, Hurtado *(*2002).

Maternal knowledge of anemia 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. Since anemia is the most frequent maternal complication of pregnancy, antenatal care should therefore be concerned with its early detection and management, anemia in pregnancy can also be controlled and monitored by good antenatal care and appropriate action, including referral, in accordance to the level of severity of the anemia. Pregnant women are often anemic but they are not aware until signs and symptoms are evident. Against this background, this study aims at assessing the perceived causes of anemia and strategies of prevention of anemia among pregnant women attending antenatal clinic at Olabisi Onabanjo University Teaching Hospital Sagamu.

Anemia is a cause of maternal mortality and it is very common among pregnant women; it is well thought out to be high in countries with prevalence greater than 40% (WHO, 2008). Anemia has serious negative consequences on both the mother and the baby leading to many complications like increased mortality and morbidity, preterm weight among others. Anemia is a significant public health problem and the most susceptible group are pregnant women and children. The causes of anemia consist of genetic factors, nutritional deficiencies and infectious agents, and of the nutritional causes of anemia, iron deficiency is perhaps 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 (Webster-Gandy, Madden & Holdsworth, 2012). Women often become anemic during pregnancy because the demand for iron and other vitamins is increased due to 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 anemia. Against this background, this study aims at assessing the perceived causes of anemia and strategies of prevention of anemia among pregnant women attending antenatal clinic at Olabisi Onabanjo University Teaching Hospital, Sagamu.

Research questions

1. What do pregnant women attending antenatal clinic at Olabisi Onabanjo University Teaching Hospital Sagamu perceive as causes of anemia?
2. What strategies are used for the prevention of anemia by pregnant women attending antenatal clinic at Olabisi Onabanjo University Teaching Hospital Sagamu?
3. What is the knowledge level of pregnant women attending antenatal clinic at Olabisi Onabanjo University Teaching Hospital Sagamu about anemia?

METHODOLOGY

A descriptive survey research design was employed for the study. The population for this study was all pregnant women who utilize the antenatal clinic of Olabisi Onabanjo University Teaching Hospital. A convenient sampling technique was used to select 120 respondents for the study. A self-developed structured questionnaire was used to elicit response from the pregnant women which has four sections. Section A examined the socio-demographic data of the respondents, Section B: knowledge of anemia in pregnancy, Section C was on perceived causes of anemia in pregnancy and Section D consists of the preventive strategies for anemia in pregnancy. A test-retest method was used to ascertain the reliability of the

instrument using Gronbach Alpha. The statistical result of the instrument reliability was 0.81 which was considered reliable enough. Two research assistants were engaged to assist in the distribution and collection of the questionnaire after obtaining their consent and ethical approval from the Babcock University Health Research and Ethical Committee.

Inclusion criteria: Pregnant women between ages of 20-45 attending antenatal clinic at OOUTH.

Exclusion Criteria: Pregnant women below or above 20-45 years of age who attended antenatal clinic at OOUTH.

RESULTS

Research question 1: What do pregnant women attending antenatal clinic at Olabisi Onabanjo University Teaching Hospital Sagamu perceive as causes of anemia?

Table 1: Perceived causes of anemia in pregnancy

Items	Strongly Agree	Agree	Never	Disagree	Strongly Disagree	Mean	SD
Not having enough m oney can cause anemia in pregnancy	24(20)	30(25)	14(11.7)	30(25)	22(18.3)	2.97	1.43
If I don't space my child birth, I can have anemia in pregnancy	38(31.7)	32(26.7)	18(15)	24(20.7)	8(6.7)	2.43	1.30
Poor knowledge of good nutrition and malnutrit ion can make me have anemia	24(20)	41(34.2)	31(25.8)	10(8.3)	14(11.7)	2.58	1.23
When i have too many successive pregnancies, i can have anemia	25(20.8)	44(36.7)	29(24.2)	9(7.5)	13(10.8)	2.51	1.21
My culture and taboos prevent intake of food tha t wi ll benefit me as a pregnant woman	23(19.2)	17(14.2)	48(40)	20(16.7)	12(10)	2.84	1.21
Anemia can occur if i have malaria	14(11.7)	11(9.2)	38(31.7)	38(31.7)	19(15.8)	3.31	1.19

*percentages written in parenthesis

Table 1 shows the findings ranked based on descriptive statistics of mean and standard deviation about the perceived causes of anaemia in pregnancy; not having enough can cause anaemia in pregnancy had ($\bar{x}$=2.97, S.D=1.43). Poor knowledge of good nutrition and malnutrition can make me have anaemia had ($\bar{x}$=2.58, S.D=1.23), Culture and taboos prevent intake of food that will benefit me as a pregnant women had ($\bar{x}$=2.84, S.D=1.21) while anaemia can occur if I have malaria had ($\bar{x}$= 3.31, S.D=1.19).

Research question 2: What strategies are used for the prevention of anemia by pregnant women attending antenatal clinic at Olabisi Onabanjo University Teaching Hospital Sagamu?

Table 2: Preventive strategies adopted by pregnant mothers against anemia in

Items	Yes	No	Mean	S.D
Frequent access to antenatal care reduces th e risk of having anemia in pregnancy	69(57.5%)	51(42.4%)	1.42	0.49
Adequate iron supplement can reduce anemia in pregnancy	76(63.3%)	44(36.7%)	1.37	0.48
Adequate child space can reduce anemia among pregnant women	76(63.3%)	44(36.7%)	1.37	0.48
Early trea tment of malaria can reduce anemia among pregnant women	79(65.8%)	41(34.2%)	1.34	0.48
Adequate nutritious diet reduces the occurrence of anemia in pregnancy	82(68.3%)	38(31.7%)	1.32	0.47

Table 2 showed that the results of the findings were ranked based on descriptive statistics of mean and standard deviation about the preventive strategies for anemia in Pregnancy; frequent access to antenatal care reduces the risk of having anemia in pregnancy had ($\bar{x}$=1.42, S.D=0.49) followed by adequate iron supplement can reduce anemia in pregnancy had ($\bar{x}$=1.37, S.D=0.48) followed by adequate child space can reduce anemia among pregnant women ($\bar{x}$=1.37, S.D=0.48) followed by adequate nutritious diet reduces the occurrence of anemia in pregnancy had($\bar{x}$=1.32, S.D=0.47). The most agreed upon preventive strategy by the respondents against anemia in pregnancy is the consumption of nutritious diet (68.3%) while the least agreed with is frequent access to antenatal care (57.5%).

Research question 3: What is the knowledge level of pregnant women attending antenatal clinic at Olabisi Onabanjo University Teaching Hospital Sagamu about anemia?

Table 3: Knowledge of pregnant women on anemia in pregnancy

Items	Yes	No	Mean	S.D
Anemia in pregnancy is shortage of blood during pregnancy	67(55.8%)	53(44.2%)	1.44	.49
Have you heard of anemia before	79(65.8%)	41(34.2%)	1.34	.48
It is possible not to have anemia during pregnancy	43(35.8%)	77(64.2%)	1.64	.48
Early attendance of antenatal clinic reduces the occurrence of anemia in pregnancy	81(67.5%)	39(32.5%)	1.33	.47
Dizziness, headache, and general fatigue as signs of anemia in pregnancy	81(67.5%)	39(32.5%)	1.33	.47
Anemia is a life threatening situation and can lead to death of both mother and fetus	87(72.5%)	33(27.5%)	1.28	.45
Nutritional deficiency is the most common cause of anemia in pregnancy	67(55.8%)	53(44.2%)	1.44	.40

Table 3 showed the mean findings on the knowledge of pregnant women about anaemia in pregnancy that anaemia in pregnancy is shortage of blood during pregnancy had ($\bar{x}$=1.44, S.D=0.49), followed by($\bar{x}$=1.34, S.D=0.48) indicating that it is possible not to have anaemia during pregnancy, early attendance of antenatal clinic reduces the occurrence of anaemia in pregnancy and dizziness, headache, and genera fatigue as signs of anaemia in pregnancy had ($\bar{x}$=1.33, S.D=0.47), anaemia is a life threatening situation which can lead to death of both mother and fetus had ($\bar{x}$=1.28, S.D=0.45) and then nutritional deficiency is the most common cause of anaemia in pregnancy had ($\bar{x}$=1.44, S.D=0.40). This clearly showed that there is significant high level of knowledge about anaemia in pregnancy.

Table 4: Relationship between knowledge and prevention of anemia in pregnancy

Variables	Mean	SD	N	r	P	Decision
Knowledge of Anemia in Pregnancy	14.8750	2.2288	120	0.421	0.05	Sig.
Prevention of Anemia in Pregnancy	9.2500	1.4567				

r=0.421 N= 120 p< 0.05

The result of the analysis presented in table 5 shows that there is a significant relationship between knowledge and prevention of anemia in pregnant among pregnant women in OOUTH (r=0.421, df=119, p<0.05). The null hypothesis was rejected while the alternate hypothesis was accepted which states that there was a significant relationship between knowledge and prevention of anemia in pregnant among pregnant women in OOUTH. This shows that the knowledge about anemia often translate to practices that prevent the occurrence.

DISCUSSION OF FINDINGS

This study aimed at determining the perceived causes of anemia and strategies for prevention among pregnant women attending antenatal clinic at Olabisi Onabanjo University Teaching Hospital Sagamu. The demographic statistics showed that the majority of the respondents are between the ages of 38-44years out of which 28.3% and 21.7% self-employed. Majority of the respondents had senior secondary school education, while only 10.8% had no formal education. Majority of the respondents (76.7%) are Yorubas and Christians (54.2%). Only 75.8% of the respondents are married. About 35% of the respondents earn 31,000Naira and above monthly.

The findings of this study revealed that pregnant women perceived causes of anaemia in pregnancy as not having enough, poor knowledge of good nutrition including malnutrition and lastly, culture and taboos. The result of this study support Ngimbudzi, Lukumay, Khairunnisa and Petrucka (2016) who opined that cultural beliefs play a major role in the causes of anemia. (Broek, 2005) explained that the inability to meet the required level for these substances either as a result of dietary deficiencies or infection gives rise to anemia. The result of this study further showed that, the most preventive strategy used by the

respondents against anemia in pregnancy is the consumption of nutritious diet (68.3%) while the least agreed with is frequent access to antenatal care (57.5%). This study clearly showed that there is significant high level of knowledge about anaemia in pregnancy. This study is inline with Ekwere and Anyiekere (2015) that reported high knowledge of pregnant women in their study about the causes, preventive strategies and simple definition of anemia.

The findings of the hypothesis tested revealed that alternate hypothesis was accepted which states that there was a significant relationship between knowledge and prevention of anemia in pregnant among pregnant women in OOUTH. This shows that the knowledge about anemia often translate to practices that prevent the occurrence. The result corroborates the findings of Margwe (2015) that knowledge of anemia in pregnancy improve adoption of the prevention of anemia in pregnancy. Vanden 2014) also found a significant impact of knowledge on improving prevention of anemia in pregnancy among pregnant women attending rural health care setting. Lastly, Harrison (2015) also found an association between knowledge and prevention of anemia in pregnancy.

Conclusion and Recommendations

Anemia is one of the causes of maternal mortality and it is very common among pregnant women; it is well thought out to be high in countries with prevalence greater than 40%. Anemia has serious negative consequences on both the mother and the baby lea ding to many complications like increased mortality and morbidity, preterm weight among others.

Based on the findings from this study, the following recommendations are made: Health education and promotion for among all pregnant women to book early for antenatal care and to take appropriate intervention measures. Information, Education and Communication (IEC) efforts should be directed towards increasing levels of awareness and commitment at all levels. Strategies such as dissemination of information via antenatal and under-five clinics, public radio, and community development meetings should be conducted by health workers to check the menace of malaria in view of its consequences on the pregnant mothers. All pregnant women should be intermittently screened for anaemia (e.g. at the booking visit, thereafter at 28 weeks and again at 36 weeks) instead of just at booking which is the practice in most health facilities.

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CLIENTS' PERCEPTION OF QUALITY OF MATERNAL HEALTH CARE SERVICES PROVIDED BY SKILLED ATTENDANTS AT POLY DISTRICT HOSPITAL ENUGU, ENUGU NIGERIA

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ABSTRACT

This study was designed to assess the clients' perceptions of quality of maternal health care services (QMHS) provided by skilled attendants at Poly district hospital Enugu, in Enugu North Local Government Area (LGA) of Enugu State. The design for this study was descriptive survey and convenient sampling technique was used to select 150 women attending both the antenatal and child immunization, postnatal clinic. The instrument used was a self-developed questionnaire. The study revealed that the respondents were generally satisfied and had a good perception of the quality of care they received during the antenatal, intrapartum and postnatal periods. Major barriers to the utilization of maternal health care services by the respondents identified in this study were far distance of the health facility, attitude of Nursing/midwives, lack of skilled staff and basic amenities; and spending long time in the hospital; with cost of services ranking among low in the list. Perception of care during delivery significantly differed with educational level P = 0.037(<0.05). Recommendations made in the study include employing more skilled attendants and organizing seminars for them to improve their attitude towards the women in addition to providing more awareness on awareness on crucial topics such as breast and cervical cancer and also malaria in pregnancy.

Keywords: Perception, Quality Health Care Services, Maternal, Skilled Attendants

INTRODUCTION

Pregnancy and childbirth have been on since ages and has been a time of joy to many families, however, in many developing countries it is the opposite. This is due to high rates of maternal and child mortality. Nigeria, which constituted less than 1 % of the world's population, however accounted for 19 % of global maternal deaths and had an estimated maternal mortality ratio of 814 maternal deaths per 100,000 live births in 2015 (WHO, 2015). Uptake of maternity care is low in Nigeria, with only 36 % of births occurring in a health facility and 38 % being assisted by a skilled provider (NPC and ICF International; 2014). In recent times, the country has embarked on measures to improve the healthcare system including maternal health care (MHC) delivery, in a bid to attain Millennium Development Goals (MDGs) 4 and 5. Unfortunately, Nigeria was not able to attain the goals were not achieved by the year 2015.

Maternal health care services in health systems comprise a set of both curative and preventive health services aimed at improving the health of women of reproductive age and their infants. This includes population-based services such as behavior change and health communication (e.g. promotion of antenatal care), (World Bank 2008).

Maternal health care services aim at reducing maternal mortality and morbidity by ensuring that pregnant women remain healthy when pregnant, deliver safely to healthy babies and recover fully from the physiological changes that occur during pregnancy (Obionu 2007).

About 63.6% of Nigerian mothers come for antenatal care. (Oladapo, Iyaniwura, Sule−Odu, 2008). Majority of the health reform efforts in Nigeria have been targeted towards increasing availability of healthcare services, without much emphasis on a proportionate increase in quality. (Emelumadu, Onyeonoro, Ukegbu et al 2014)

The World Health Organization, defined quality health care as "that care which consists of the proper performance according to standards."(WHO, 1988) Therefore, maternal health care service quality is the application of those necessary multisectoral services required to ensure a state of physical, mental, social, and perhaps spiritual well−being of mothers in the community, and their children (Lane and Kelman, 1975). These include services required to curtail the effects of prior and current health risks or conditions and promote the health and social status of those women of reproductive age who require it. (Lane and Kelman, 1975)

Quality of care is, therefore, an important determinant of health outcome (Cohen, 2005). Quality of care over time has been assessed in three general domains namely; Structure, process, and outcome.(Donabedian, 1988). Outcome assessment refers to the results of care on the health status of clients, which consists of changes in client knowledge, perception and behavior, client satisfaction with health care, biologic changes in disease, complications of treatments, morbidity and mortality. (Donabedian, 1988). Quality of healthcare services can also be assessed either objectively or subjectively or by assessing the supply or demand component of health services. Subjectively, assessment of patients' perception of healthcare services is one of the ways of measuring quality of healthcare. Clients' perception of care provides another opportunity of assessing quality of care based on their prospect. This is because patient perception of quality of care is one of the major determinants of uptake of healthcare services including maternal health services and evaluates level of satisfaction of healthcare services received from the health facility. (Uzochukwu, Onwujekwe and Akpala, 2004). Community defined dimensions of quality of maternal health care include access to a maternal facility in the community; treatment that is provided in a respectful and timely fashion; respect for traditional practices and use of native language; a clean and well−equipped facility, transportation, and free services. (WHO, 2003).

In sub-Saharan Africa (SSA), many women who utilize antenatal care (ANC) services do not receive adequate attention; as the few care providers are overwhelmed by the large number of pregnant women seeking ANC.(Nikiema et al 2010). Moreover, various reports have indicated that increased availability of service does not always lead to improved access to healthcare (Osariemen, 2011, World Bank 2001). Hence, there is an urgent need to ensure that quality of service is optimal while providing maternal health services. Quality of care is key in optimizing uptake (effective utilization) of maternal and child health services (Osariemen, 2011, Hutchinson and Do, Agha, 2011). Standards of quality of health care provided in many developing countries including Nigeria are set by health managers and care providers most of the time. The level of adherence to the existing guidelines put in place to ensure quality of care is also not well known.

A Chinese study on mothers' perspectives of the quality of postpartum care showed that the mothers indicated that in order to advance the quality of services, greater emphasis should be placed on: Health education on child care; more time allocation for discussion with health workers during their postpartum home visit to address concerns effectively; access to health workers at all times of need; continuous

training for maternal and child health workers (Lomoro, Ehiri, Qian and Tang, 2002).

Some studies have shown that women may largely express satisfaction with the quality of services notwithstanding some inconsistencies between received care and their expectations of the facilities. (Uzochukwu et al, 2004, Oladapo et al, 2008). It has also been shown that women were satisfied with the care received, interpersonal relationship and the infrastructures for providing care; health education and communication in the indigenous language were also stressed to improve client satisfaction. (Tandon, Parillo, and Keefer 2005, Büchi, Cignacco, Lüthi and Spirig 2006). Conversely, other studies have revealed women's dissatisfaction with maternal care; and reasons for these were: long waiting time, poor laboratory services, inadequate medicine supply and health workers negative attitudes (Dowswell et al 2001, Al−Mandhari 2002, Nigenda et al 2003). Moreover, women's perception of care often determines clients' willingness to comply and continue with the service rendered. It can also be an avenue for gathering inputs (feedbacks) of beneficiaries of healthcare services for the purpose of establishing more patient-friendly services and improved quality of care.(Mahfouz et al 2004, Mairiga et al 2008). Similarly, it is important in setting standards for maternal health services in any country. A study showed that many patients in southeast Nigeria are indigent and ill-informed, hence often feel that they are not well positioned to influence the quality of services they receive even if their expectations are not met. (Uzochukwu et al, 2004). Many studies have reported high ANC attendance among pregnant women in southeast Nigeria, however, only a few studies have assessed the quality of ANC services among pregnant women (Emelumadu et al 2014, Osariemen, 2011). Reducing maternal mortality and morbidity through increased service utilization in turn requires public health interventions made on a distinct understanding of women's perception of maternal care services within their traditional context. (Lubbock and Stephenson 2008).

At present in Nigeria and most specifically in Enugu State, there is paucity of data on clients' knowledge, perception of and satisfaction with the quality of maternal health care services. This is the gap that this study seeks to fill. Hence, this study was designed to assess the clients' perceptions of quality of maternal health care services (QMHS) provided by skilled attendants at Polyclinic district hospital Enugu, in Enugu North Local Government Area (LGA) of Enugu State.

Research questions

1. What is the client's perception of quality of care during the antenatal period?
2. What is the client's perception of quality of care during the intrapartum period?
3. What is the client's perception of quality of care during the postnatal period?
4. What are the barriers to utilization of maternal services as perceived by women?
5. Is there any significant relationship between perception of care and demographic details of the clients?

METHODOLOGY

Descriptive survey was used as the research design. The study area is Enugu, Enugu is regarded as the oldest urban area in the Igbo speaking area of south-east Nigeria. It became the capital of the former eastern region in 1929 and has since retained its old status as the regional, industrial administrative and business hub of the Igbo people. It became the capital city of Enugu state, one of the thirty-six states in Nigeria in August 27, 1991. The area of the study covers Poly district hospital Asata Enugu, Enugu state, a secondary healthcare facility run

by the ministry of Health, Enugu State to run maternal, child and other health care services. Antenatal care was offered in a regular outpatient waiting area where health talk also delivered. Regular antenatal care was delivered by Nurses, Nurse/Midwives and CHOs who worked on rotation, with the help of CHEWs. The doctors attended to women with specific problems during antenatal visits after an initial consultation with the Nurse/Midwives. Antenatal clinics were held twice weekly. The centre had an ultrasound scan machine and routine ultrasound examinations were performed by the doctors at the centre. The population of the study comprises child bearing women aged 15-49 years attending antenatal clinic and infant immunization clinic at Poly district hospital Asata Enugu while 150 mothers were sampled using convenient sampling method. A self-developed questionnaire was used for data collection. It was made up of structured questions based on the study objectives. A face validation of the questionnaire was done by a research expert.

RESULTS

Research question 1: What is the client's perception of quality of care during the antenatal period?

Table 1: Perception of care during Antenatal period

Items	Less than 3mmonths	3-6months	7-8months	9months
At what month did you book/register for ANC?	30 (21.1)	92 (64.8)	17 (12.0)	3 (2.1)
How many times did you attend antenatal clinic during your last pregnancy	1-4 19 (13.4)	5-9 64 (45.1)	10-14 34 (23.9)	15+ 6 (4.2)
The time you spent in at antenatal clinic during each visit	too long 5-7hrs 28 (19.7)	Normal 4hrs 81 (57.0)	too short 2hrs 33 (23.2)	
How would you rate the relationship between the clients and the skilled birth attendants?	Very good 98 (69.0)	Average 42 (29.6)	Very poor 2 (1.4)	
			Yes (%)	**No (%)**
Were you satisfied with the number of times you attended antenatal clinic			139 (97.9)	3 (2.1)
Were the nurses/midwives friendly			138 (97.2)	4 (2.8)
Were you treated with respect at the clinic?			134 (94.4)	7 (4.9)
Topics addressed in health talks				
Diet in pregnancy			122 (85.9)	
Exercise			120 (84.5)	
Exclusive breast feeding			123 (86.6)	
Family planning			100 (70.4)	
Birth preparation			126 (88.7)	
Personal hygiene during pregnancy			115 (81.0)	
Prevention of cancer of the breast and cervix			76 (53.5)	
HIV and sexually transmitted diseases			100 (70.4)	
Others:				
Immunization			4 (2.8)	
malaria in pregnancy			3 (2.1)	
signs of labour			1 (0.7)	
Diabetes			3 (2.1)	
Were you satisfied with the information you were given during health talk			139 (97.9)	2 (1.4)
Were you involved in making decisions that concerned you and your baby			125 (88.0)	17 (12.0)
Were you satisfied with the palpation and other examinations done on you			135 (95.1)	7 (4.9)

As presented in Table 1, majority, 92(64.8%) of the respondents booked for antenatal care at the gestational age of 3-6months, and close to half, 64(45.1%) attended antenatal clinic for 5-9times with a mean of 7.56±3.37. majority, 139(97.9%) were satisfied with the number of times they attended antenatal clinic, and during each visit, more than half, 81(57.0%) spent about 4hours. Most respondents, 138(97.2%) also answered that the nurses/midwives were friendly, and 134(94.4%). The topics majorly addressed in antenatal teachings included Diet in pregnancy 122(85.9%), exercise 120(84.5%), exclusive breastfeeding 123(86.6%), family planning 100(70.4%) Birth preparation 126(88.7%), Personal hygiene during pregnancy 115(81.0%), Prevention of cancer of the breast and cervix 76(53.5%), HIV and sexually transmitted diseases 100(70.4%). Others include Immunization 4(2.8%), malaria in pregnancy 3(2.1%), signs of labour 1(0.7%) and Diabetes 3(2.1%). Majority, 139(97.9%) were satisfied with the information given during health talk and 125(88.0%) answered that they were involved in making decisions that concerned them and their babies, while a good number, 98(69.0%) rated their relationship with the skilled birth attendants as very good. More so, 135(95.1%) were satisfied with the palpation and other examinations done on them at the clinic.

Table 2: Clients' perception of quality of intrapartum care

Items	Yes	No
Were skilled birth attendants friendly and polite in the labour ward	135 (95.1)	7(4.9)
Was your privacy ensured during procedures like vaginal examination?	133 (93.7)	9 (6.3)
Was your permission sought for before any procedure was carried out on	126 (88.7)	16 (11.3)
Were you informed about what was happening to you and how your labour was progressing	131 (92.2)	11 (7.7)
Do you think they were competent in handling the delivery of your baby?	131 (92.1)	11 (7.7)
Were you satisfied with the care you were given at the labour ward	138 (97.2)	4 (2.8)
	Very good	Satisfactory	Poor
How would you rate attitude of the skilled birth attendants at the labour ward	84 (59.2)	51 (35.9)	7 (4.9)

Table 3 above represents information on clients' perception of quality of care received during postnatal period. Among the topics handled during counseling as identified by the respondents were Family planning, 96(67.6%), care of the baby 125(88.0%), immunization 123(86.6%) Exclusive breastfeeding 119(83.8%), and care of the umbilical cord 85(59.9%). others include circumcision 1(0.7%) and personal hygiene 1(0.7%). Most, 132(93.0%) were satisfied with the care they received after delivery. Some of those who were not satisfied gave their reasons to be: Untidy state of the ward and absence of insecticide treated net 3(2.1%), Harshness of the caregiver 1(0.7%), Failure to inform client about BCG after delivery 1(0.7%) and Not receiving direction on how to take care of oneself 1(0.7%).

Research question 4: What are the barriers to utilization of maternal services as perceived by women?

Table 4: barriers to utilization of maternal services as perceived by women

Items	Frequency	Percentage
Were there barriers that hindered your use of maternity services		
No	108	76.1
Yes	34	23.9
If yes, what were the barriers?		
cost of treatment	7	4.9
too far from my house	12	8.5
Attitude of Nursing/midwives	9	6.3
Lack of doctors and nurses	6	4.2
lack of basic amenities	8	5.6
poor quality of services provided	3	2.1
time spent in the hospital is too long	10	7.0

Table 5 showed the barriers to utilization of maternal services. 34(23.9%) indicated that they had barriers and they included: cost of treatment 7(4.9%), far distance 12(8.5%) attitude of Nursing/midwives 9(6.3%) lack of doctors and nurses 6(4.2%), lack of basic amenities 8(5.6%), poor quality of services provided 3(2.1%) and time spent in the hospital is too long 10(7.0%).

DISCUSSIONS OF FINDINGS

This study was aimed to assess the clients' perceptions of quality of maternal health care services (QMHS) provided by skilled attendants at Polyclinic district hospital Enugu, in Enugu North Local Government Area (LGA) of Enugu State. Design used for this study was descriptive survey and the target population comprise of child bearing women aged 15-49years attending antenatal clinic and infant immunization clinic at Poly district hospital Asata Enugu. Convenient sampling method was used to select 150 mothers. A self-developed questionnaire was used for data collection. Data collection was analyzed with Statistical Package for Social Sciences (SPSS) version 18.0 to obtain the frequencies, percentages and descriptive statistical results.

Overall, it can be deduced that the respondents were satisfied with the quality of care received during the antenatal period at Poly district hospital Asata Enugu. It was observed in the course of the study that the respondents attended antenatal clinic on an average of 7 times and that majority of them (97.9%) were satisfied with these antenatal clinic visits. This finding was similar to the findings of oladapo et al 2008 in the study they carried out in Sagamu, Ogun State, which showed that women were satisfied with the traditional antenatal clinic visits. Time spent in the clinic was considered to normal by more than half of the respondents, (57.0%) spent. It was also observed that most of the respondents reported that the nurses/midwives were friendly and treated them with respect in the antenatal clinic. This showed that the skilled attendant at poly district hospital Enugu had good relationship with their clients This was in line with the findings of Oladapao et al (2008) but in contrast with the findings from a Bangladesh study where women complained of abusive and unfriendly treatment from care providers (Afsana et al, 2002).

During the course of this study, it was also discovered that health talks on diet in pregnancy, exercise, exclusive breastfeeding and birth

preparation came top in the list of health talks given at the antenatal clinic while talks on prevention of cancer of the breast and cervix; and malaria in pregnancy ranked lowest. This corroborates the findings of Oladapo et al 2008 which showed similar trend. However, the non-enthusiasm on the part of women as regard health talks on the prevention of killer diseases like breast and cervical cancer is worrisome and more public enlightenment campaigns should be carried out, this will help dispel the stigma and myths about them. The respondents revealed that they were involved in the making decisions concerning their health and that of their unborn child. This showed that the care providers at Poly district hospital had good relationship with their clients unlike those reported by Oladapo et al (2002). Clients attending the antenatal clinic also reported satisfaction with the technical competence of the staff as shown in their examination skills. This was similar that the findings of a Nepalese study which revealed that majority of delivery cases took place in public hospitals due to their reputation and perceived higher technical quality than birth centres.

Regarding care during labour, findings in this study showed that the respondents perceive the midwives in labour ward to be friendly, polite and provided them with privacy during procedures. This contra dictated the report by Olivera et al (2002) who stated that there was an increasing documentation of neglect, intentional humiliation and verbal abuse of women during childbirth in many countries. This study also revealed that most of the respondents (92.2%) also showed that the skilled attendants were competent in the delivery of their babies, therefore, the perception of the respondents was positive about the quality of care received during childbirth and which was in agreement with the findings of Oladapo et al (2002) study in Sagamu , Nigeria.

The result of this study showed that majority of the respondents (93%) were satisfied with the care they received after delivery. This could be due to the vast topics covered during their postnatal clinic visit such as family planning, care of the baby and exclusive breast feeding. This also corroborates Moore et al (2002) findings which showed that providing adequate information to clients has been associated with higher levels of client satisfaction.

Findings of this report showed that the major barriers to utilization of maternal services by the respondents were, far distance of the health facility, attitude of Nursing/midwives, lack of skilled staff and basic amenities; and spending long time in the hospital. This confirms the findings by previous researchers on those barriers: distance from health facility (Stash 1999) and lack of care providers (DISH, 1999). Cost of treatment surprisingly was not a major barrier unlike that seen in other studies (Ndhlovu, 1995). This disparity could be due to the subsidization of maternal and child care services by the Enugu state government. Hence, provision of free maternal and child care services or it subsidization in low income settings can help in enhancing the utilization of such services; thereby reducing maternal and infant mortality/morbidity.

Conclusion and Recommendations

Based on the findings of this study, it was concluded that, the clients were generally satisfied with the interpersonal relationship, technical competence of providers, and the information communication aspects/attributes of care they received during their antenatal period. Also, respondents were satisfied and had a good perception of the quality of care they received during labour. Majority of the respondents' perception of quality of care during the postnatal period was good. Barriers to the utilization of maternal health care services by the respondents identified in this

study were far distance of the health facility, attitude of Nursing/midwives, lack of skilled staff and basic amenities; and spending long time in the hospital.

The following recommendations have been made in line with findings of this study: Seminars should be organized for the health care staff in Polyclinic district hospital, Asata Enugu on client interpersonal relationship with a view of improving it. Similarly, more doctors, nurses and midwives should be employed in the Polyclinic district hospital, Asata Enugu to help boost the staff capacity and reduce time spent by clients in the hospital. Also, skilled attendants at both the antenatal and postnatal clinics need to provide more awareness on crucial topics such as prevention and screening for breast and cervical cancer and also prevention and identification of malaria in pregnancy. The subsidization of maternal and child health care services by the Enugu state Government should continue.

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BIRTH PREPAREDNESS AND COMPLICATION READINESS IN AMASSOMA COMMUNITY OF SOUTHERN IJAW LOCAL GOVERNMENT AREA, BAYELSA STATE, NIGERIA

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ABSTRACT

Maternal mortality in Nigeria is second only to that of India. Nigeria accounts for only 2 per cent of the world's population but accounts for up to 10 per cent of the maternal mortality rates. This study examined birth preparedness and complication readiness in Amassoma community of Southern Ijaw Local Government Area, Bayelsa State. A descriptive survey design was employed and the target population of this study were booked antenatal mothers in Amassoma general hospital, Bayelsa State. A convenient sampling technique was used to select the respondents for the study. The instrument for this study was a self-structured questionnaire developed by the researcher with a coefficient of 0.83 showing that the instrument is reliable. The statistics used for date analysis include frequencies and percentages. The result of the study showed that the respondents were not prepared for birth and not ready for complications and factors influencing birth preparedness and complication readiness among respondents are lack of money (98.8%) bad roads to health facilities(88.7%) lack of husband support (88.8%) location of hospital far away from home (97.5%) inexperience health workers (88.7%) and lack of family and community support (66.3%).The study revealed that majority of the respondents 50(62.5%) started preparing for birth and delivery from 7-9 months of pregnancy these findings has shown late preparation of birth preparedness and complication readiness this has amount to result that showed most of the respondents 64(80%) have not make provision for birth partner, 78(97.5%) have not made arrangement for blood donor and 52(65%) have not made arrangement for finance as the time of responses. It is recommended that professional nurses play a key role in BP and CR to reduce maternal mortality and morbidity as a result of obstetric emergencies and complications and its socioeconomic effect.

INTRODUCTION

The moment a child is born, the woman is also born, the birth of a baby is a major reason for celebration around the world, inspite of this, preparing for birth is not a common concept in most developing countries, pregnancies are often not acknowledged until there are visible physical signs. (6-7 months), (Mukhopadhyay, Mukhopadhayay, Bahattacharjee, Nayak, Biswas & Biswas 2013). Maternal mortality is a substantial problem in developing countries. (Johns, 2004). Globally, in 2010 an estimated 287000 maternal deaths occurred as a result of complications of pregnancy and child birth (World Health Organisation, 2012). Reduction of maternal mortality is a global priority and it is one of the millennium development goals. (Sterrs, 2006). The key to reducing maternal mortality ratio (MMR) and improving maternal health is increasing attendance by skilled health personnel throughout pregnancy and delivery (WHO, 2004). Birth preparedness and complication readiness (BPCR) is one of the

keys for safe motherhood strategy whose objective is to promote the timely use of skilled maternal and Neonatal care during childbirth by making a birth plan and promoting active preparation and decision making for delivery of pregnant women and their families (Johns Hopkins Program for International Education In Gynecology and Obstetrics 2004, & WHO 2006).

Every pregnancy faces risks and every minute of every day, somewhere in the world, a woman dies as a result of complications arising during pregnancy and childbirth, the majority of these deaths are avoidable by accessing quality maternal health service (Starrs, 2004). Women and Neonates need timely access to skilled care during pregnancy, childbirth and post partum period, but too often their access is impeded by delays in seeking, reaching and receiving care (Dipta,Sharmistha, & Akhil, 2016). Although maternal healthcare services are provided free of cost in Nigeria, a recent survey of the 2004 National Sample Survey Organization revealed over 80% of households had to pay for maternal health care services, with those using private care facilities paying almost four times more than those using public facilities (Leone, James, & Padmadas, 2013). Also studies have shown that in many societies in the world, cultural belief socio-economic characteristics, and lack of awareness among other personal factors, inhibit preparation in advance for delivery and expected baby, most families tries to act only when labour begins, since no action is taken prior to the delivery, the majority of pregnant women and their families do not know how to recognize the danger signs of complications when they occur, the unprepared family waste a great deal of time in recognizing the problem, getting organized, getting money, finding transport and reaching the appropriate referral facility (Hiluf, & Fantahun, 2007).

Maternal mortality in Nigeria is second only to that of India (Emma, Nwokeukwu, & Uzochukwu 2014). Nigeria accounts for only 2% of the world's population but accounts for up to 10% of the maternal mortality rates (Federal Ministry of Health, Nigeria, 2005). Nigeria is also a leading contributor to the maternal deaths figure in sub-saharan Africa not only because of the hugeness of her population but also because of her high MMR (Hill, Thomas, Abonzahr, Walker, Say, & Suzuki, 2007). As at 2008, its Maternal Mortality Ratio (MMR) was 840 per 100,000 live births (Trends in Maternal Mortality, 2012). And the proportion of births attended by skilled health professional was about 36% (MDG Report, Nigeria, 2010). World Health Organization (WHO) recommends focused antenatal care which requires individual's health education on BPCR as one of its pillars. (WHO, 2013). Therefore, BPCR strategy encourages women to be informed of danger signs of obstetric complications and emergencies, choose a preferred birth place and attendant at birth, and make advance arrangement with the attendant at birth, arrange for transport to skilled care site in case of emergencies, saving or arranging alternative fund for costs of skilled and emergency care and finding a companion to be with the woman at birth or to accompany her to emergency care source, other measures include identifying a compatible donor in case of hemorrhage, obtaining permission from the head of household to seek care in the event that birth emergency occurs in his absence and arrange a source of household support to provide temporary family care during her absence (Ministry of Health and family welfare, 2007).

Responsibilities for BPCR must be shared among all safe motherhood stakeholder, since coordinated effort is needed to reduce the delays that contribute to maternal and Newborn deaths (Johns, 2004). Globally, in 2010 an estimated 287000 maternal deaths occurred as a result of complications of pregnancy and child

birth (WHO, 2012). Maternal mortality is a substantial problem in developing countries (Johns, 2004). Decreasing maternal mortality has got recognition of reducing maternal mortality in the millennium development goals (JHPLEGO; 2004). Meanwhile, in many societies in the world, cultural beliefs, socioeconomic characteristics, and lack of awareness among other personal factors, inhibit preparation in advance for delivery and expected baby, most families tries to act only when labour begins, since no action is taken prior to the delivery, the majority of pregnant women and their families do not know how to recognize the danger signs of complication when they occur, the unprepared family waste a great deal of time in recognizing the problem, getting organized, getting money, finding transport and reaching the appropriate referral facility (Hiluf, & Faantahun, 2007). In as much as BPCR is a safe motherhood strategy which addresses delays that could increase the immediate postpartum period, the strategy has not been effectively implemented in Nigeria, hence maternal mortality remains unacceptably high. This situation prompted the researcher's choice of the topic "Birth preparedness and complication readiness" to ascertain what women do in Amassoma community of Southern Ijaw Local Government Area, Bayelsa State, in Preparation for delivery.

Research questions

1. What is the level of birth preparedness and complication readiness among booked antenatal women in Amassoma general hospital?
2. What are the factors influencing Birth preparedness and complication readiness?
3. At what gestational age does the mothers start preparing for delivery?

METHODOLOGY

A descriptive survey design was employed to determine birth preparedness and complication readiness among antenatal women in General Hospital Amassoma, Bayelsa State. The research was carried out in General Hospital Amassoma, Southern Ijaw Local Government, Area, Bayelsa State. The Hospital is a State Government Secondary Health care institution situated in the south-south region of Nigeria, in the oil rich city of Bayelsa state located in Amassoma community. Amassoma community is an Ijaw speaking community in Southern Ijaw Local Government area in Bayelsa state of Nigeria. It shares common boundaries with the Ijaw speaking communities, on the north with Ogobiri, south with Oporoma, East with Otuan and west with Torugbene. The Hospital is made up of a reception which is the Nurse's station, male/female wards with 14bed spaces and 5 cots, a theatre, a Pharmacy and a laboratory. The staff strength is made up of; 3 Doctors, 18 Nurses, 2 Pharmacist, 3 laboratory technicians, 5 ward cleaners and a security man, making a total of 32 workers. The Hospital rendered general medical services.

The target population of this study were booked antenatal mothers in Amassoma general hospital, Bayelsa state. The total population of booked antenatal mothers of age range 15-49 is 101. The total number of antenatal mothers in the hospital is 101. The sample size 81 was calculated using Taro Yemane formula, A convenience sampling technique was used to select the respondents of the study. The instrument for this study was a self-structured questionnaire developed by the researcher. It consists of four sections: Face and content validation was done. Reliability of the instrument was ensued by a test-retest method and yielded 0.83 coefficient. The method of data collection was through the administration of questionnaire. Data collection was on each antenatal day and a period of 2 weeks was used

to collect data from respondents. The data so collected were analyzed and presented in Tables.

RESULTS

Research question 1: What is the level of birth

Table 1: Level of birth preparedness and its complications readiness

VARIABLES	Yes (%)	No (%)
Do you attend antenatal clinic up to date?	49 (61.3)	31 (38.8)
Have you made an arrangement for transportation before labour?	28 (35)	52 (65)
Have you made preparation for finance?	28 (35)	52 (65)
Have you made provision for birth partner?	16 (20)	64 (80.2)
Have you made arrangement for a blood donor in case of emergency?	2 (2.5)	78 (97.5)

In table 1, majority of the respondents 49 (61.3%) attend antenatal clinic (ANC) regularly while 31 (38.8%) does not attend (ANC) regularly. Majority of the respondents 52 (65%) have not made arrangement for transportation before labour while 28 (35%) have made arrangement for transportation. Majority of the respondents 52 (65%) have not prepared financially for labour while 28 (35%) have made preparation for finance. Majority of the respondents 764 (80.2%) have not made provision for birth partner while 16 (20%) have made provision for birth partner. Majority of the respondents 78 (97.5%) have not made arrangement for blood donor, while 2 (2.5%) have make arrangement for blood donor. Majority of the respondent 46 (57.5%) have carried out all necessary investigation while 34 (42.5%) have not done all the necessary investigation.

Research question 2: what are the factors influencing Birth preparedness and complication readiness?

Table 2: Factors influencing birth preparedness and complication readiness

Variable	Frequency	Percentage
Lack of money		
Yes	79	98.8%
No	1	1.3%
Bad roads to the health facility		
Yes	71	8.7%
No	9	11.3%
Lack of husbands support		
Yes	71	88.7%
No	9	11.3%
Location of hospital far away from home		
Yes	78	97.5%
No	2	2.5%
Inexperience health workers		
Yes	71	88.7%
No	9	11.3%
Lack of family and community support		
Yes	53	66.3%
No	27	33.8%
Maternal or neonatal complication in previous pregnancy		
Yes	53	66.3%
No	27	33.8%

As presented in Table 2, majority of the respondents 79 (98.8%) believes that lack of money can influence birth preparedness and complication readiness, 1 (13%) do not believe lack of money can influence birth preparedness and complication readiness. Majority 71 (88.7%) believes that bad roads to the health facility can influence birth preparedness and complication readiness, 9 (11.3%) do not believe that bad road can influence BP and CR. Majority of the respondents 78 (97.5%) believe that location of hospital far away from home can influence BP and CR, 2 (2.5%) do not believe that location of hospital far away from home can influence BP and CR. Majority of the respondents 71 (88.7%) believes that inexperience health workers can influence BP and CR, 9 (11.3%) do not believe that inexperience health workers can influence BP and CR. Majority of the respondents 53 (66.3%) believe that lack of family and community support an influence BP and CR, 27 (33.8%) do not believe that lack of family and community support can influence BP and CR. majority of the respondents 53 (66.3%) believe that maternal or neonatal complication in previous pregnancy can influence BP and CR.

Research question 3: At what gestational age does the mothers start preparing for delivery?

Table 3: Gestational age at which mothers started preparing for delivery

Gestational age		
1 – 3 months	11	13%
6 – 4 months	19	23.8%
7 – 9 months	50	62.5%

In table 3, majority of the respondents 50 (62.5%) start preparing for delivery at 7 – 9 months. 19 (18.8%) start preparing at 6 – 4 months, 11 (13.7%) started preparing for delivery at 1 – 3 month(s).

DISCUSSION OF FINDINGS

The study revealed that the respondents were not prepared for birth and not ready for complications for example. Majority of respondents 49 (61.3%) do not attend antenatal regularly, majority of the respondents 52 (65%) have not make arrangement for transportation. Majority of the respondents 52 (65%) have not made preparation for finance. Majority of the respondents 64 (80%) have not make provision for birth partner. Majority of the respondents 78 (97.5%) have not made arrangement for blood donor, these findings corresponded with that of Kaso and Addisse (2014) who concluded that the study identify very low magnitude of birth preparedness and complication readiness. It also corresponded with that of Markos, Daniel & Bogale (2014), they concluded that only a small number of respondent were prepared for birth and its complication. This finding did not correspond with that of Mutiso (2008) which shows that over 84.3% of the correspondents had set aside funds for transport to hospital during labour. While 62.9% had fund for emergency and 65.2% had identified a birth companion.

Study revealed that factors influencing birth preparedness and complication readiness among respondents are lack of money (98.8%) bad roads to health facilities(88.7%) lack of husband support (88.8%) location of hospital far away from home (97.5%) inexperience health workers (88.7%) and lack of family and community support (66.3%) These finding correspond to that of Nwokeukwu, Ukaegbu and Hukwu, (2014), whose findings revealed that role of husbands, educational level and parity, non-existence of community base support services for maternal health services are factors influencing birth preparedness and complication readiness among their respondents.

The study revealed that majority of the respondents 50(62.5%) started preparing for birth and delivery from 7-9 months of pregnancy these findings has shown late preparation of birth preparedness and complication readiness this has amount to result that showed most of the respondents 64(80%) have not make provision for birth partner, 78(97.5%) have not made arrangement for blood donor and 52(65%) have not made arrangement for finance as the time of responses.

Implication to Nursing Practice

Professional nurses have a key role to play in BP and CR to reduce maternal mortality and morbidity as a result of obstetric emergencies and complications and its socioeconomic effect. Professional nurses also have the responsibility to health educate the pregnant women and women of child bearing age on the importance of birth preparedness and complication readiness in other to prevent and treat obstetric complication.

Conclusion and Recommendations

The study revealed that pregnant women especially the women attending Amassoma General Hospital are not prepared for birth and its complications. Birth preparedness and complication readiness campaign messages should be a target for the government and health team towards general potential mothers because the effect of not preparing for birth and its complication will bore down on socio-economic factors and productivity. Emphasis should be placed on health education on BP and CR and the need for prompt prevention of complications also the need for referral to appropriate system to manage complications and reduce maternal mortality and morbidity rate by health workers.

Community based health education should be prompted by the government to increase knowledge on BP and CR and effect applicable prevention and assessment of BP and CR and other dangerous signs of pregnancy.

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KNOWLEDGE AND PRACTICE OF BREAST-SELF EXAMINATION AMONG FEMALE YOUTH CORPERS IN LOKOJA, KOGI STATE, NIGERIA

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&

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Abstract

Breast cancer, though a disease that affects the breast tissues of both women and men is more prevalent in women. The study aimed to determine knowledge and practice of breast-self-examination among female youth Corpers in Lokoja, Kogi State, Nigeria, and identify their awareness of early signs of the disease as a preventive measure. A descriptive survey research design was used to assess the knowledge of 310 female youth Corpers during their service year in 2016 in Lokoja using the convenient sampling method. Descriptive statistics and hypothesis testing at 0.05df were conducted with X^2. Results showed that all respondent 310 (100%) have heard of the concept of breast-self-examination, while 296(95.5%) believe it can be treated if detected early. However, 300(96.8%) opined that the presence of lumps, swelling and pains in the breast are signs of breast cancer, but 10(3.2%) do not know. It is recommended that health education modules should be included in the secondary and university education and made compulsory irrespective of faculty as well as free testing sites for all women of child bearing age.

Keywords: Breast cancer; Breast self-examination; Knowledge, Practice

INTRODUCTION

Breast cancer constitutes close to 23% of all cancer and ranks second overall when males and females sexes are considered together (Akhtari-Zavare, Latiff, Juni, Said, & Ismail, 2015). Apart from skin cancer, breast cancer is the most prevalent cancer that plaque the female folk. Some women are at higher risk for breast cancer than others because of their personal or family history and certain changes in their genes. Other risk factors such as age (>50 years), early menarche, late menopause (>55yrs), obesity or overweight, hormone therapy and oral contraceptives use are all implicated in the development of breast (CDC, 2016).

The adoption of lifestyle behaviors such as smoking, poor diets, physical inactivity and reproductive changes (lower parity and later age at first birth) have further increased the cancer burden in less economically developed countries (Torre, Bray, Siegel, Ferlay, Lortet-Tieulent, & Jemal, 2015). Reports by WHO (2016) indicates that breast cancer control is being promoted within the context of a comprehensive national cancer control programs that are integrated to non-communicable diseases and other related problems. Cancer control involves prevention, early detection, diagnosis, treatment, rehabilitation and palliative care. Raising awareness of the general public on the breast cancer problems and the mechanisms of control as well as advocating for the appropriate policies and programs are key strategies of population-based breast cancer control. Early diagnosis remains an important early detection strategy, particularly in low and middle-income countries like Nigeria where the disease is diagnosed in late stages due to limited material and physical resources. Breast-Self Examination practice (BSE) has been seen to empower women in taking responsibility for their own health. BSE is recommended for

raising awareness of early signs and symptoms of breast cancer among women at risk in order to facilitate early diagnosis and treatment .

Knowledge and empowerment are key to prevention and early detection of symptoms of breast cancer. Studies have reported poor knowledge, attitude and practice among female health science students at Adama Science and Technology University in Ethopia while health workers have demonstrated high knowledge of risk factors of breast cancer. It was asserted that respondents knew that breast cancer is a killer disease and can be treatable if it is detected early (Segni, Tadesse, Amdemichael, & Demissie, 2016). In India, very few female year one to four dental students investigated had good knowledge of BSE. Significant knowledge was found among the fourth year students (Doshi, Reddy, Kulkarni, & Karunakar, 2012). This is supported by a study in Nigeria which reported that the knowledge and practice of BSE was significantly correlated with the duration of stay in the University (Gwarzo, Sabitu, & Idris, 2009). Similar findings were reported in Cameroon among 120 women in Buea, where very few of the respondents know how to perform BSE. The respondents who were not aware of BSE, had absolutely not heard of BSE; had a slight idea on how to perform it and does not practiced it often, while those who were substantially aware of BSE had heard of BSE, knew how to perform it and practiced it often (Suh, Atashili, Fuh, & Eta, 2012). Also majority 185 (77.7%) of 238 women studied in Abakaliki, South Eastern part of Nigeria were aware of breast cancer while only 92 (39 %) were aware of BSE as a method of early detection of breast cancer (Obaji, Elom, Agwu, Nwigwe, Ezeonu, & Umeora, 2013).

Studies that have assessed the practice of BSE among women have reported a correlation between inadequate practices of BSE and awareness of breast cancer (Silva, Sanches, Ribeiro, Cunha, & Rodrigues, 2009). The interfering factors of BSE practice reported are forgetfulness, lack of attention for one's health, lack of knowledge of technique and correct procedures, fear of the diseases or afraid of finding nodules. Similarly, non- belief in BSE, unawareness of the importance of early detection, no family history of breast cancer and too young to develop breast cancer are reasons for non-practice of BSE by some nurses and nurse aids and agents investigated in Brazil and respondents believed they would never be affected by breast cancer (Silva, Sanches, Ribeiro, Cunha, & Rodrigues, 2009). Similar to these findings is that by Azubuike and Okwuosike (2013) who investigated female senior secondary school students in Abuja which reported that only very few of the respondents had practiced BSE. However, a study in Kogi, Benue state, Nigeria, reported more than half (337) women investigated had poor practice of BSE (Ezeah, Apeh, Omerigwe, & Ojo, 2012). Factors such as "it is embarrassing, I don't want to be examined by a male doctor, forgetfulness, lack of awareness, feeling that one cannot get cancer" were also reported. In contrast, female health workers in Edo State perform BSE (Akhigbe & Omuemu, 2009).

Despite the effect of breast cancer on the health of women, many of them still adopt lifestyle behaviours such smoking, poor diets and excessive alcohol consumption which are risk factors to breast cancer disease (Brinton, Figueroa, Awuah, Yarney, & Wiafe, et.al, 2014). Simple preventive measures and awareness creation that require no equipment can mediate the after mart of developing this disease. There is currently no known study done or reported in Lokoja, the Kogi state capital on female youth Corpers knowledge of breast cancer and BSE. Furthermore, it is unclear how much information relating to BSE is available to female Corpers in Lokoja the Koji state capital to mediate the challenges posed by this scourge.

Objectives of the Study

1. Assess the knowledge of breast self-examination among the female corpers in Lokoja, Kogi state.
2. Determine factors associated with the practice of BSE among the female corpers in Lokoja, Kogi state.
3. Determine if the female corpers are willing to impact the knowledge about breast cancer and BSE on their clients

Research Questions

1. What knowledge about breast cancer and BSE do female corpers in Lokoja, Kogi state possess?
2. What are the factors associated with the practice BSE among the female corpers in Lokoja, Kogi state?
3. What factors hinder the female corpers' willingness to impact the knowledge about BSE to their clients?

Hypothesis

There is no significant relationship between knowledge of breast cancer and practice of BSE among the female youth corpers' in Lokoja, Kogi State, Nigeria.

Significance of the Study

1. Assist the Kogi State government in planning awareness campaign against breast cancer through the ministry of health while encouraging the awareness of nurses and midwives to the task of promoting BSE among their clients especially the female folk during their prenatal, antenatal, post-natal and family planning clinics. Also, the paper will improve knowledge of Youth Corpers especially in Lokoja the Kogi state capital by highlighting the importance of BSE in the prevention of breast cancer and reduction of breast cancer mortality. Similarly, the ability of youth corpers in the Medical and Health Services (MHS) and reproductive health community development service (CDS) will be enhanced to educate people in the community on breast cancer and BSE during their various health outreach programs.

METHODOLOGY

The research design for this study was the descriptive survey design, a non-experimental design which involves carrying out survey for the purpose of providing an accurate description of a group of subjects with specific characteristics. The main purpose of which is to describe objectively the nature of the situations under study. This design was considered the best approach for this study because it allows smaller elements which can be generalized to be studied. A sample size of 310 was selected from a population of 1300 female Corpers in the 2016 batch "A" These are persons who had affiliation with the health profession and are posted to serve in health related facilities such as MHD and CDS groups. The YaroTamani (1987) formular was applied to arrive at this number: $n=N/1+N\,(d)^2$

Instrument Validity and Reliability

The instrument for data collection was a self-administered questionnaire developed by the researchers based on literature search, objectives of the study and personal experiences. The question consisted of 22 selected response items of "Yes" "No" "don't know" in three sections A, B, C excluding demographic details to decipher response pertaining to the objectives of the study. Due modifications were made based on the results and input from two experts in Obstetrics and Gynaecology and nursing education. Reliability of the instrument was by pretesting it among 15 female undergraduates in Kogi State College of Education who have same

characteristics as the study population. Result was measured by the Cronbach alpha which yielded 0.82, 0.85 and 0.88 respectively; this is regarded as high (Santos, 1999).

Data Collection Method and Analysis

A total of three hundred and ten (310) questionnaire were administered and retrieved giving a response rate of 100%. This was made possible because questionnaire were handed directly to respondents on one of the monthly meeting days of all corpers in the state and same was collected at the end of the days' proceedings with the help of three assistants who were stationed at the exit doors of the halls to ensure retrieval. Descriptive statistics SPSS (21) was used to summarize data in frequency tables and graphs while hypothesis was tested at a p-value ≤ 0.05. Scoring system of the participant's knowledge was done with each correct answer awarded one point and incorrect or "I don't know" answer was assigned zero. Correct responses were summed up to get total knowledge scores of 5 points. Score of between 4-5 points, is regarded as good; 3 points = fair, < 3 points= poor knowledge.

Ethical consideration

Table 1 Demographic details (N-310)

Variables	Attributes	Frequency	(%)
Age	20 years & below	14	4.5%
	21-25 years	171	55.2%
	26-30 years	125	40.3%
Marital Status	Single	290	93.5%
	Married	20	6.5%
	Divorced	0	0.0%
	Co-habiting	0	0.0%
Community Development Group (CDS)	Medical and health services	102	32.9
	HIV/Reproductive health	104	33.6
	Entertainment	54	17.4
	Road safety	50	16.1

Table 1 show that 14 (4.5%) of the respondents are less than 20 years old, 171 (55.2%) are between 21 and 25 years of age while 125 (40.3%) are within the age range of 26 and 30 years. None of the respondents were divorced or co-habiting. However, 290 (93.5%) were single, while 20 (6.5%) were married. In terms of the respondents' CDS group, 102 (32.9%) belong to medical and health services CDS group; 104 (33.6%) belong to HIV/reproductive health service CDS group; 54 (17.4%) belong to entertainment CDS group while the remaining 50 (16.1%) belong to road safety CDS group.

Table 2: Knowledge about breast cancer BSE (N=310)

Variable		N (%)
Have you heard about breast cancer.	Yes	310 (100)
	No	0 (0.0)
Breast cancer can be treatable if detected early.	Yes	296 (95.5%)
	No	4 (4.5%)
Source of information about breast cancer.	Mass media	220 (71%)
	School	208 (67.1%)
	Health professional	106 (34.2%)
	Friends	84 (27.1%)
	Parents	42 (13.6%)
Have you ever received information about breast cancer from your health care provider?	Yes	106 (34.2%)
	No	204 (65.8%)
Symptoms of breast cancer	Lumps, swelling, pains	309 (96.8%)
	Reddening of nipples, dimpling	204 (65.8%)
	Don't know	10 (3.2%)
Risk factors of breast cancer	Not having any children at all	206 (66.5%)
	Family history of breast cancer	302 (97.4%)
	Genetic mutation	204 (65.0%)
	Don't know	0 (0.0%)
Information received from health care provider about breast cancer	Breast cancer is an uncontrolled growth of cells in the breast	310 (100%)
	Breast cancer is a killer disease	310 (100%)
	Breast cancer can be treated if detected early	310(100%)
Are you aware of Breast Self-Examination	Yes	202 (65.2%)
	No	108 (34.8%)
What is the sole aim of BSE?	Prevention of Breast cancer	202 (65.2%)
	Early detection of breast cancer	296 (95.5%)
	All of the above	202 (65.3%)
From what age is Breast Self-Examination supposed to be done?	35-50 years	100 (32.3%)
	20 years and above	184 (59.4%)
	Don't Know	26 (8.4%)
Do you know how to perform Breast Self-Examination?	Yes	193 (62.3%)
	No	117 (37.7%)
Source of information on Breast-Self Examination	Health professionals	60 (31.1%)
	School	104 (53.9%)
	Friends	12 (6.2%)
	Magazine	11 (5.7%)
	Parents	6 (3.1%)
Are periods between 7 to 10days after menstrual period adequate for Breast Self-Examination performance?	Yes	190 (61.3%)
	No	120 (38.7%)

Table 2 showed that all the respondents 310 (100%) have heard about breast cancer, though only 296 (95.5%) know it can be treatable if detected early. However, 14 (4.5%) do not think it can be treated. One hundred and six (34.2%) have received information about breast cancer from their healthcare giver, 300 (96.8%) know that lumps, swelling, pains are symptoms of breast cancer, 204(65.8%) know that reddening of nipples, dimpling are symptoms of breast cancer, while 10 (3.2%) reported that they do not know the symptoms of breast cancer. Two hundred and two (65.2%) respondents were aware of breast self-examination (BSE), while 108 (34.8%) were not aware; 193 (62.3%) know how to perform BSE while 117 (37.7%) do not know how to perform BSE. Only 184 (59.4%) of the respondents know that breast self-examination should be performed from 20 years and above, while 100 (32.3%) feel it should be 35-50 years, and 26 (8.4%) reported that they do not know. Majority of the respondents got information about breast cancer from the mass media 220 (71%), school 208 (67.1%). Only 106 (34.2%) have their source of information as health personnel. Also, table showed that 193 (62.3%) of the whole respondents know how to perform BSE, with majority 60 (31.1%) having their source of information as health professionals and school 104 (53.9%). On the number or days between menstrual periods before BSE, 190 (61.3%) answered correctly, while 120 (38.7%) did not.

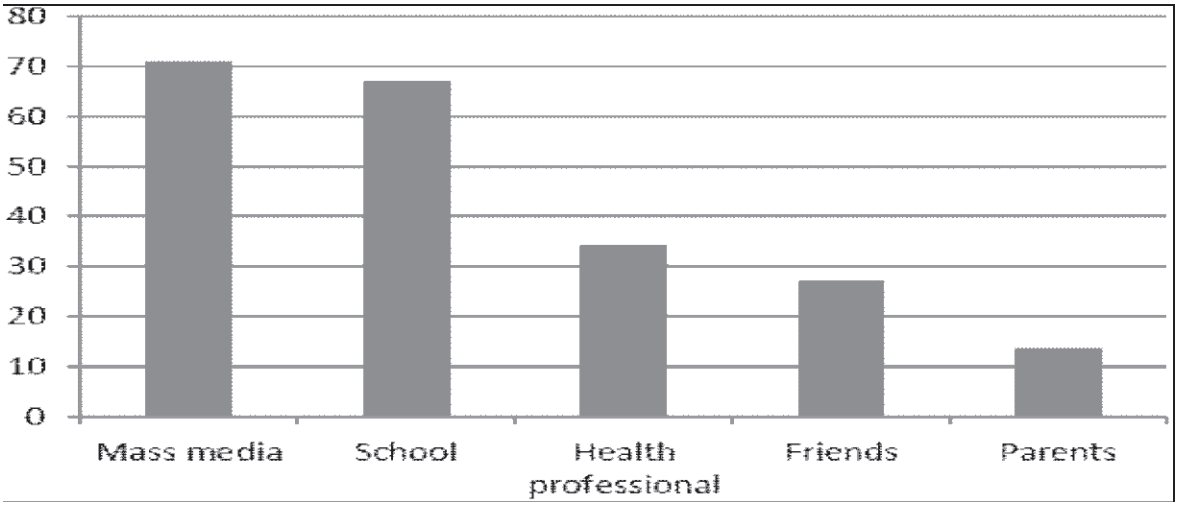

Figure 1: Source of Information

Figure 1 shows the source of information of breast cancer by the respondents. Mass media is the major source 70%, followed by school, and health professionals while the least source are the parents.

Table 3: factors Associated with practice of BSE

Variable	Frequency	Percentage
Ever practiced BSE? (Yes)	180	58.9%
Frequency of performance of BSE (N=180)		
Every month	164	(52.9%)
Once in a year	5	(1.6%)
Whenever I remember	10	(3.2%)
None	131	(42.3%)
Factors influencing practice of BSE (N=131)		
Forgetfulness	14	(10.7%)
Lack of knowledge about BSE technique	117	(89.3%)
Fear, don't believe I am at risk, I don't have cancer	None	None

Table 3 showed that only 180 (58.1%) respondents have ever practiced BSE; 164 (52.9%) carry out BSE every month, while 5 (1.6%) perform it once in a year. Ten (3.2%) perform BSE whenever they remember; and 131 (42.3%) have never practiced BSE. The table revealed that majority 164 (52.9%) of the respondents have good practice of BSE while 146 (47.1%) have poor practice of BSE.

Table 4: willingness to impact knowledge about breast self-examination

Variables	Frequency	Percentage
Would you impact knowledge about Breast Self-Examination to your adolescent students or patients?		
Yes	120	38.7%
No	190	61.3%
If No! Why?		
I don't know how to perform it	117	61.6
It is embarrassing	13	6.8%
I am shy	60	31.6%

Table 4 showed that majority of the respondents 190(61.3%) were not willing to impact knowledge about BSE, while 120 (38.7%) were willing to do so. Majority of them 117 (61.6%), claimed ignorance on how to perform BSE while 13 (6.8%) said it is embarrassing to teach breast self-examination technique to adolescent students or patients, but 60 (31.6%) say they are shy.

Table 5: Knowledge about breast cancer and BSE

Variables	Frequency	Percentage
Good knowledge CA breast	260	83.9%
Fair knowledge CA breast	10	3.2%
Poor knowledge CA breast	40	12.9%
Good knowledge of BSE	194	62.6%
Fair knowledge of BSE	10	3.2%
Poor knowledge of BSE	108	34.8%

Based on the scoring system of knowledge adopted for the analysis, participants score between 5-7 points knowledge is good; 3-4 points for fair knowledge while less than 3 points have poor knowledge. Hence, the table above showed that 260 (83.9%) of the respondents had good knowledge about breast cancer, 10 (3.2%) have fair knowledge while 40 (12.9%) have poor knowledge about breast cancer. Similarly, 194 (62.6%) of the respondents have good knowledge about BSE, 10 (3.2%) have fair knowledge while 108 (34.8%) have poor knowledge about BSE.

Table 5: Testing of Hypo thesis

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	74.225[a]	16	0.007
Likelihood Ratio	13.708	16	0.014
Linear-by-Linear Association	28.386	1	0.111
N of Valid Cases	310		

Table 5 showing the chi-square test result at 0.05 df. Also, table 5 shows that X^2 (16) = 74.225, p = 0.007. The chi-square test carried showed that the p-value for the test is 0.007 which is less than 0.05; hence the null hypothesis is rejected and the alternate accepted which states that there is a significant relationship between the female Youth Corpers' knowledge of and practice of BSE in Lokoja, Kogi State.

DISCUSSION OF FINDINGS

The study investigated the knowledge and practice of BSE as a preventive measure against breast cancer among female youth corpers in Lokoja, Kogi State, Nigeria. The result shows that the respondents have good knowledge about breast cancer as they have heard about breast cancer previously. This may be attributed to the fact that they are all in health-related postings due to their course of study in the tertiary institutions. The findings revealed that more than half of the total respondents have knowledge and are aware of the risks of breast cancer. This is in agreement with the findings in Edo state and Ethiopia (Akhigbe & Omuemu, 2009; Azubuike & Okwuokei, 2013; Segni et al., 2016). It is however contradictory to studies in Benue State and Abuja, Nigeria which reported that women in the state have superficial or

poor knowledge about breast cancer symptoms and causes (Isara & Ojedokun, 2011).

With regard to practice of BSE among the respondents, the findings show that majority of them had practiced BSE. This is in agreement with the findings in Brazil, Iran and Edo State, Nigeria where more than half of the respondents have performed BSE (Akhigbe & Omuemu, 2009; Reisi, Javadzade, & Sharifirad, 2013; Silva et al., 2009). The reason one could deduce for this high performance of BSE among the respondents was that they are health workers. This contradicts other findings in Abuja and Edo state where more than half of the population have never performed BSE (Azubuike & Okwuokei, 2013; Isara & Ojedokun, 2011).

The respondents in this study know the aim of BSE and more than half of them know when it should commence. This is unlike Azubuike and Okwuikei (2013) who reported ignorance of BSE in their Edo state study. Similarly, results reveal key hindrances associated with the practice of BSE among the respondents as forgetfulness and lack of knowledge of BSE technique. This agrees with studies that reported that knowledge of breast cancer among Benue women is superficial as genetic testing is quite a new subject to most of the respondents and hence their negative attitude towards breast cancer early detection campaigns (Ezeah et al.). Interfering factors of BSE practice in that study include forgetfulness, lack of attention to health, lack of knowledge of technique and or fear of finding nodules.

On respondent's willingness to impact the knowledge about BSE on their clients, findings indicate unwillingness to do so. Reasons adduced are shyness, embarrassment and lack of knowledge about BSE technique and performance. This is in agreement with Akhtari- Zavare et als' (2015) findings in Riyadh, kingdom of Saudi Arabia where it was reported that many of the student nurses will not be able to impact knowledge of BSE to women in their environment because they lack information. Like the popular saying that 'one cannot give what he does not have'; in other to be able to impact knowledge on others, one must be seen to possess such knowledge which can be accessed from diverse means in this era of information and communication technology.

Conclusion and Recommendations

Breast cancer remains one of the commonest cancers that plaque the female folk; BSE has been identified as a very important tool for early detection and prevention of the scourge. This study has shown that the female youth corpers in Lokoja have good knowledge about BSE, but majority of them are not willing to impact the knowledge on their clients. The failure to impact knowledge about BSE due to lack of knowledge will lead to poor practice of BSE among the population most at risk (adolescent girls and women), thereby increasing their chances of developing the disease. Thus, interventions that will improve the knowledge of causes of breast cancer and practice of BSE techniques are very important among this population.

The following recommendations were made: Government should organize enlightenment programme and workshops through the ministry of health to raise awareness of breast cancer and engage in practical demonstrations of BSE. Also, Government should introduce compulsory Health Education modules into the secondary and tertiary curriculum. There should be free mammography examination for all women above 40yrs of age.

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EVALUATION OF THE IMPACT OF FEEDING PRACTICES DURING EARLY INFANCY ON BABIES IN SELECTED INFANT WELFARE CLINICS IN IBADAN, OYO STATE, NIGERIA.

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&

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ABSTRACT

Child mortality remains high in low- and middle-income countries. Previous studies have shown infants who were not exclusively breastfed were more susceptible to dying. This study evaluated the impact of feeding practices during early infancy on the babies' susceptibility to common childhood illnesses, in selected infant welfare clinics in Ibadan, Oyo state of Nigeria. A descriptive cross- sectional research design was adopted and structured validated questionnaires with reliability of 0.76 were used to gather data from 136 mothers selected through simple random sampling technique, from three infant welfare clinics in Ibadan. Data collected were analysed using version 20.0 of statistical package for Social Science (SPSS), using frequencies, Chi-square and ANOVA. The result from this study revealed that majority of the parents were practicing combined feeding (53.7%). Factors identified were: antenatal education, health benefit of feeding, knowledge about the feed, perception about the feed, time available, mother's health factors, family's influence, health worker's influence, infant's response to the food and economic factors. Also, most (88.1%) of the infants were wasted. Further analysis revealed that there was no significant influence of methods of feeding on reported cases of common childhood illness at ($F (2/133) = 1.598, P>0.05$) and there was a significant association between sleeping pattern and feeding practices in Ibadan ($\chi 2 = 6.028, P= 0.049$). There was also a significant result between parents' occupation and choice of infant feeding in Ibadan at ($\chi 2 = 24.25$ $P = 0.002$). The study concluded that there should be more awareness campaign on exclusive breastfeeding which should encompasses the benefits of engaging in it.

Keywords: Evaluation, Feeding Practices, Early Infancy, Baby, Infant, Welfare Clinics

INTRODUCTION

Nutrition plays an important role in the health and development of individuals. Adequate nutrition during the first two years of life is very important to ensure optimal, physical and mental development. At this age, children are particularly vulnerable to growth retardation, micronutrient deficiencies, and common childhood illnesses such as diarrhoea, sepsis and acute respiratory infections (Mananga, Kana-Sop, Nolla, Tetanye-Ekoe and Gouado 2014). Wasting, or acute malnutrition, refers to a child who is too thin for his or her height and is the result of recent rapid weight loss or the failure to gain weight. A child who is moderately or severely wasted has an increased risk of death. Wasting in children is the life-threatening result of hunger and/or disease. Children suffering from wasting have weakened immunity, are susceptible to long term developmental delays, and face an increased risk of death. In 2016, nearly 52 million children under 5 were wasted and 17 million were severely wasted (UNICEF/WHO/World Bank Group, 2017). The joint estimates, published in May 2017, cover indicators of stunting, wasting, severe wasting and overweight among children under 5, and reveal insufficient progress to reach the World Health Assembly targets set for 2025 and the Sustainable Development Goals set for 2030. In 2016, according to World Health Organization and World Bank, approximately 52million children globally is wasted, 14 million of which are from Africa and 8.5% of the total number of

children are from west Africa. In Nigeria, 18 percent of children suffer from acutely malnourished or low weight for height, half of them severely. Twenty-nine per cent of children are underweight almost half of them severely (UNICEF/WHO/World Bank Group, 2017; WHO 2000) Malnutrition prevalence also varies with children's age: stunting prevalence is highest among children aged 24-47 months, underweight prevalence is highest among children aged 12-23 months, and wasting is highest among children aged 6-11 months (Belkeziz, Amor, Lamdaour, Bouazzaoui & Baali, 2000). Inadequate breast feeding could lead to poor nutrition, especially low resource countries where poor income could impede providing good complementary feeding for children.

In Nigeria, only 17% under 6 month was exclusively breastfed in 2013, an improvement of the 12% in 2007 (WHO 2000). Weight changes steadily throughout the life which may influence the behavior of the infant and is measured at varied intervals from the hour of birth. In turn, because feeding difficulties or unexpected weight loss may be a subtle first sign of significant neonatal illness or anatomic abnormalities, identification of these issues during the birth hospitalization could lead to earlier identification of significant causes of morbidity. According to the Centers for Disease Control and Prevention, 2017 report, approximately 19% of neonates in the United States in 2011 were supplemented with or exclusively fed formula in the first 2 days after birth. It has been well established that among exclusively breastfed neonates, initial postnatal weight loss is nearly universal (Chantry, Nommsen-Rivers, Peerson, Cohen & Dewey, 2011; Van-Dommele, Boer, Unal & van-Wouwe, 2014 and Martens & Romphf 2007), and this loss has been attributed both to diuresis and to relatively low initial enteral intake; little research has focused on weight loss for those who are formula fed. Although formula-fed infants have a somewhat larger, more measurable intake than those who breastfeed (Fonseca, Severo, Barros & Santos 2014), feeding habits for formula-fed newborns are often inconsistent in the immediate postnatal period (Noel-Weiss, Courant, & Woodend 2008). Common causes of significant weight loss among formula-fed neonates may include fluid diuresis, poor initial intake due to infant somnolence, inadequate provision of formula, and disruption of bonding as parents master the feeding techniques. In addition, weight loss may signify systemic abnormality or illness, even when feeding is presumed to be going well. Joy Noel-Weis, 2013 described the second- and third-days following birth to be the days of maximum weight loss (Davanzo, Cannioto, Ronfani, Monasta & Demarini 2013). Although all other feeding practices are associated with worse health outcomes than exclusive breastfeeding, breastfeeding supplemented with liquids has a lower burden on infant health than solid foods and infant formula has a lower burden than milk or non-milk liquids as measured by four of five health metrics.

Providing specific quantified burden estimates of these practices can help inform public health policy related to infant feeding practices (, Benjamin & Patrick 2014). A serious outcome of unrecognized feeding problems and too much weight loss can be hypernatremic dehydration. Complications of hypernatremic dehydration may include renal and liver failure, disseminated intravascular coagulation, intracranial hemorrhage, seizure and death (Dewey, Nommsen-Rivers, Heinig & Cohen 2003). For many years 5-7% loss of birth weight, has been considered the normal and expected amount of physiological weight loss for breastfed infants (Chantry, Nommsen-Rivers, Peerson, Cohen & Dewey 2011; Hintz, Gaylord, Oh, Fanaroff, Mele & Stevenson, 2001 and Crossland, Richmond, Hudson,

Smith, & Abu-Harb 2008). This figure is now being challenged. Researchers are suggesting that little is actually known about weight changes in term babies during the first two weeks of life (Davanzo, Cannioto, Ronfani, Monasta, Demarini 2013 and American Academy of Pediatrics 2012). Until recently, the growth of breastfed babies was judged by a standard that was derived from data collected on children who had largely been artificially fed (Centers for Disease Control and Prevention 2010). There are several well-documented factors associated with increased infant weight loss after birth. These factors include higher weight at birth, female gender advanced maternal age and education, cesarean delivery, and jaundice (Noel-Weiss, Courant, & Woodend 2008 and Tawia & McGuire 2014).

The 2012 American Academy of Pediatrics policy statement 'Breastfeeding and the Use of Human Milk' also notes that breastfeeding infants should have a weight loss of no more than 7%. Despite these differing professional opinions and lack of evidence, the percentage of weight lost after birth remains one of the most frequently used measures to assess infants' wellbeing (WHO Multicentre Growth Reference Study Group 2006). This is especially true in the early days of life before lactogenesis is well established. The World Health Organization growth standards (Flaherman, Schaefer, Kuzniewicz, Li, Walsh, Paul 2015) are the best reference for growth in the first 2 years as they reflect the growth of breastfed babies. The general guidelines that are usually given for weight loss and weight gain are: a baby loses 5-10% of birth weight in the first week and regains this by 2-3 weeks, birth weight is doubled by 4 months and tripled by 13 months in boys and 15 months in girls, birth length increases 1.5 times in 12 months and birth head circumference increases by about 11 cm in 12 months. All infants lose weight after they are born, no matter what or how they are fed; therefore, it is normal for breastfed infants to lose weight for the first 3 days after birth. However, studies have clearly identified that mode of feeding dramatically affects weight loss. Weight loss >10% was common among new-borns who were exclusively breastfed and born through caesarean delivery. For formula-fed new-borns, there were only 0.1% infants with >10% weight loss at any time. Breastfeeding is positively associated with fewer respiratory, gastrointestinal, and ear infections (Duijts, Jaddoe, Hofman Moll. 2010 and Roth, Cauleld, Ezzati, Black, 2008).

Objectives of the study

The broad objective of this study was to evaluate the impact of feeding practices on the baby during early infancy in selected infant welfare clinics in Ibadan, Oyo State.

The specific objectives were to:

1. Identify factors responsible for mothers' choice of infant feeding during the early infancy period.
2. Assess the frequency of complaints of common childhood illness during the early infancy period.
3. Assess the difference in the weight of babies on various mode of feeding.
4. Assess the association between the behaviour of babies and their feeding practices.

Hypotheses

1. There is no significant association between the weight of babies and the different modes of feeding
2. There is no significant association between the parents' occupation and the choice of feeding

METHODOLOGY

Research design: it was a cross-sectional descriptive study conducted amongst mothers in selected infant welfare clinics in Ibadan, Oyo State. Two infant welfare clinics (University College Hospital and Adeoyo Maternity Teaching Hospitals) in Ibadan North local government were purposely selected based on client turn over. Then using a convenient sample technique, 79 and 57 mothers who met the eligibility criteria (willingness to participate and nursing infants 0 -6months) successfully completed a structured validated questionnaire with a reliability of 0.76 for factors responsible for choice of feeding, 0.85 for common illness and behaviours of babies.

Sample Size Determination

The sample size was determined using Yavvore 1967:

Table 1: number of women attending infant welfare clinics

S/N	Infant Welfare Clinics	Number of nursing mothers
1	Public health department, UCH	130
2	Adeoyo	115
	Total	245

$$n = \frac{245}{1 + 245(0.05)^2}$$

$$n = \frac{245}{1.6875}$$

$$n = 152$$

Adjusting the sample size for 10% non response

$$n_f = \frac{n}{1 - f}$$

$$n_f = \frac{152}{1 - 10\%}$$

$$n_f = 168$$

Table 2: number of attendees in the selected infant welfare clinics

S/N	Infant welfare clinics	Population of nursing mothers	Proportional allocation	Sample size
1	UCH	130	(130÷245)×168	89
2	Adeoyo	115	(115÷245)×168	79
	Total	245		168

Data obtained was coded and entered into spread sheet. Analysis was performed using SPSS version 20.0. Descriptive statistics such as frequency counts, percentages, bar chart, pie chart, mean and standard deviation was used to summarize and present the results. One-way ANOVA was used to test the relationship between the weight of the babies and the mode of feeding, and chi square was used to test the association between parents' occupation and method of infant feeding.

RESULTS

Out of the 168 questionnaires distributed, only 136 were properly filled, 20 mothers withdraw for personal reasons, while 12 questionnaires had lots of missing variables. Therefore, the return rate was 81%, only 136 were analysed (79 from UCH and 57 from Adeoyo, Hospital) Results are presented in tables and figures.

Table 1: Socio demographic characteristics of the respondents

Variables	Frequency(N=136)	Percentage (%)	Mean	Std. Dev
Mother's age				
20-30years	88	64.7	30.5	+11.7
31-40years	43	31.6		
41-50years	3	2.3		
51years and above	2	1.4		
Marital status				
Single	4	2.9		
Married	127	93.5		
Separated	3	2.2		
Widowed	1	.7		
Others	1	.7		
Tribe				
Yoruba	69	50.7		
Igbo	34	25.0		
Hausa	28	20.6		
Others	5	3.7		
Religion				
Christianity	63	46.3		
Islam	66	48.6		
Traditional	4	2.9		
Others	3	2.2		
Mother's occupation				
Government workers	38	27.9		
Self-employed	7	5.1		
Trader	58	42.7		
Student	1	.7		
Housewife	32	23.6		
Delivery method				
Normal	111	81.6		
C.S	25	18.4		
Number of previous children				
Non	18	13.3		
1	88	64.7		
2	21	15.4		
3	9	6.6		

Table 1 revealed the demographic characteristic of the respondents. The mean age of respondents was 30.5±11.7 years and 64.7% are between the ages 20-30years. 93.5% of the participants were married and 50.7% were Yorubas. A little less than half (48.6%) of respondents were Muslims, while 46.3% were Christians. Majority of the respondents (81.6%) had normal delivery with 64.7% having only a child Up to 42.7% were traders, while 27.9% were government workers.

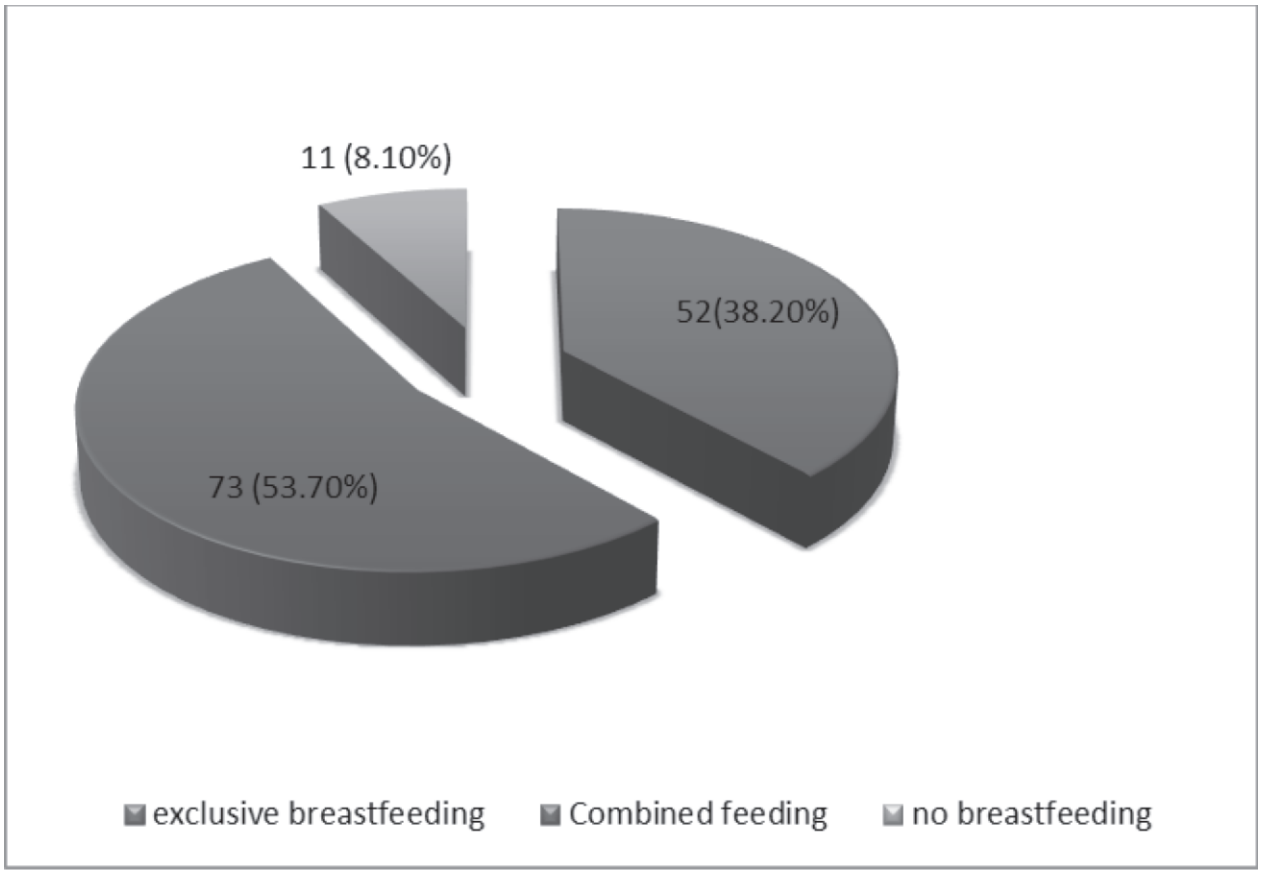

Figure1: Methods of feeding

Figure 1 above revealed the methods of feeding of the babies in the study area. The result showed that majority 73 (53.7%), of the parents were practicing combined feeding, while 52(38.2%) were practicing exclusive breastfeeding and only 11(8.1%) used formula feeding.

Table 1: Factors responsible for mother's choice of infant feeding

	YES		NO	
	Freq	%	Freq	%
Breastfeeding part of antenatal care teaching	128	94.1	8	5.9
Suggested health benefits of breastfeeding	127	93.4	9	6.6
Breast milk is not sufficient for the baby	111	81.6	25	18.4
It is important to breastfeed your baby	99	72.8	37	27.2
Difficulty during birth affects your breastfeeding	33	24.3	103	75.7
Staying away from your baby affect your breastfeeding	65	47.8	71	52.2
Difficulty during previous lactation	71	52.2	65	47.8
family members support exclusive feeding	94	69.1	42	30.9
Health condition that preven ts you fr om breastfeeding?	69	50.7	67	49.3
Artificial milk was given to you in the hospital or by health workers?	72	52.9	64	47.1
Baby starts stooling when I eat certain foods	80	58.8	56	41.2
Infant formula milk because it is now very expensive	68	50.0	68	50.0

Result revealed that majority (94.1%) of the mothers agreed that antenatal education, awareness of suggested health benefits of breast milk (93.4%), insufficiency of breast milk (81.6%), importance of breastfeeding to baby (72.8%), difficulty during previous lactation (52.2%), family members support exclusive breastfeeding (69.1%), health condition preventing breast feeding (50.7%), artificial milk given to mothers by health workers in the hospital (52.9%), baby stooling when mothers eat certain food type (58.8) were factors responsible for their choice of infant feeding. However, (75.7%) disagreed that difficulty during birth (24.3%) and staying away from the baby (52.2%) were factors responsible for their choice of infant feeding.

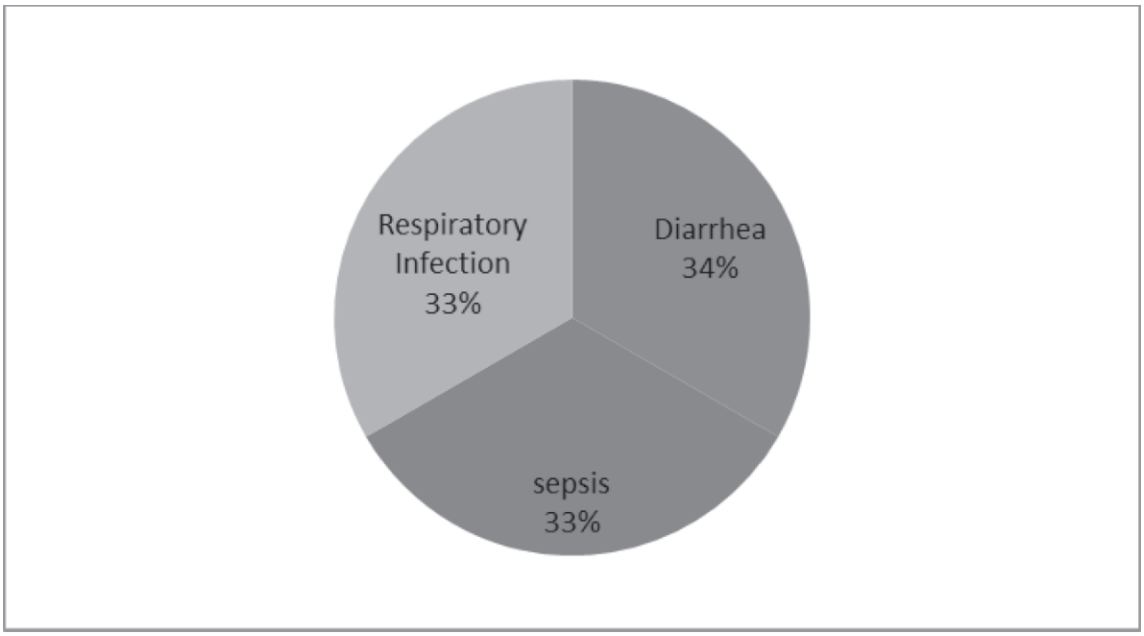

Figure : Summary of Incidence of common childhood illness during early infancy

Incidence of common childhood illness during early infancy shown in figure 2 revealed that all the mothers selected in clinics reported cases of different signs and symptoms of the common childhood illness with diarrhea, having the highest level of occurrence and early management.

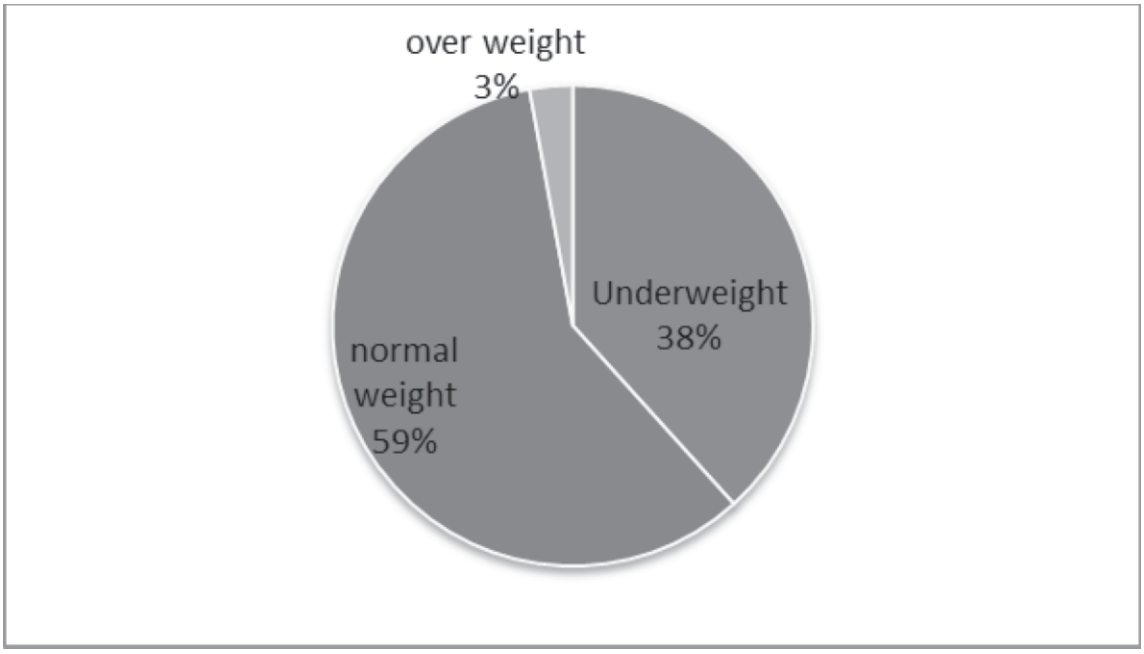

Figure : Cumulative birth weight of infants in the study

Figure 3 shows the cumulative birth weight of infants in the study area. The result revealed that majority 80 (58.8%) of the infants had a healthy normal weight.

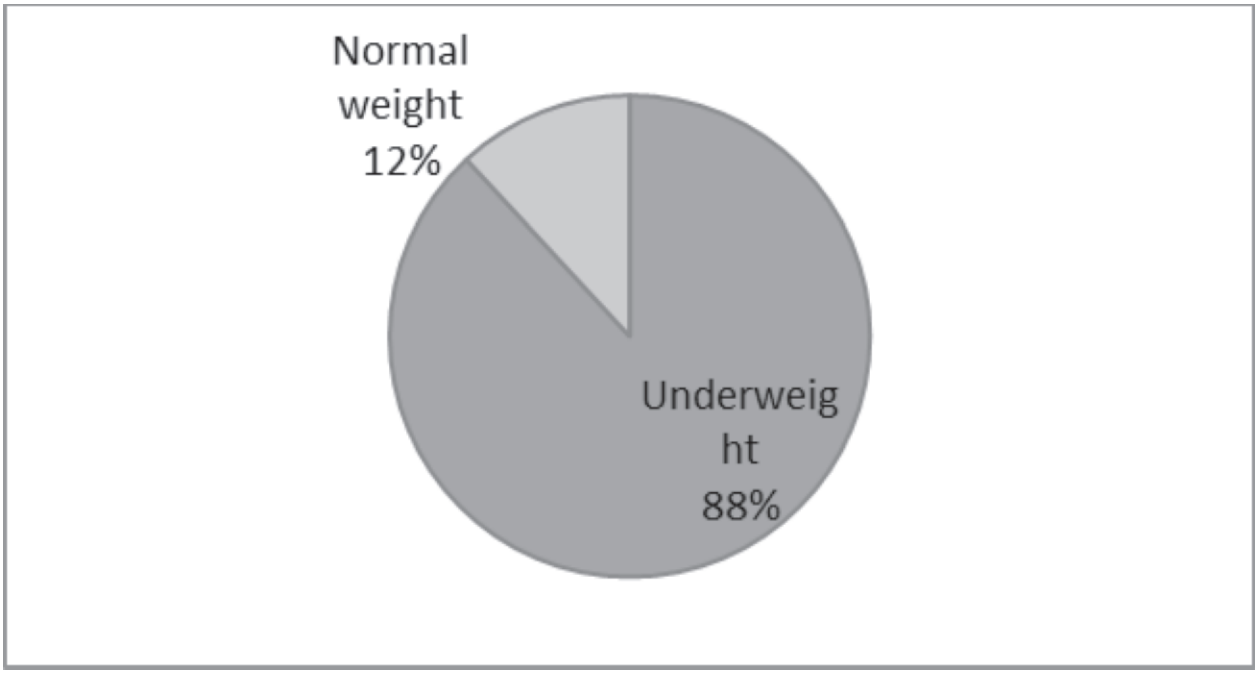

Figure : Cumulative weight of infants after 6 months of feeding in the study area

The cumulative present weight of infants after 6months in the study area revealed that majority (88.1%) of the infants were wasted and had a weight below the normal weight range for infants.

Table 3: Cumulative behaviours of infants in the study area

	Level	Frequency	Percentage
Sleeping pattern	Normal	102	75.0
	Abnormal	34	25.0
Feeding pattern	Normal	96	70.6
	abnormal	40	29.4
Urinary pattern	Normal	91	66.9
	Abnormal	45	33.1
Reflexes	Normal	46	33.8
	Abnormal	90	66.2

Majority of the infants had expected pattern of sleeping (75%), feeding (70.6%) and urination (66.9%) while majority had abnormal reflex pattern (66.2%).

Hypothesis Testing

Table 4: Difference in weight of children with different methods of feeding

	N	Mean	MS	F	P
Exclusive breastfeeding	52	4.9019 (5.43)			
Combined breastfeeding	73	4.8630 (1.92)	1.98	.144	.866
formula feeding	11	4.2636(1.45			
Total	136	4.8294(3.64)			

The result shows that there is slight difference in babies' mean weight values of the three different methods of feeding. Babies with exclusive breastfeeding had mean weight value of 4.90 while children with combine feeding (4.86) was next and children with formula feeding reported lowest mean weight (4.26). Therefore, the result revealed that there was no significant difference in weight of babies with different methods of feeding ($F = 0.144$, $P>0.05$).

Table 5: Relationship between Parents' occupation and methods of breast feeding

	Feeding methods			X2	df	P	Sig.
Parents' occupations	Exclusive Breastfeeding	Combined feeding	Formula feeding				
Government workers	16(11.7%)	20(14.7%)	2(1.3%)	24.25	8	.002	Sig
Self-employed	2(1.3%)	2(1.3%)	3(2.2%)				
Trader	22(16.2%)	33(25.5%)	3(2.2%)				
Student	0(0%)	0(0%)	1(0.01%)				
Housewife	12(8.8%)	18(13.2%)	2(1.3%)				

Table 5 revealed a significant association between parents' occupation and choice of infant feeding in Ibadan.

Table 6: ANOVA of reported cases of common childhood illness of children with different methods of feeding

	N	Mean	S.D	F	Sig
Exclusive breastfeeding	52	14.1154	2.05468		
Combined feeding	73	14.7534	3.09471	1.598	0.206
No breastfeeding	11	15.6364	4.05642		
Total	136	14.5809	2.84814		

The result shows that there is no significant influence of methods of feeding (exclusive breastfeeding, combined feeding and no breastfeeding) on reported cases of common childhood illness ($F(2/133) = 1.598, P>0.05$).

DISCUSSION OF FINDING

This cross-sectional study revealed that majority 53.7% of the parents were practicing combined feeding, 38.2% were practicing exclusive breastfeeding were and 8.1% were practicing formula feeding. This modes or methods of feeding have implication on the wellbeing of the infants, most especially the immunity development against disease in the baby.

Some of the factors implicated for mother's choice of infant feeding like antenatal education and knowledge about the feed have been identified by other authors. This goes to emphasise the importance of women empowerment, in raising the child. Although their knowledge of formula feeding seems have adversely affected EBF in this study. Maybe this calls for a need of revision of the antenatal talks to lay more emphasis on EBF. More so, making complementary feed easily available at immediate post-partum should only be done in extreme cases where the mother appears very weak or on request. Also, that time was factor has been documented. This calls for need of good education on time management to couples in expectant family. The need to reorganize their schedule to accommodate the child should be emphasized. Breastfeeding time should also be part package to all employees.

Result also revealed that there is no significant influence of methods of feeding (exclusive breastfeeding, combined feeding and no breastfeeding) on reported cases of common childhood illness. However, children on EBF had lower mean value than others. This finding is in congruence in a study that claimed some practices had less burden on infant health. Although all other feeding practices are associated with worse health outcomes than exclusive breastfeeding, breastfeeding supplemented with liquids had a lower burden on infant health than solid foods and infant formula has a lower burden than milk or non-milk liquids as measured by four of five health metrics(Benjamin, and Patrick 2014).

That majority of the infants' under-weight could be attributed to various clinical manifestations of childhood diseases like diarrhoea, respiratory disease and sepsis reported in the study. It has been well established that among exclusively breastfed neonates, initial postnatal weight loss is nearly universal (Martens, Romphf 2007), and this loss has been attributed

both to childhood illness and to relatively low initial enteral intake. Data in congruence to the finding of methods of feeding was reported by UNICEF. The report of UNICEF//WHO/World Bank Group revealed that in Nigeria, 37 per cent of children, or 6 million children, chronically malnourished or low height for age, more than half of them severely (Duijts, Jaddoe, Hofman, & Moll 2010). The report also acknowledged that 18 percent of children suffered from wasting severely malnourished Twenty-nine per cent of children are underweight almost half of them severely (Righard, Alade, 1990). This report is partially consistent with the finding of this study which revealed that 120 (88.1%) of the infants reported were wasted while few 16 (11.9%) of the infants weighed normal weight after 6 months of feeding. [20].

Behaviours of infants were also examined in the study and the result of the finding revealed that there is high level of adequate sleeping and normal urinary pattern among the infants in Ibadan metropolis, and there is also high level of inadequate pattern of feeding and abnormal reflexes pattern among them. Result revealed that there is a significant association between parents' occupation and choice of infant feeding in Ibadan. The result also points to the fact that many parents who are traders reported to prefer combined feeding. This could be because of the nature of their business that did not give them time to exclusively breastfeed their children. Previous studies have not delineated the direction of significant relationship between parents' occupation and choice of infant feeding.

Implication of the Findings for Nursing

More emphases and continuous education on exclusive breastfeeding for 6 months and its benefit should be teaching during antenatal and postnatal programme as this will serve as reminder for them and shape their attitude towards it. More so, orientation on the childhood illness, associated factor and management of such illnesses should also be included in the teaching during antenatal and postnatal clinic programme because doing this will help avoid factors that predispose the pregnant women and mothers to it, and invariably reduce the prevalence rate of childhood diseases.

Psycho-educational intervention by nurses and health related professionals should be giving to mothers and expected mother in order to mitigate the false belief that exclusive breastfeeding is not necessary and that combined feeding is the better.

Conclusion and Recommendations

The result from this study revealed that majority of the parents are practicing combined feeding which may be related to the factors identified from the study such as: antenatal education, health benefit of feeding, knowledge about the feed, perception about the feed, time available, mother's health factors, family's influence, health worker's influence, infant's response to the food and economic factors. The result of this study also revealed that more than of the infants were wasted. This can be linked to the incidence of common childhood illness amongst them as all infants in the study area reported occurrence of illness. The result of the finding also revealed that there is no significant influence of methods of feeding on weight and incidence of common childhood illness of selected babies in Ibadan metropolis. A significant relationship between parents' occupation and choice of infant feeding was established from the findings of the study.

Findings of this study revealed that the majority of the parents are practicing combined feeding. Therefore, it is recommended that there should be more awareness campaign on exclusive breastfeeding which should encompasses the benefits and disadvantage of it. Mothers should

be encourage and endeavour to exclusively breastfeed their babies not matter the nature of their job because of it important on the babies' health. It is also recommended that other factors should be put into considerations as regarding the best method for infant feeding as there is no difference in the impact of the feeding practices on the baby. It is recommended that mothers in Ibadan metropolis should seek for more information or help from health professionals concerning childhood illness because the finding of this study showed that there is high prevalence rate of childhood illness among the selected infants in the selected clinics.

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