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University Teaching Hospital Sagamu, Nigeria; clients' perception of quality of maternal health care services provided by skilled attendants at Poly District Hospital Enugu, Enugu North local government area, Enugu State, Nigeria. Birth preparedness and complication readiness in Amassoma community of Southern Ijaw local government area, Bayelsa State, Nigeria. Knowledge and practice of breast-self examination among female youth corpers in Lokoja, Kogi State and 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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doctoradeyemo@yahoo.com or lautechjournal@gmail.com

LIST OF CONTRIBUTORS

Abdullahi, S.	Department of Nursing Sciences, Faculty of Allied Health Sciences, ABU Zaria, Nigeria
Adeyemo, F. O.	Department of Nursing, College of Health Sciences, Ladoke Akintola University of Technology, Osogbo, Osun State.
Ajao, E. O.	Department of Community Health, School of Nursing, Babcock University, Ilishan-Remo.
Akeusola, A.	School of Nursing, Asubiaro, Osogbo, Osun State, Nigeria.
Aluye-Benibo D	Department of Community Health Nursing, Faculty of Nursing Sciences, College of Health Sciences, Niger Delta University, Wilberforce Island, Bayelsa State. Emailbaluye@yahoo.com
Amadi, H. O.	Dept of Nursing Science, School of Basic Medical Sciences, College of Medical Sciences, University of Benin, Edo State, Nigeria. Phone: 08023368031; Email: roseline.esewe@unben.edu; rossysewe@yahoo.com
Amakoromo, T.	Department of Community Health Nursing, Faculty of Nursing Sciences, College of Health Sciences, Niger Delta University, Wilberforce Island, Bayelsa State.
Amieghemie, F. O.	Department of Nursing Science, University of Benin Ugbowo Benin City, Edo state.
Atunde, M. O.	Department of Primary Education, Nana Ishaiat Memorial College of Education, Ilorin, Nigeria. Email: atundemartins@gmail.com/+2348067995010
Bello, M. A.	School of Nursing, Asubiaro, Osogbo, Osun State, Nigeria.
Beredugo, L. I.	Department of Community Health Nursing, Faculty of Nursing, College of Health Sciences, Niger Delta University, Wilberforce Island Bayelsa State, Nigeria Email letticiaikio@gmail,com

Dajwal, J. M.	Collage of Nursing and Midwifery Vom, Plasteau State, Nigeria.
Edward, M. I.	Ondo State School of Nursing, Akure, Nigeria
Ehwarieme, T. A.	Department of Nursing Science, University of Benin Ugbowo Benin City, Edo state. timy4real12@gamil.com 08060696870
Emmanuel L.	Department of Community Health Nursing, Faculty of Nursing, College of Health Sciences, Niger Delta University, Wilberforce Island Bayelsa State, Nigeria dimunanyo @gae@yahoo.com
Enuku, C. A.	Department of Nursing Science, School of Basic Medical Sciences University of Benin, Benin City, Edo State, Nigeria.
Enwelum, J. C.	Department of Nursing Sciences, Faculty of Medical Sciences, University of Jos, Plateau State, Nigeria
Esewe, R. E.	Department of Nursing Science, School of Basic Medical Sciences, College of Medical Sciences, University of Benin, Edo State, Nigeria
Ezenduka, P. O.	Department of Nursing Science, Nnamdi Azikiwe University, Nnewi Campus, Nigeria
Folami, F.	Department of Nursing, College of Medicine, University of Lagos. Email: flofolami@yahoo.com
Gaknung, B. K.	Department of Nursing Sciences, Faculty of Medical Sciences, University of Jos, Plateau State, Nigeria
Gambar, A. Y.	Department of Nursing Science, Faculty of Clinical Sciences, College of Health Sciences, University of Ilorin, Kwara State, Nigeria.

Gotodok, K. H.	Department of Nursing Sciences, Faculty of Medical Sciences, University of Jos, Plateau State, Nigeria
Hayat, M. G.	Department of Nursing, Faculty of Medicine, Ahmadu Bello University, Zaria
Ibraheem, M. A.	Department of Nursing Science, Faculty of Clinical Sciences, College of Health Sciences University of Ilorin, Nigeria. Ibraheem.ma@unilorin.edu.ng/+2348038432495
Imam, A. A.	Department of Nursing Science, Faculty of Clinical Sciences, College of Health Sciences, University of Ilorin, Kwara State, Nigeria.
Madu, N. B.	Health Visiting Unit, University of Nigeria Teaching Hospital, Enugu, Nigeria
Maitanmi, J. O.	Department of Community Health, School of Nursing, Babcock University, Ilishan-Remo.
Mokeme, A. W.	Department of Nursing Science, University of Benin Ugbowo Benin City, Edo state
Ndie, E. C.	Department of Nursing Science, Ebonyi State University, Abakaliki, Nigeria chubike2005@yahoo.com.
Njoku C.	Department of physical and health Education, Faculty of Education, ABU Zaria, Nigeria.
Nwaneri, A. C.	Department of Nursing Science, University of Nigeria, Enugu Campus, Nigeria
Ohaeri, B.	Department of Nursing, Faculty of Clinical Sciences, College of Medicine, University of Ibadan bmkohaeri@yahoo.co.uk +2348161352904
Okpala P. U.	Department of Nursing, University of Nigeria, Enugu Campus, Nigeria

Olatoke, A. M.

Department of Nursing Science, Faculty of Clinical Sciences, College of Health Sciences, University of Ilorin, Kwara State, Nigeria.

Olatunji, A. A.

Department of Nursing, College of Medicine, University of Lagos.

Oluseye, O. M

School of Nursing , Ilaro, Ogun State, Nigeria. Email: olubim4real@yahoo.com

Olokoba, E. O

Department of Nursing, Faculty of Medicine, Ahmadu Bello University, Zaria

Olubiyi, S. K.

Department of Nursing Science, Faculty of Clinical Sciences, College of Health Sciences, University of Ilorin.

Kayode.O

Centacare Community Services 2506 Ipswich Rd, Darra, Brisbane Queensland, Australia Email: bunmy16@yahoo.com

Oluwatosin, O. A.

Department of Nursing, University of Ibadan, Nigeria.
Email: aoluwatosin@yahoo.com or oa.oluwatosin@ui.edu.ng

Oniso J. I.

Department of Maternal and Child Health Nursing, Faculty of Nursing, College of Health Sciences, Niger Delta University, Wilberforce Island
Bayelsa State, Nigeria
juliechinek@yahoo.com

Osuala E.

Nnamdi Azikiwe University, Akwa.

Oyedele, E. A.

Department of Nursing Sciences, Faculty of Medical Sciences, University of Jos, Plateau State, Nigeria

Rejuaro F. M.

Department of Nursing Science, Faculty of Clinical Sciences, College of Health Sciences, University of Ilorin, Kwara State, Nigeria.
Email: sholarejuaro@gmail.com

Umar, A. B. Department of Nursing Sciences, Faculty of Allied Health Sciences, ABU Zaria, Nigeria addanice@yahoo.co.uk

Umar G. A. Department of Mathematics, College of Education Technical Lafiagi, Kwara State, Nigeria.

Umar, N. J. Department of Nursing Science, College of Health Sciences, University of Ilorin, Kwara State, umaribna@gmail.com

Unuakhe P. M. Department of Community Health, School of Nursing, Babcock University, Ilishan-Remo.

Yusuf, A. G. Department of Nursing Science, College of Health Sciences, University of Ilorin, Kwara State,

Yusuf A. Department of Nursing, Faculty of Clinical Sciences, College of Medicine, University of Ibadan omayowa2@gmail.com

TABLE OF CONTENTS

1. Assessment of Food Craving and Aversion Practices among Primigravid Mothers in Enugu Metropolis.
Nwaneri, A. C., Madu, N. B., Ezenduka, P. O. and Ndie, E. C. 1

2. Assessment of Nurses Knowledge on Pain Assessment Tools in Selected Hospital in Benin City, Edo State.
Ehwarieme, T. A.; Amieghemie, F. O. and Mokeme, A. W. 9

3. Knowledge and Use of Anti-Shock Garment among Midwives in Central Hospital, Benin City, Edo State.
Enuku C. A. and Adeyemo, F. O. 23

4. Mentoring in Nursing: Strategy for Professional Development.
Oluwatosin, O. A. 31

5. Economical Adaptation of Vesico Vaginal Fistular Patients in Nigeria.
Umar, A. B., Njoku, C. and Abdullahi, A. S. 39

6. Comparative Analysis of the Socio-Economic Status of Parents with the Academic Performance of Students of two Selected Secondary Schools in Jos South, Plateau State, Nigeria.
Gaknung, B. K., Oyedele, E. A., Gotodok, K. H., Enwelum, J. C., Dajwal, J. M. 50

7. Utilization of Self Medication among Students of Government Technical College, Osogbo, Osun State, Nigeria.
Bello, M. A. and Akeusola, A. 57

8. The Relationship between Stress Management Mechanisms and Lecturers' Job Performance in Kwara State, Nigeria.
Ibraheem, M. A., Atunde, M. O., Rejuaro, F. M., Umar, N. J., Imam, A. A., Umar G. A. 69

9. Dichotomy between knowledge and utilization of delivery care services among women of child bearing age in Edu Local Government Area, Kwara State, Nigeria.
Umar, N. J. Olubiyi, S. K., Rejuaro, F. M., Ibraheem, M. A., Imam, A. A., and Yusuf, A. G. 82

10. Knowledge of risk factors and preventive practice of hypertension among office workers in Yenagoa Local Government Council Bayelsa State.
Beredugo, L. and Amakoromo, T. 90

11. Child Abuse related Knowledge and Practice among Parents in Ilorin South Local Government Area, Kwara State, Nigeria
Rejuaro F. M., Umar, N. J., Imam, A. A., Ibraheem, M. A., Gambar, A. Y., Olatoke, A. M. 100

12. Perception of Sleep Deprivation in relation to Academic Performance among Nursing Students in College of Medicine, University of Lagos, Nigeria.
Olubiyi, S. K., Folami, F. and Olatunji, A. A. 107

13. Effect Of Health Education Intervention On Knowledge Of Birth Preparedness Among Pregnant Women Attending Primary Health Care In Zaria Metropolis
Olokoba E. O.; Umar A. B. and Hayat M. G. 115

14. Assessment of Family Levels of Functioning among Civil Servants in Federal Capital Territory Abuja, Nigeria.
Kayode, O. Oluseye, O. M. and Oluwatosin O. A 130

15. Perceived Causes of Anemia and Strategies of Prevention among Pregnant Women Attending Antenatal Clinic at Olabisi Onabanjo University Teaching Hospital Sagamu, Nigeria.
Olubiyi, S. K., Maitanmi, J. O., Unuakhe P. M. and Ajao, E. O. 140

16. Clients' Perception of Quality Of Maternal Health Care Services Provided By Skilled Attendants At Poly District Hospital Enugu, Enugu North Local Government rea, Enugu State, Nigeria.
Okpala, P. U., Nwaneri A. and Osuala E. 149

17. Birth Preparedness and Complication Readiness In Amassoma Community Of Southern Ijaw Local Government Area, Bayelsa State, Nigeria
Beredugo, L. I., Emmanuel L, Oniso J I & Aluye-Benibo D 160

18. Knowledge and Practice of Breast-Self Examination among Female Youth Corpers in Lokoja, Kogi State, Nigeria.
Esewe, R. E. & Amadi H. O. 168

19. Evaluation of the Impact of Feeding Practices during Early Infancy on Babies in selected Infant Welfare Clinics in Ibadan, Oyo State, Nigeria.
Ohaeri, B. M and Yusuf A. G 178

ASSESSMENT OF FOOD CRAVING AND AVERSION PRACTICES AMONG PRIMIGRAVID MOTHERS IN ENUGU METROPOLIS, NIGERIA.

Nwaneri, A.,
Madu, N. B.,
Ezenduka, P. O.
&
Ndie, E. C.

ABSTRACT

The study assessed food craving and food aversion practices among primigravid mothers in Enugu Metropolis using survey research design. Convenient sampling technique was used to select hospitals and pregnant mothers attending antenatal clinics. Questionnaire was used for data collection. The findings showed that majority (56.9%) of the primigravid women crave for fruits, beverages and snacks or averse to beans-based food, cassava-based food and spices example, garlic. Also, food craving and aversion were mostly experienced during the first trimester. Based on the result, it was then recommended that public health nurses/midwives should be encouraged to educate pregnant women, especially the primigavid women on nutritional needs during pregnancy and the implication of food craving and aversion in pregnancy.

Keywords: Food craving, Food aversion, practices, Prmigavid mothers

INTRODUCTION

Pregnancy is often accompanied by a variety of nutritionally linked problems that pregnant mothers have to cope with (Dickason et al, 2010). In order to cope with these problems and to proceed with a successful delivery, mothers experience a number of physiological and behavioral adjustments such as food craving and food aversion during pregnancy. Food cravings are intense desire to obtain certain foods which are very interesting to the individual and may not be what the individual need at that time. On the other hand, food aversion is a strong dislike of a particular food during pregnancy (Olusanya and Ogundipe, 2012). Food craving and aversion if not properly managed may interfere with the dietary intake of the pregnant women and sometimes cause serious problem such as low birth weight of the baby and deficiency of iron, calcium, protein, vitamins A, D, B6 and folic acid in the mother.

Safaii (2013), stated that some researchers believe that food craving is a mechanism to protect the fetus and the mother from nutrient deficiencies and suggest that craving is triggered off by a deficiency in one or more nutrients. This opinion appears to be supported by a study done by Demissie, Muroki and Wambui, (2012) which revealed that 43% of pregnant women crave for nutritious foods that are lacking in their diet. According to Nyaruhucha (2012) some women crave for non-food substance like soil, clay, chalk, charcoal and some believe that ingestion of non-food substance relieves nausea and vomiting. Glans (2013) also noted that aversions are physiological mechanism that protects the fetus either from nutrient deficiencies by prompting mothers away from quality and monotonous foods or from excess foeto-toxic substance present in the food, thus food aversion could be beneficial. The researchers aimed at assessing food craving, aversion and foods involved in the practices among prigravid mothers attending antenatal clinics in Enugu Metropolis as well as the types of foods involved. The result will be of use for public health nurses/Midwives in planning nutrition education for pregnant mothers.

Research questions

1. What is the prevalence of food craving and aversion among pregnant women in Enugu metropolis?

2. What type of food do pregnant women in Enugu metropolis crave for?
3. To what extent does a pregnant woman crave for non-food items?
4. At what period of pregnancy do pregnant women experience food craving and aversion?
5. What are the reasons for craving of food among pregnant women in Enugu metropolis?

METHODOLOGY

Survey research design was used for the study. This study was carried out in the health facilities in Enugu metropolis that were selected using the convenience sampling technique. They are Uwani Cottage Hospital, Ikirike Health Centre, Eastern Nigeria Medical Centre, Balm of Gilead hospital, Amaechi Cottage Hospital, Obeagu Amachi Health Centre, St. Getrude Hospital and Maternity and St. Merkin Hospital and Maternity. A total of 267 pregnant mothers was selected using the convenience sampling technique. Instrument for data collection was questionnaire developed by the researchers. Reliability of the research instrument was determined using test-retest reliability method, and yielded a reliability coefficient of 0.87. Permission was sought from the Heads of selected health facilities, as they have no ethical committee and informed oral consent was obtained from each of the respondents. Participants were assured of confidentiality of any information given. Descriptive statistics, which include frequency, percentage, mean and standard deviation were used to analyze the collected data which aided answering of research questions. Results were presented in tables and charts.

RESULTS

As presented in figure 1, the prevalence of food craving and aversion was high. This is because out of the 267 pregnant women used for this study, 75% had a craving for food. The frequency of food craving among the respondents, 90 (25%) had no craving for some food, 109 (31%) averse at least one food while, 158 (44%) crave for more than one food. Also, Table 1 shows the stages of pregnancy at which food craving is experienced. 251 (94.0%) experience it at 1st trimester, 16 (6.0%) experienced it at the 2nd trimester while none experienced it at 3rd trimester.

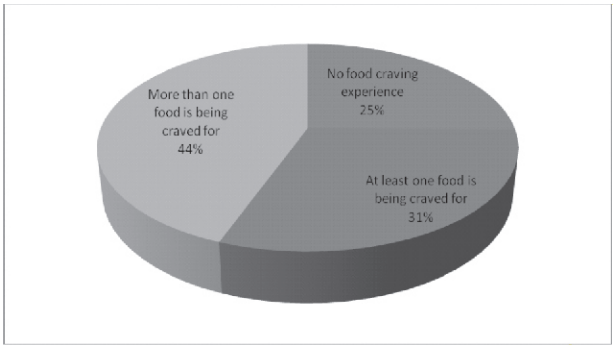

Fig 1: Respondents who crave for food

Table 1: Stage of pregnancy at which the primigravid women experience craving

Stage of pregnancy	N	%
1st trimester	251	94.0
2nd trimester	16	6.0
3rd trimester	0	0
Total	267	100

Also, Table 2 shows the types of food crave for or averted to by first time pregnant women. The most commonly craved food were fruits 152 (56.9%) followed by soft drinks 128 (47.9%) then snacks 109 (40.8%) others are plantain 66 (24.7%), vegetable 66 (24.0%) nodules 59 (22.1%), milk and milk products 51 (19.1%), cassava based food 48 (18.0%), fish and fish products 43 (16.1%), beverages 43 (16.1%), cereal based food 36 (13.5), meat and meat product 35 (13.1%) and beans based food 20 (7.5%).

The result also showed that among the 357 respondents, majority 273 (76.5%) has no craving for non-food items, 79 (22.1%) crave for one food item and a few 5 (1.4%) crave for more than one food item. The most craved food item were soft white stone 67 (79.8%), ash 7 (8.3%), charcoal 6 (7.1%) and soil 4 (4.8%).

Table 2: Types of food craved by primigravid women

Category of food	N	Percentage (%)
Cassava based food	48	18.0
Cereal based food	36	13.5
Meat and meat product	35	13.1
Vegetable	64	24.0
Fruits	152	56.9
Fish and fish products	43	16.1
Beverages	43	16.1
Yam based food	28	10.5
Plantain	66	24.7
Beans based food	20	7.5
Snacks	109	40.8
Soft drinks	128	47.9
Milk and milk products	51	19.1
Noodles	59	22.1

Craving for non-food	N	%
No non-food item is craved	273	76.5
At least one non-food item is being craved for	79	22.1
More than one food item is being craved for	5	1.4

Non- food item craved for			
Non- food item	N	%	Rank order of food item craved for
Soil	4	4.8	4th
Soft white stone	67	79.8	1st
Charcoal	6	7.1	3rd
Ash	7	8.3	2nd
Total	84	100	

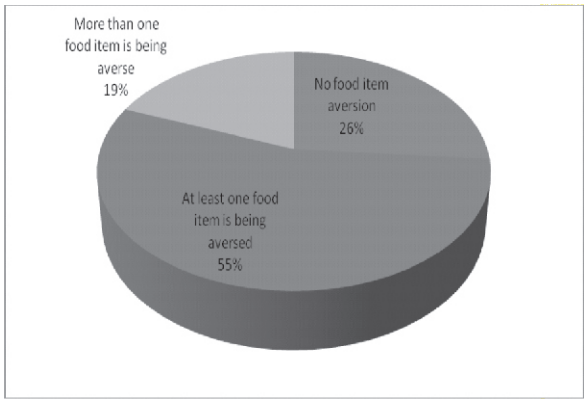

Fig 2: Respondents who have aversion for food

Similarly, Figure 2 shows the frequency of food aversion among first time pregnant women, the proportion of women who reported no food aversion experienced were 94 (26%), 195 (55%) averse at least one food item and 64 (19%) averse more than one food item.

Table 3: Stage of pregnancy at which primigravid women experience aversion

Stage of pregnancy	N	Percentage
1st trimester	249	96.1
2nd trimester	9	3.5
3rd trimester	1	0.4
Total	259	100

As presented in Table 3, majority of the respondents [249 (96.1%)] experience aversion in 1st trimester than the 2nd [9 (3.5%)] and 3rd trimester [1 (0.4%)].

While Table 4, revealed that, the most commonly aversed foods were beans-based food [104 (39.5%)] followed by cassava-based food 54 (20.5%) and spices eg. Garlic 42 (16.0%) others were beverages 39 (14.8%), meat and meat products 37 (14.1%) Cereal based food 34 (12.9%), milk and milk products/fish and fish products 32 (12.2%) respectively, vegetable 18 (6.8%), soft drinks 16 (6.1%), fruits 14 (1.3%), snacks 10 (3.8%) and plantain 4 (1,5%).

Table 4: Types of food primigravid women have aversion for

Responses	Frequency	Percentage
Cassava based food	54	20.5
Cereal based food	34	12.9
Meat and meat product	37	14.1
Beans based food	104	39.5
Milk and milk product	32	12.2
Vegetables	18	6.8
Fruits	14	5.3
Fish and fish products	32	12.2
Beverages	39	14.8
Yam based food	19	7.2
Plantain	4	1.5
Snacks	10	3.8
Soft drinks	16	6.1
Spices eg. Garlic	42	16.0

On the other hand, Table 5 reveals that, the majority of the respondents [106(39.7%)] reported that their reason for food craving is for feel of satisfaction. However 97 (36.3%) of the respondent reported that it is for good health, [53 (1.9%)] believed that craving is because of availability, [48 (18.0%)] believed that craving reduces nausea and vomiting, [36 (13.5%)] reported that the food is easy to prepare, [27 (10.1%)] had no particular reason for their craving, [26 (9.7%)] reported that the food flavor made them to have intense urge to consume the food, [11 (4.1%)] stated that culture/belief influence their food craving and few respondents [6 (2.2%)] reported that color of food made them to crave for such food.

Similarly, 48 (57.1%) of the respondent reported that non-food substance prevents nausea and vomiting, 15 (17.9%) of the respondent believe that they get satisfaction from it. Other reasons include the smell of pica substances 13 (15.5%) and no reason 8 (9.5%).

The majority of the pregnant women 133 (50.6%) believed that food aversion to certain foods helps to overcome the symptoms of nausea and vomiting, 99 (37.6%) reported that aversion of food causes heartburn, 69 (26.2%) believed that certain food were avoided because they can affect the size of the baby other reasons were Taboo/belief 32 (12.2%) and causes stomach pains 30 (11.4%).

Table 5: Reasons for their specific food craving and aversion

	Frequency	Percentage
For good health	97	36.3
Colour of food	6	2.2
Culture/believe	11	4.1
Availability	53	19.9
Food flavor	26	9.7
Easy to prepare	36	13.5
It reduces nausea and vomiting	48	18.0
For satisfaction	106	39.7
Total		
Reasons for craving non- food items		
	Frequency	Percentage
No reason	27	10.1
Smell of pica substance	13	15.5
Prevent nausea and vomiting	48	57.1
Get satisfaction	15	17.9
No reason	8	9.5
Reasons for food aversion		
	Frequency	Percentage
Can affect the size of the baby	69	26.2
Causes stomach pains	30	11.4
Taboo/believe	32	12.2
Nausea and vomiting	133	50.6
Causes heart burns	99	37.6
No reason	27	10.3

DISCUSSION

The high prevalence of food craving and aversion found in this study is comparable with other studies in developed and developing countries like Nigeria, which ranges from 50-80% (Olusanya & Folashade, 2012; Tsegaye et al, 2012; Ogunbjuyigbe et al, 2012; Nyaruhucha, 2009; Ejei-Okeke & Analuba, 2014; Koryo et al, 2012; & Kroskey, 2013). Craving for a non - food item is at the minimal as the majority do not crave for any non- food item. This finding implied that it was only about one quarter of the respondents crave for non- food item which is better because craving for non- food item could interfere with the absorption of vital nutrients and may also be toxic for the baby and mother.

This finding is in line with Nyaruhucha (2009) which reported that the food most craved by the largest proportion of pregnant women were fruits. This was also supported by Ejei-Okeke and Analuba (2014) who reported that fruits and vegetables were mostly craved by pregnant women. This finding, however disagreed with the study by Handisco (2014) who reported that pregnant women most craved food were meat and egg. This finding also is not in line with Koryo et al (2012) and Hook (2014) that reported that pregnant women crave chocolate, candies and milk-based product most. Their finding

could be attributed to the kind of food items available in the area of study. Chocolate, candies and milk are not common food items in South Eastern Nigeria. The non- food item mostly crave by first time pregnant women were soft white stone (nzu) 67 (79.8%). The soft white stone (nzu) is popularly known in the study area and being consumed by pregnant and non-pregnant women in the locality. It is obvious that the belief held in the area that it prevents nausea made the first-time pregnant women to crave for this non- food item. This study is also contrary to the study by Nyaruhucha (2009) who reported that the type of non- food craved by pregnant women is soil. This again may also be explained by cultural belief.

Result in this study revealed that food craving and aversion were mostly experienced during the first trimester. This is in line with Nyaruhucha (2009) who attributed this to hormonal changes. The majority of the first-time pregnant women averse / avoid beans-based food, followed by cassava-based food and spices e.g. Garlic. There is a need for nurses to provide appropriate nutrition counseling to guide the first-time pregnant women. The aversion to garlic supports the observation by Knox (2013) which stated that garlic is a trigger as taste and smell causes nausea and vomiting among some pregnant women. This finding is, however, contrary to the study by Ejei Okeke and Analuba (2014) who reported that the most averse food by pregnant women were fried and fatty food.

A closer look at the reason given for craving of food items revealed that they were not nutritionally correct as majority indicated fruits as foods that are crave and averse, still they consumed it to satisfaction. This suggests that in spite of the high literacy rate (91.6%) among the respondents, they lacked correct and adequate nutritional knowledge as it concerns food craving and aversion. This finding is in line with a report by Koryo, Nti and Adamu (2012) who reported that reasons expressed by the pregnant women for food craving is for satisfaction. The respondents' second main reason for food craving is good health which is in line with the study by Hook (2004) who stated that the reason for pregnant women craving is concerned for personal or fetal health. The finding also revealed that the majority of the first-time pregnant women indicated that ingestion of these substances relieves or prevent nausea and vomiting. This finding tally with the report by Nyaruhucha (2009) who pointed out that the reason for craving non- food item is because of cultural belief and attitude. This is understandable since most of them craved for food during the first trimester, which is the period when most pregnant women experience nausea and vomiting.

Concerning the reason for food aversion, the result shows that the majority (57.1%) of the first-time pregnant women indicated that the occurrence of nausea and vomiting made them to averse certain food items. This study affirmed the finding by Ogunbjuyigbe et al (2012) who pointed out that the reason for food aversion by pregnant women were nausea and vomiting.

Conclusion andRrecommendations

Based on the findings, it was concluded that the majority of the primigravid women crave for fruits, soft drinks and snacks or averse to beans-based food, cassava-based food and spices eg. Garlic. The few who craved for non- food items craved mostly for soft white stone (nzu). It is then recommended that Public health nurses/Midwives should be encouraged to educate pregnant women, especially the primigavid women on nutritional needs during pregnancy and the implication of food craving and aversion in pregnancy.

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ASSESSMENT OF NURSES KNOWLEDGE ON PAIN ASSESSMENT TOOLS IN SELECTED HOSPITAL IN BENIN CITY EDO STATE, NIGERIA.

Ehwarieme T. A;
Amieghemie F. O.
&
Mokeme, A. W.

ABSTRACT

Nurses and physicians interact with patients and families, they assess and treat their pain. Nurses' knowledge of pain assessment tools can affect the management and treatment options of their patient's pain. The purpose of this study was to assess the knowledge of pain assessment tools among nurses at University of Benin Teaching Hospital. A descriptive cross-sectional survey design was used and a sample size of 306 was selected from a total population using Taro Yamane's formulae. The instrument was a self-structured questionnaire containing closed ended questions. The questionnaire was administered using non-probability purposive sampling. Data obtain were analysed using descriptive statistics and hypothesis were tested using chi-square and t-test. Result shows that majority of the respondent 196(68.3%) have good knowledge of pain assessment tools; 83(28.9%) have average knowledge while the remaining 8(2.8%) have poor knowledge; also the study revealed that males 71(82.6%) are more knowledgeable than females 125(62.2%) in terms of pain assessment tools. The hypothesis tested reveal a significant relationship between level of knowledge and social demographic characteristics such as sex (^{2} = 11.540; p =0.001), age (^{2} = 0.527; p = 0.000), level of education (^{2} = 7.253; p =0.027) and Working experience (^{2}=19.315; p = 0.000). However, there was no difference in the knowledge of male and female nurses (t=1.353; p = 0.177). On the basis of these findings, recommendations were however made that there is need to design and implement a continuous professional education program on pain and its assessment with special focus on method of assessment.

Keyword: Knowledge, Pain assessment tool

INTRODUCTION

Each day, millions of people suffer from pain, whether they are in the hospital, their homes, or assisted living facilities. The experience of pain negatively influences their daily lives. As nurses and physicians interact with patients and families, they assess and treat their pain. Nurses and physician's knowledge and use of pain assessment tools can affect the management and treatment options of their patient's pain. Nurses are major players in pain management, especially in a country with inadequate number of doctors. It is estimated that Nigeria currently has a poor doctor-patient ratio of 1:3500 against the World Health Organization (WHO) standard of 1:600. This is grossly inadequate to cater for over 170 million populations. Maintaining an optimal level of comfort is a universal goal for physicians and nurses because pain is one of the major experiences that can minimize patients' comfort. These patients experience pain from preexisting diseases, invasive procedures, or trauma (Arif & Grap, 2009). Pain assessment is the first step in proper pain relief, an important goal in patients' care (Gelinas et al., 2006). According to the International Association for the Study of Pain (IASP) (2010), pain is a sensory and emotional experience associated with actual or potential damage or described in terms of such damage. It is a sensation that is strictly subjective in nature. Pasero and McAffery (2010) defined pain as whatever the experiencing person says it is, existing whenever the experiencing person says it does. This exemplifies the importance of the patient's perspective and input, which supports

the individual's self-report as the single most reliable indicator of the existence and severity of pain (Pasero, 2009). Pain assessment is crucial if pain management is to be effective. Nurses are in a unique position to assess pain as they have the most contact with the patient and their family in hospital. Pain is multidimensional therefore assessment must include the intensity, location, duration and description, the impact on activity and the factors that may influence the patient perception of pain (bio-psychosocial phenomenon). Failing to assess pain may affect quality of life, and increase the length of stay of hospitalized clients (Zanolin et al., 2007). There are several validated assessment tools in the literature to assess pain; for example, the Numeric Rating Scale (NRS), Visual Analog Scale (VAS), Verbal Descriptor Scale (VDS), and Wong-Baker Faces Scale (WBFS) (ACCN, 2013; Pasero and McCaffery, 2010). For critically ill adults who cannot communicate properly, there are also several validated tools including the, Behavioral Pain Scale (BPS), Critical-Care Pain Observation Tool (CCPO), and Face, Legs, Activity, Cry, and Consolability (FLACC) pain scale (ACCN, 2013). Untreated and undertreated pain has debilitating effects and significantly interferes with the patient's physical, emotional and spiritual well-being, thus can alter the patient's quality of life (Ho et al., 2013; Alexandrina de Jesus & Jacinta, 2013). Quality pain assessment requires nurses to be knowledgeable about pain, the scale/tool, its consequences, and the key principles embedded in the current best evidence (Polomano et al., 2011). Available studies show that a large number (50%) of nurses working in critical care settings such as emergency departments lacks knowledge on key aspects related to pain assessment and its tools (Moceri & Drevdahl, 2014). It was reported that the reasons for the inadequacies in pain management, include inadequate knowledge of pain assessment tool/scale, utilization, monitoring, and pharmacological treatment of pain especially frequently used opioids (Bernardi et al., 2007, 2006, Pediaditaki et al., 2010).

In another study by (Moceri & Drevdahl, 2014) on pain management in selected hospitals in Ilorin, the result showed that nurses were found to be deficient in knowledge of pain assessment, its tools and utilization. Wang & Tsai (2010) reported the analgesic knowledge and pain assessment tools for nurses were lower than 30%, which inferred nurses' ability to integrate pain knowledge into clinical scenarios needed strengthening. There were inconsistencies, as 85.4% of nurse respondents thought patients overestimated their pain, but research has established that nurses underestimate the pain (Rose et al., 2011). Moreover, there is the continued lack of knowledge about pain assessment tools and its documentation among nurses (Gelinas et al., 2004), for example, a study conducted in Quebec reported a pain assessment score was documented for only 3/183 pain episodes in 52 patients (Gelinas et al., 2004). This may have been attributed to a lack of knowledge of pain assessment and its tools.

A descriptive cross-sectional study conducted by Manwere, Chipfuwa, Mukwamba & Chironda (2012) on the knowledge of Registered Nurses toward pain assessment tools in adult medical patients at a provincial hospital in Zimbabwe, shows that registered nurses had inadequate knowledge and the knowledge of pain assessment tools was associated with years of experience in nursing profession. It states that 84% of the respondents failed to give correct tools used for pain assessment. 76% gave incorrect ideal time for pain assessment and 76% failed to identify the type of pain measuring scale.

Similarly, a descriptive exploratory study conducted by Mohamed, Morsy & Ali (2010) on Nurses' knowledge and practices regarding pain assessment tools at Cairo University Hospital Eygpt, using 60 nurses with different

educational categories. The result revealed that the majority of the studied sample (93.3% & 95%) had an unsatisfactory knowledge and practice level respectively. Also, a study conducted by Kituyio, Imbayo, Wambami, Sisenda & Kuremu (2011) aimed at determining the knowledge of pain assessment tools among 200 nurses at Moi Teaching and Referral Hospital in Kenya, the result shows that only 41% of nurses indicated that they had sufficient knowledge of pain assessment tools. In the same study, 21% of all the participants had never had any formal teaching in relation to knowledge of pain assessment tools. In addition, the findings showed that duration of service among all the health care providers (nurses) did not influence the respondents' knowledge of pain assessment tools. More also a descriptive and cross-sectional study conducted by Yava, Cicek, Tosun, Ozcan, Yildiz, Dizer (2010) on knowledge and attitude of nurses about pain management in Turkey using 246 nurses. The result shows that nurses did not did not have adequate knowledge of assessment tools and management.

Furthermore, a descriptive study to assess the knowledge and attitudes of registered nurses towards pain management of adult medical patients carried out in Bindura Provincial Hospital, South Africa by Ancia, Tirivanhu, Maceline and Geldine (2015), 50 consenting registered nurses was drawn using a systematic random sampling method. Forty-two (84%) of the respondents failed to give correct tools used for pain assessment, 38 (76%) gave incorrect ideal time for pain assessment and 39 (76%) failed to identify types of pain measuring scales.

Kizza and Muliira (2016) in a study aimed at describing the knowledge and practices related to pain assessment, and perceived barriers among nurses caring for critically ill - adult patients (CIAP) using a descriptive cross-sectional design among 170 nurses caring for CIAP in Uganda. Results shows that Nurses reported poor pain assessment practices, including lack of use of pain assessment tools and guidelines, which were significantly associated with workload and the low priority set to pain assessment and management

Despite the growing awareness on pain management, patients still suffer from unnecessary pain in many hospitals with the resultant negative effect on physical, emotional and spiritual health and quality of life (Lui & Fong, 2008, Kankkunen et al., 2009a; Kankkunen et al., 2009b). Research related to nurse's knowledge of pain assessment tools in clinical setting remains limited despite the increase awareness of the significance of pain among patients (Mohommed, 2010). Few empirical studies available focus on pain management using pharmacological approach, but there is dearth of studies on nurse's knowledge of pain assessment tool which is the bed rock of pain management especially in this part of the country and in Edo state in particular. This study was conducted to assess nurse's knowledge of pain assessment tool.

Purpose of the Study

The purpose of this study is to assess nurses' knowledge of pain assessment tools in University Benin Teaching Hospital Benin city Nigeria.

Specific objectives

The specific objectives of the proposed study include,

1. To assess the level of knowledge of pain assessment tools among nurses in University of Benin Teaching Hospital Benin city (UBTH).
2. To examine the relationship between level of knowledge of pain assessment tool and socio-demographic characteristics among nurses in UBTH.
3. To find out the differences in the level of knowledge on pain assessment tool

between male and female nurses in UBTH.

Hypothesis

There is no significant relationship between the level of knowledge of nurses on pain assessment tool and socio-demographic characteristic in university of Benin teaching hospital.

METHODOLOGY

Research design: The researcher uses a descriptive cross-sectional survey design.

Research setting; University of Benin Teaching Hospital, (UBTH) Benin City was purposely selected for this study as one of the first generational tertiary health institution in the country. It was established to compliment her sister institution, University of Benin and to provide secondary and tertiary care to them Midwestern region it has facilities for over 900 in patient. University of Benin Teaching Hospital has many departments including nursing service which is divided into seven (7) unit headed by an Assistant Director.

Target population; Target populations of the study were all nurses working in UBTH. According to data from the Director of Nursing Services University of Benin Teaching Hospital the total the number of nurses in UBTH is 928

Sample size; A sample size of 306 was used for this study and this was gotten from the target population of 928 using the Taro Yarmenes formula, with 10% attrition rate.

N= N/1+N(e)2 ; Where n=sample size, N= Target population, e is error (5%)

n= 928/1+928(0.05)2

= 279.51

10% attrition rate = 28

279 + 27= 306

The inclusion criteria**:** All must be registered nurse with the Nursing and midwifery council of Nigeria (NMCN), with more than one year of clinical experience in the clinical setting.

Sampling technique; Non-probability convenient sampling technique was used.

Instrument for data collection; A self-developed questionnaire consisting of two sections A and B. Section A consists of the demographic data of the respondents. Section B comprises knowledge on pain assessment tools.

Validity; Face and content validity of the instrument was done by two other senior clinicians who are experts in pain management in UBTH.

Reliability: Reliability of the instrument was tested in a pilot study with 20 respondents from similar institution; Irua Specialist Teaching Hospital, Ekpoma Edo state using test re-test method. The data was analysed using IBM SPSS version 20. The product moment reliability coefficient (r) was measured as 0.78. This showed that the instrument has a high internal consistency and can be used for the study.

Ethical Consideration; ethical approval for the study was obtained from UBTH Research and Ethical Committee. Administrative permit was also obtained from the Nursing Services Department of UBTH. Consent of the respondents was duly sort for before proceeding and confidentiality was held in high esteem.

Procedure for data collection; the researcher recruited three (3) registered nurses working in the hospital as research assistants. These research assistants were trained on how to administer the questionnaire. The researcher working closely with the research assistants administered the questionnaire to the different wards/units every day except on Sundays and this was done during each of the shift. After administering the questionnaire time will be giving to the respondents to fill, and then collect it immediately. A period of four (4) weeks was

used for the data collection.

Method of data analysis

Data generated was statistically analysed using descriptive statistics; arithmetic means, proportions, standard deviation and percentages. hypotheses were tested using t-test and chi-square at 5% level of significance.

RESULT

Out of a total of 306 copies of questionnaire distributed to the nurses, 287 copies of questionnaire were duly filled and returned, this is about 95.7% response rate. The remaining 4.3% that was not used in this research was as a result of incorrectly filled and multiple response in certain items in the questionnaire.

Table 1: Demographic characteristics of nurses

	Frequency	Percentage
Gender		
Male	86	30.0
Female	201	70.0
Age		
20 - 30yrs	102	35.5
31 - 40yrs	84	29.3
41 - 50yrs	43	15.0
50yrs and above	58	20.2
Mean /SD	37.49±11.31yrs	
Level of Education		
RN	131	45.6
B.Sc	135	47.0
M.Sc	21	7.3
Ph.D	0	0.0
Working Experience		
1 - 5yrs	100	34.8
6 - 10yrs	84	29.3
11 - 15yrs	48	16.7
16yrs and above	55	19.2
Mean (SD)	10.16±7.58yrs	
Have you attended workshop/Seminar on pain management		
Yes	175	61.0
No	112	39.0
Have you read any book or journal about pain?		
Yes	247	86.1
No	40	13.9

As presented in Table 1, the demographic characteristics of the nurses in UBTH. 86(30.0%) of the nurses are males; while 201(70.0%) of the nurses are females. The mean age of the nurse is 37.49±11.31yrs. 102(35.5%) are in the age group 20 - 30yrs; 84(29.3%) are within 31-40yrs; 43(15.0%) are within 41-50yrs; the remaining 58(20.2%) are 50yrs and above. In assess the nurses level of education, 131(45.6%) reported they have RN, 135(47.0%) have B.Sc, 21(7.3%) reported they have M.Sc. None of the nurses reported having a Ph.D. From the 100(34.8%) have worked for 1-5yrs; 84(29.3%) have worked for 6 - 10yrs; 48(16.7%) have been working for 11-15yrs; while the remaining 55(19.2%) are 16yrs and above. The mean years of experience are 10.16±7.58yrs. More than half 175(61.0%) of the nurses have attended workshop/seminar on pain management; while 112(39.0%) have never attended such exposure. Over three-quarter 247(86.1%) of the respondents have read books/journals about pain; while very few 40(13.9%) have not been exposed about pain.

Respondents' level of knowledge on pain assessment tool

Table 2: Knowledge of pain assessment tools

Items questions	Correct (%)	Wrong (%)	Mean±(SD)
Have you heard of pain assessment tools/scale?	287(100.0)	0(0.0)	1.00±0.00
Pain assessment tools/scale are used in measuring the level of pain a patient is experiencing	276(96.2)	11(3.8)	0.96±0.19
One of the following is not a pain assessment tool/scale	203(70.7)	84(29.3)	0.71±0.46
The best pain assessment tool/scale is____	165(57.5)	122(42.5)	0.57±0.50
Which of the following will the nurse not consider when using pain assessment tools?	177(61.7)	110(38.3)	0.62±0.49
The most commonly used one dimensional pain scale is	163(56.8)	124(43.2)	0.57±0.50
Which of the following pain assessment tools is used for children?	175(61.0)	112(39.0)	0.61±0.49
Pain assessment use for children who can talk.	114(39.7)	173(60.3)	0.40±0.49
In managing pain, it is compulsory to first assess the pain using pain assessment tool.	246(85.7)	41(14.3)	0.86±0.35
Pain assessment tool use in management should be documented	256(89.2)	31(10.8)	0.89±0.31

Also, Table 2 shows the nurses' knowledge of pain assessment tools. The table shows that all the nurses have heard of pain assessment tools/scale. 276(96.2%) have correct knowledge that pain assessment tools/scale are used in measuring the level of pain a patient is experiencing. 203(70.7%) were able to correctly identify a pain assessment tool/scale. 165(57.5%) of the nurses correctly got the best pain assessment tool/scale. 177(61.7%) correctly got the answer to what should not be considered when using pain assessment tools. 163(56.8%) correctly answered the most commonly used one dimensional pain scale. 175(61.0%) correctly answered the pain assessment tool suitable for children. 114(397%) of the nurses correctly answered the pain assessment used for children who can talk. 246(85.7%) of the nurses correctly answered if in managing pain, it is compulsory to first assess the pain using pain assessment tool. 256(89.2%) of the nurses correct answered that pain assessment tool used in management should be documented.

Table 2b: Level of Knowledge of Pain assessment tools among nurses in UBTH

Level of knowledge	Scores	Frequency	Percentage
Poor Knowledge	0-3	8	2.8
Average Knowledge	4-6	83	28.9
Good knowledge	7-10	196	68.3
Total		287	100.0

In a similar vain Table 2b shows the level of knowledge of pain assessment tools among nurses in UBTH. It shows that a very good number 196(68.3%) of the nurses have good knowledge of pain assessment tools; 83(28.9%) have average knowledge while the remaining 8(2.8%) have poor knowledge. This shows that the level of knowledge of pain assessment tools among nurses is UBTH is very high.

Table 3: relationship between Exposure and level of Knowledge on pain assessment tool

Have you attended workshop/Seminar on pain management	Knowledge				
	Poor	Average	Good	χ^2	**P**
Yes	2(1.1)	39(22.3)	134(76.6)	15.676	0.000
No	6(5.4)	44(39.3)	62(55.4)		
Have you read any book or journal about pain?					
Yes	6(2.4)	65(26.3)	176(71.3)	7.249	0.027
No	2(5.0)	18(45.0)	20(50.0)		

Table 3 shows that the association of knowledge with workshop/seminar is statistically significant (^{2} = 15.676; p = 0.000). Also, the proportion of level of knowledge increase with exposure to books/journal about pain. The association is statistically significant (^{2} = 7.249; p = 0.027). We therefore reject the null hypothesis which states that there is no significant relationship between exposure and knowledge of pain assessment tools.

Table 4: Independent t-test of gender and knowledge nurses

Grouping variable	N	Mean	SD	t-cal	Sig.
Male	86	7.4186	1.62673	1.353	.177
Female	201	7.0846	2.02677		

Not significant at .05 level; df = 285

Table 4 shows the mean comparison of knowledge score of male and female nurses in the knowledge of PAT. The mean score for male nurse is 7.42±1.63; while that of the female nurses is 7.08±2.03. This shows that the male has higher knowledge of PAT. This difference is mean is however not statistically significant (t=1.353; p = 0.177). We therefore accept the null hypothesis which states that there is no significant difference between male and female nurses in the knowledge of PAT

Table 5: Relationship between socio-demographic characteristics and level of knowledge of Pain

Variables	Poor/Fair	Good	χ^2	p
Gender				
Male	15(17.4)	71(82.6)	11.540	0.001
Female	76(37.8)	125(62.2)		
Age				
20 - 30yrs	49(48.0)	53(52.0)	20.527	0.000
31 - 40yrs	18(21.4)	66(78.6)		
41 - 50yrs	8(18.6)	35(81.4)		
50yrs and above	16(27.6)	42(72.4)		
Level of Education				
RN	51(38.9)	80(61.1)	7.253	0.027
B.Sc	37(27.4)	98(72.6)		
M.Sc	3(14.3)	18(85.7)		
Working Experience				
1 - 5yrs	47(47.0)	53(53.0)	19.315	0.000
6 - 10yrs	25(29.8)	59(70.2)		
11 - 15yrs	9(18.8)	39(81.2)		
16yrs and above	10(18.2)	45(81.8)		

Table shows 5 that Males 71 (82.6%) are more knowledgeable than females 125 (62.2%) in terms of pain assessment tools. This difference in proportion is statistically significant (^{2} = 11.540; p =0.001). It also shows that as age increases, the level of good knowledge of pain assessment tools also increases. The test of association also shows that age is significantly associated (^{2} = 0.527; p = 0.000) with level of knowledge of pain. There was also a significant association (^{2} = 7.253; p =0.027) between level of education and level of knowledge of pain.

The table shows that as level of education increases, there was also increase in the level of good knowledge of pain. Working experience of the nurses shows that nurses with higher working experience have higher level of good knowledge of pain assessment tools than those who have lower working experience. This association is statistically significant (^{2}=19.315; p = 0.000) indicative that working experience is associated with level of knowledge of pain assessment tools.

Table 6: Multivariate logistic regression analysis assessing the relationship between demographic characteristics and level of knowledge of pain assessment tools

	P	OR	95% confidence interval
Gender			
Female (Reference)		1.000	
Male	0.002	2.995	1.49-3.94
Age			
20 - 30yrs (Reference)		1.000	
31 - 40yrs	0.098	1.872	0.89-3.94
41 - 50yrs	0.996	1.003	0.30-3.34
50yrs and above	0.160	0.426	0.13-1.40
Level of Education			
RN (Reference)		1.000	
B.Sc	0.369	1.317	0.72-2.40
M.Sc	0.526	1.558	0.40-6.14
Working Experience			
1 - 5yrs (Reference)		1.000	
6 - 10yrs	0.024	2.333	1.12-4.87
11 - 15yrs	0.081	2.786	0.88-8.79
16yrs and above	0.001	10.054	2.53-39.97

The multivariate logistic regression shows that gender and working experience are the only significant demographic characteristics associated with level of knowledge of pain assessment tools. Males are three times more likely to have good knowledge of pain assessment tools than females (OR = 2.995; C.I. = 1.49 – 3.94). For the working experience, nurses in the profession for 6 – 10yrs are twice more likely to have good knowledge than those 1 – 5yrs in the profession, those that have spent 11 – 15yrs in the progression are three times more likely to have good knowledge than the reference category, while those who have spent 16yrs and above are ten times more likely to have good knowledge than the reference category.

DISCUSSION OF FINDINGS

The research work assessed the knowledge of pain assessment tools among nurses in University of Benin Teaching Hospital, Benin City, Edo State, Nigeria.

Findings from the study show that 86(30.0%) of the nurses are males; while 201(70.0%) of the nurses are females. The mean age of the nurse is 37.49±11.31yrs. 102(35.5%) are in the age group 20 - 30yrs; 84(29.3%) are within 31-40yrs; 43(15.0%) are within 41-50yrs; the remaining 58(20.2%) are 50yrs and above. In assess the nurses level of education, 131(45.6%) reported they have RN, 135(47.0%) have B.Sc, 21(7.3%) reported they have M.Sc in other health related field. None of the nurses reported having a Ph.D. From the working experience part of the demographics, 100(34.8%) have worked for 1-5yrs; 84(29.3%) have worked for 6 - 10yrs;

48(16.7%) have been working for 11-15yrs; while the remaining 55(19.2%) are 16yrs and above. The mean years of experience are 10.16±7.58yrs. More than half 175(61.0%) of the nurses have attended workshop/seminar on pain management; while 112(39.0%) have never attended such exposure. Over three-quarter 247(86.1%) of the respondents have read books/journals about pain; while very few 40(13.9%) have not been exposed about pain. From this study it has been observed that majority of the respondent has been expose to workshop and seminar on pain assessment and management, this percentage is far higher than that reported in the Kenyan study by Kituyi et al., 2011 who reported that only 21% of the nurses have had formal training on pain assessment tools. This development is commendable of the respondent in this index study, however this might not be far from the high level of educational status attained by the respondents in this index study as many of them had bachelor of science degree in addition to master degree, also this may not be unconnected to the status of the hospital as one of the first generation hospital in the country which also houses the famous university of Benin with a college of medical sciences. With these, there are a lot of opportunities for the respondent to go for in-service training and also acquire higher degree as noted in the findings of this study.

The study also reveals that the respondents' level of knowledge on pain assessment tools was high as a very good number 196(68.3%) of the nurses have good knowledge of pain assessment tools; 83(28.9%) have average knowledge while the remaining 8(2.8%) have poor knowledge. Worthy of note from the findings is that 276(96.2%) have correct knowledge that pain assessment tools/scale are used in measuring the level of pain a patient is experiencing. 203(70.7%) were able to correctly identify a pain assessment tool/scale. 165(57.5%) of the nurses correctly got the best pain assessment tool/scale. this is in contrast with the study Manwere, Chipfuwa, Mukwamba & Chironda (2012) on the knowledge of Registered Nurses toward pain assessment tools in adult medical patients at a provincial hospital in Zimbabwe, which shows that registered nurses had inadequate knowledge of pain assessment tools, the same study also noted that 84% of the respondents failed to give correct tools used for pain assessment. 76% gave incorrect ideal time for pain assessment and 76% failed to identify type of pain measuring scale. Similarly, the level of good knowledge of nurses reported in this present study is higher than the 43% reported by Kituyi et al., (2011) in Kenya among clinicians where they reported that poor knowledge of pain assessment tool leads to poor pain management. Furthermore, Tirivanhu, Maceline and Geldine (2015) in Bindura Provincial Hospital South Africa reported that 42(84%) of the respondents failed to give correct tools used for pain assessment, 38 (76%) gave incorrect ideal time for pain assessment and 39 (76%) failed to identify types of pain measuring scales.

Similar result was also reported by Kizza and Muliira (2016) in Uganda, where nurses reported poor pain assessment practices, including lack of use of pain assessment tools and guidelines, however this poor result in Uganda was significantly associated with workload and the low priority set to pain assessment and management. Other studies which differ from the finding of this index study are that of Mohamed Naeem Bard, Morsy& Ali (2010) which reported that the majority of the studied sample (93.3% & 95%) had an unsatisfactory knowledge of pain assessment tool and practices level respectively. Similar finding was also reported in Turkey by Yava, Cicek, Tosun, Ozcan, Yildiz, Dizer (2010) among 246 nurses. The result shows that nurses did not did not have adequate knowledge on

pain assessment tools and management. Also, Kituyio, Imbayo, Wambami, Sisenda & Kuremu (2011), posited that only 41% of nurses indicated that they had sufficient knowledge of pain assessment tools and that 21% of all the participants had never had any formal teaching in relation to knowledge of pain assessment tools. It is pertinent to note that this lack of training in the aforementioned studies may have accounted for the poor knowledge on pain assessment tool recorded in Kenya as against this present study where majority of the participant had under gone courses and training on pain assessment and management. This assertion was validated in this present study as the proportion of level of knowledge increases with attendance to workshop/seminar on pain management as shown that 134(76.6%) of the nurses that attended workshop/seminar on pain management have good knowledge of PAT; 39(22.3%) of them have average knowledge; while only 2(1.1%) of these nurses have poor knowledge of PAT. Association between exposure and level of knowledge is statistically significant (^{2} = 15.676; p = 0.000). The finding also shows that the proportion of level of knowledge increase with exposure to books/journal about pain. The association is statistically significant (^{2} = 7.249; p = 0.027).

However finding from this present study supports that of Niamh (2011) who reported 75.5% level of good knowledge which was based on their self-rating. According to Jablonski & Ersek, (2009), the level of knowledge of pain assessment tool affects the ability to effectively manage pain; which according to them includes reducing pain to a reasonable point and assuring that one's ability to function is to lead a comfortable life is sustained or enhance and nurses tends to have more knowledge as they are mostly close to the patient. Therefore, the high level of knowledge reported by these nurses in the present study shows they may also have better experience and knowledge of pain management.

Furthermore, findings from this study reveals males 71(82.6%) are more knowledgeable than females 125(62.2%) in terms of pain assessment tools. This association in proportion is statistically significant (^{2} = 11.540; p =0.001). It also shows that as age increases, the level of good knowledge of pain assessment tools also increases. The test of association also shows that age is significantly associated (^{2} = 0.527; p = 0.000) with level of knowledge of pain assessment tool. There was also a significant association (^{2} = 7.253; p =0.027) between level of education and level of knowledge of pain assessment tool. It shows that as level of education increases, there was also increase in the level of good knowledge of pain. Working experience of the nurses shows that nurses with higher working experience have higher level of good knowledge of pain assessment tools than those who have lower working experience. This association is statistically significant (^{2}=19.315; p = 0.000) indicative that working experience is associated with level of knowledge of pain assessment tools. This finding agrees with that of Ancia, Tirivanhu, Maceline and Geldine (2015), who reported association between Knowledge of pain assessment tool and management with the age of the respondents (p=.001; p = . 0 0 5) with those of older (40 years and above) scoring high on the knowledge of pain assessment tool/scale, same study also find association between knowledge of pain management and one's years of experience in the nursing profession (p=.003; p = . 0 0 5). Furthermore, the study shows the mean score for male nurse is 7.42±1.63; while that of the female nurses is 7.08±2.03. This shows that the male have higher knowledge of PAT. This difference in mean is however not statistically significant (t=1.353; p = 0.177). This finding however, does not corroborate the finding of ***Khalid*** *and*

Majed (2015) who found significant difference between the mean knowledge score of male and female health care providers on knowledge of pain assessment tool. The findings of this present study has further strengthen the relevance and need for continuous education and training among health care professional especially nurses who are the frontline health care professionals.

Implication for Nursing

Management of pain is a critical issue for patients; and nurses are the first point of call as one of the core function and responsibility of the nurse is to ensure the comfort of the patient by alleviating his/her pain. For this to be possible in this contemporary time, the nurses has to be versatile in her knowledge of pain management and skill, however this will not be possible if the nurses did not have adequate knowledge of pain assessment tool, as the panacea to effective pain management is a good knowledge of pain assessment tool. Without the pain assessment tool the nurse will be deficient in his /her assessment which can lead to wrong and inadequate pain management leaving the patient in perpetual pain. Therefore, there is need for more proactive action from all stalk holders in health sector especially nursing profession to continuously roll out programmes aim at updating and training of nurses on the latest skill and tools in pain assessment and management.

Conclusion and Recommendations

This study provided important information about the knowledge of pain assessment tools among nurses in University of Benin Teaching Hospital, Benin City, Edo State, Nigeria. The results demonstrated that majority of the respondents have very good knowledge of PAT. However, there is need for more improvement.

Based on the findings from this study, the following are recommended:

There is need to design and implement a continuous professional education program on pain and its assessment with special focus on methods of assessment, guidelines, how to use assessment tools, protocols and charts for proper documentation for all patients

In addition, introduction of tools, charts and protocols suitable in the settings is equally important. Implementation of these recommendations will require a multifaceted approach with combined input of the hospital and nurse leaders nursing and midwifery council of Nigeria, practicing nurses and nurse-educators in conjunction with Ministry of Health.

To ensure proper and continued use of tools, protocols and charts, there is need for a supportive environment which can be attained through improving staffing, provision of support supervision by experienced and skilled nurses and presence of a dedicated pain management team to provide leadership on prioritizing of pain and its management, and champion the changes needed.

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elmagla.egy2010@yahoo.com

KNOWLEDGE AND USE OF ANTI-SHOCK GARMENT AMONG MIDWIVES IN CENTRAL HOSPITAL, BENIN CITY, EDO STATE.

Enuku, C. A.
&
Adeyemo, F. O.

ABSTRACT

This study assessed midwives' knowledge and use of Non-Pneumatic Anti-Shock Garment in management of postpartum hemorrhage. A descriptive design was adopted for this study. The population are registered midwives working in Central hospital Benin City. Taro Yameh's formula was used to determine the sample size of 150 participants and a simple random sampling technique was used to select the respondents that took part in the study. A self- developed structured questionnaire was given to experts for face validation, while the reliability was determined through internally consistency and reliable with a Cronbach's alpha value of 0.799. Data was analyzed and presented in percentages, graphs and inferential statistics using the chi square (χ^2) test at 95% confidence interval. The result revealed that majority of the respondents (93.3%) claimed that anti-shock garments are available in Central hospital Benin City. Also, the ***result showed that more than half of the respondent****s were knowledgeable about use of NASG in preventing post-partum Hemorrhage. Out of the 150 respondents used for this study, 68.6% demonstrated knowledge on application of NASG and similar trend is observed among respondents on knowledge on other methods of prevention of PPH. Further, the result revealed that only 16.6% reported that they use NASG 11 – 20times, Lastly, this study showed that there is a significant association between knowledge of NASG and its use which is at P<0.05. In conclusion, the study showed that the Midwives knowledge of NASG are good but its use is p****oor.***

Keywords: Knowledge, Use, Anti-Shock Garment, Midwives

INTRODUCTION

Of the 287,000 maternal deaths occurring annually, over 99% happen in low – income countries (WHO, UNICEF, UNFPA & WORLD BANK, 2012) Postpartum hemorrhage (PPH) is one of the leading causes of maternal mortality, accounting for one-quarter of global maternal deaths (WHO,2012) With great progress being made to reduce maternal mortality globally, PPH still remains a leading killer of women of reproductive age. A significant number of maternal morbidities and mortalities related to postpartum hemorrhage (PPH) can be prevented with the implementation of active management of the third stage of labour (AMSTL), particularly the administration of uterotonics, such as injection oxytocin or oral misoprostol within 5minutes of delivering (WHO 2012, FIGO 2012, AIFIREVIC et al 2007). Despite these measures women still die of postpartum hemorrhage. Adesokan (2010) defined postpartum hemorrhage as 'excessive bleeding from the genital tract at any time following the birth of the baby up to 6 weeks after delivery which is in excess of 500mls or any amount sufficient enough to cause cardiovascular collapse which is detriment to the life of the woman.' Even though, PPH is a killer, it is still one of the obstetric emergencies with proven effective intervention. Such intervention is the use of Lightweight, neoprene covering that resembles the bottom half of a wetsuit which is referred to as 'Non-Pneumatic anti-shock Garment'(NASG) otherwise known as 'life wrap'

The garment has six segments that fasten with Velcro around the woman's legs, pelvis, and abdomen. The abdominal segment incorporates

a small foam ball that applies pressure to the uterus. The NASG works by decreasing pelvic blood flow (Hauswald, Williamson, Baty, Kerr, & Edgar-Mied, 2010), in particular, by increasing the resistive index of the pelvic blood vessels (hypogastric and uterine arteries) (Lester, Stenson, Meyer, Morris, Vargas, & Miller, 2011). The NASG can be applied by any healthcare staff after a brief training, and it results in the reversal of hypovolemic shock and the stabilization of the patient for many hours, during transport, examinations, and delays in receiving definitive treatments such as blood, procedures, and surgeries. The NASG is applied as soon as signs of hypovolemic shock are identified. Ifintravenous fluids are not already running, veins are easier to find after placement of the garment. The NASG is not replacement for standard care; shock/hemorrhage protocols should be followed in addition to NASG application. The NASG is left in place for vaginal procedures; for abdominal surgery, only the abdominal and pelvic panels are opened.

WHO (2012) explained that postpartum hemorrhage still a leading cause of death with 25%. Balachandram, (2005), Bias, Eskes, Pel, Bonsel and Bleker (2004) and Magann, Evan, Flutechnison, Collins, Lanneau, G. and Mirrison, (2005) posited that a woman suffering from PPH can die within two hours unless she receives immediate and prompt medical care. WHO further discussed that despite the introduction of the first aid device in Nigeria in 2008, there has not been a significant reduction in maternal morbidity and mortality as Nigeria and India at the country level accounted for a third of the global maternal death with India at 19% (56,000) and Nigeria14% (40,000). Onasoga et al (2015), said that midwives are the first point of contact for most women during pregnancy and labour and all women are at risk of PPH, therefore midwives' knowledge and use of the NASG is very important in management of postpartum hemorrhage in reducing maternal death. Ijaya, Aboyeji, and Abubakar (2013) explained that PPH is the most common cause of obstetric haemorrhage and one of the five leading causes of maternal mortality in world, Nigeria inclusive. Lertakyamanee. Chinachoti, Tritrakam, Muangkasem, Somboonnan, Onda and Kolatat, (2009) and Anya and Anya (2009) observe that current treatment protocols for PPH and hypovolemic shock include the administration of uterotonics, bi-manual massage of the uterus, manual removal of placenta, repair of lacerations, blood transfusion and surgery. There are many emergency referral cases to Central hospital, Benin on daily basis from health facilities within the Benin City. Of importance is the several numbers of post-partum hemorrhage cases that could be referred to the hospital from private, state and local health facilities on weekly basis. Cases that are lucky to get to the hospital alive too may die in the process of identifying the source of bleeding if there is no NASG to prevent further bleeding during the process. It is a known fact that NASG can be applied by anyone that has received training for it; and not necessary midwives or only health personnel. Hence this study was to assess midwives' knowledge and use of Non-Pneumatic Anti-Shock Garment in management of postpartum hemorrhage.

Objective of the study

1. To identify if Anti-shock garments are available in Central Hospital
2. To assess the knowledge of the functions of Anti-shock garment among midwives in Central Hospital, Benin City, Edo State on Anti-shock garments.
3. To determine the use of Anti-shock garment among the midwives Central Hospital, Benin City, Edo State.

Research questions

1. Are anti-shock garments available in Central Hospital, Benin City?
2. What is the knowledge of midwives about the functions of anti -shock garments in Central Hospital, Benin City?
3. Do midwives in Central Hospital, Benin City use anti-shock garments?

Hypothesis

There is no significant relationship between the knowledge of anti-shock garment and its use as a method of managing obstetric hemorrhage.

METHODOLOGY

The study adopted the descriptive research design. The study was done in Central Hospital situated along Sapele Road, Benin City Edo State. The hospital is a Government owned hospital. The hospital was created in 1902 by the British government before independence with head quarter at Ibadan. In 1963, Midwest State was created with the headquarter in Benin City. At this point in time, it was under the Ministry of Health till 1970. In 1970, Hospitals Management Board was established by an edit by then Military under Ogbemudia's regime. Edo State Hospitals Management Board was the first to be established in Nigeria. Central Hospital started with the name General hospital in the early seventies and was changed to Specialist Hospital which now metamorphosed to Central Hospital in the eighties. It is made up of various departments that render specialized care to patients with varied problems. It is in charge of curative health care and training of personnel. It has a Staff strength of seven hundred and twenty working in twenty-six departments. There are thirty-two units with four hundred and twenty bed spaces and two hundred and seventy-one midwives working in these units of the hospital.

Population: The target populations for this study are 271 registered midwives working in Central hospital Benin City.

Sample Size Determination and Sampling Technique: Taro Yameh's formula was used to determine the sample size of 150 participants and a simple random sampling technique was used to select the respondents that took part in the study

Instrument for data collection: A self-developed structured questionnaire which consist of 4 sections; namely A. Socio-Demographic data of respondents, B. Knowledge of Anti-shock,

C. Use of Ant-shock, D. Factors influencing the use of Anti-shock

Scoring of knowledge: A total of five questions (questions 9, 10, 11, 13, 15) were used to assess the respondents' knowledge. Minimum and maximum scores were calculated as 0 and 18. The scores were converted to percentages and graded as follows: scores below 50% were graded as having poor knowledge while those 50.0% and above were graded as having good knowledge.

Validity and Reliability: Experts were given for face validation, while the reliability was determined through internal consistency and reliable with a Cronbach's alpha value of 0.799.

Method of Data Analysis: The method for analyzing data collected was descriptive which involved the use of percentages, graphs and inferential statistics using the chi square (χ^2) test. Level of significance was set at 5% [0.05] such that significant associations were established when $p < 0.05$.

Ethical Consideration: Ethical clearance was obtained from the Director of Nursing Services. Inform consent was obtained from respondents before participation.

RESULTS

As presented in Table 1, 51 (34.0%) of the respondents were aged 32 – 38 years, followed by 42 (28.0%) aged 39 – 45 years and 33 (22.0%) aged 25 – 31 years. More than two thirds 102 (68.0%) were married while 30 (20.0%) were single. Most 126 (84.0%) were Christians while 24 (16.0%) were Muslims. Seventy-two (48.0%) of the respondents were Bini, 29 (19.3%) were Esan and 14 (9.3%) were Yoruba. The cadre was distributed with 50 (33.3%) being NO II, 30 (20.0%) NO I, 15 (10.0%) SNOs and 9 (6.0%) PNOs. ACNO 28(18.7%), CNO 18(12.0%)

TABLE 1: Socio-demographic characteristics of respondents

Variable	Frequency (n = 150)	Percent
Age (years)		
25 – 31	33	22.0
32 – 38	51	34.0
39 – 45	42	28.0
46 – 52	24	16.0
Sex		
Male	21	14.0
Female	129	86.0
Marital status		
Single	30	20.0
Married	102	68.0
Separated	6	4.0
Divorced	12	8.0
Religion		
Christianity	126	84.0
Islam	24	16.0
Ethnic group		
Bini	72	48.0
Esan	29	19.3
Yoruba	14	9.3
Igbo	12	8.0
Urhobo	9	6.0
Delta igbo	5	3.3
Etsako	3	2.0
Hausa	2	1.3
Others*	4	2.7
Cadre		
NO II	50	33.3
NO I	30	20.0
SNO	15	10.0
PNO	9	6.0
ACNO	28	18.7
CNO	18	12.0

Mean age = 41.7 ± 13.9 years *Others* included Afemai, Ora, Owan and Isoko*

Table 2: Distribution of respondents on availability of anti-shock garment

	Yes	No
Anti-shock garment is availability in our hospital?	140 (93.3)	10 (6.7) *

*percentages are written in parenthesis.

As presented in Table 2, out of the 150 respondents studied, 93.3% claimed that anti-shock garments are available in their hospital while only a very small proportion 6.7% responded that anti-shock garment is not available in their hospital. This could be explained by two factors; there were not exposed to the garment while undergoing their training and maybe because they have not work in hospital unit were anti-shock garments are commonly used.

Table 3**:** Respondents' knowledge about the function of NASG,

	Yes	**No**
Knowledge on the use of NASG to prevent Post Partum Haemorrhage (PPH)	95 (63.3)	55 (36.6) *
Knowledge on the application of NASG	103 (68.6)	47 (31.3)
Knowledge on other methods of prevention of PPH	117 (78.0)	33 (22.0)

*percentages are written in parenthesis

Three areas of knowledge about the function of NASG was assessed and presented in Table 3. As presented in Table 3, more than half of the respondents 63.3% were knowledgeable about use of NASG to prevent post partum Haemorrhage while only 36.6% were not knowledgeable in this area. Out of the 150 respondents 68.6% demonstrated knowledge on application of NASG while 31.3% did not. Similar trend is observed among respondents on knowledge on other methods of prevention of PPH 78.0% responded yes while only 22.0% responded no.

TABLE 4: Frequency of times of application of NASG

Frequency of use per annum	Frequency	Percent (%)
Once	46	30.6
2 – 5 times	49	32.6
5 – 10 times	30	20.0
11 – 20 times	25	16.6
Total	150	100.0

As presented in Table 4, 32.6% reported that they use NASG 2-5times per annum, 30.6% reported that they use NASG once per annum, 20.0% reported that they use NASG 5 – 10times per annum while only 16.6% reported that they use NASG 11 – 20time**s.**

Test of Hypothesis

There is no significant relationship between the knowledge of Anti-shock garment and its use as a method of managing obstetric hemorrhage.

Table 5: Knowledge of NASG and its use by respondents

Knowledge of NASG	Ever used NASG		
	Yes	No	Total
	n (%)	n (%)	
Good	59 (54.1)	50 (45.9)	109 (100.0)
Poor	4 (9.8)	37 (90.2)	41 (100.0)
Total	63 (42.0)	87 (58.0)	150 (100.0)

Using the formula $\chi^2 = \Sigma(O - E)^2/E$

O	E	O – E	$(O - E)^2$	$(O - E)^2/E$
59	45.8	13.2	174.2	3.8
50	63.2	13.2	174.2	2.8
4	17.2	13.2	174.2	10.1
37	23.8	13.2	174.2	7.3
Total 150				

χ^2 = 24.000. The calculated chi square was 24.000.

Computation of the degree of freedom (df)

Df = (R - 1) (C - 1). R represents the number of rows in the chi-square table above minus one while C represents the number of columns in the chi-square table minus one.

(2 - 1) (2 - 1) = 1. At 5% significance level for the degree of freedom the critical value of chi square is 3.841. Since the calculated chi-square value of 24.000 is more than the chi-square critical value of 3.841, we simply reject the null hypothesis (H_{o1}) of no significant relationship between the knowledge of NASG and its use as a method of managing obstetric haemorrhage.

DISCUSSION

Our study was to assess midwives' knowledge and use of Non- Pneumatic Anti-Shock Garment in management of postpartum hemorrhage. One hundred and fifty [150] midwives participated the study. Majority of the participants were within the ages of 32 – 38 years and 39 – 45 years.

More than two thirds of the participants were married while 20.0% were single and most of them were Christians. The cadre of the participants were mostly 33% NO II, 20%, 19% PNOs. ACNO and 12% CNO

Our study revealed that majority of the respondents (93.3%) claimed that anti-shock garments are available in Central hospital Benin City.In the three areas of knowledge about the function of NASG assessed, result showed that more than half of the respondents were knowledgeable about use of NASG to prevent post-partum Hemorrhage. Out of the 150 respondents used for this study, 68.6% demonstrated knowledge on application of NASG and similar trend is observed among respondents on knowledge on other methods of prevention of PPH. This was consistent with a related study done by Onasoga, Awhanaa, Amiegheme (2010) in Bayelsa State in which 73.9% of their respondents were know legible about the use of anti-shock garment. This also support the findings of Olowokere, Adekeye, Ogunfowokan, Olagunju and Irinoye (2013).

Our result revealed that only 16.6% reported that they use NASG 11 – 20times, this means that many of the midwives have either applied NASG on PPH woman on few occasions or had never applied it. This is not encouraging because knowledge is not enough but its use is paramount in reduction of PPH and maternal

mortality. Supporting our result, is the report of John and Catherine (2013) which affirmed lack of adequate training and underutilization of the anti-shock garment in most developing countries of the globe. Our result is inconsistent with the findings of Miller *et al* (2007) because, NASG is in common use by emergency medical teams in the United State to stabilize patients before and during transfer to the hospital.

Lastly, this study showed that there is a significant association between knowledge of NASG and its use which is at $P<0.05$. Though there is high level knowledge NASG but its use is poor

Conclusion and Recommendations

The study showed that the Midwives knowledge of NASG are good but its use is poor. The severity of the obstetric haemorrhage was the most popular factor influencing the use of Anti-shock garment among the midwives in Central Hospital, Edo state. It's unavailability also militates against its use in the hospital.

The following recommendations were made based on the findings from this study

There is urgent need for training and retraining of personnel of private, state and local government health facilities, as well as the community birth attendants on the application of NASG. This will assist in stabilizing the bleeding woman and preventing complications as well as maternal death before getting the woman to the referring hospital.

In-service-education unit of Central hospital, Benin should organize on regular basis workshop on the use of NASG for all its health personnel; and the hospital authority should make NASG abundantly available for the use of the personnel.

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MENTORING IN NURSING: STRATEGY FOR PROFESSIONAL DEVELOPMENT

Oluwatosin, O. A.
&
Edward M. I.

ABSTRACT

Mentoring is an important aspect of Nursing as it is a professional means of passing knowledge, skills, behaviors and values to a less experienced individual. However, this aspect is often neglected as it is time consuming and tasking. It is therefore recommended that there should be a renewed orientation to thorough mentoring to enhance quality nursing practice.

INTRODUCTION

Nursing encompasses autonomous and collaborative care of individuals of all ages, families, groups and communities, sick or well and in all settings. Nursing includes the promotion of health, prevention of illness, and the care of ill, disabled and dying people. Advocacy, promotion of a safe environment, research, participation in shaping health policy and in patient and health systems management, and education are also key nursing roles (ICN, 2002). Within the nursing profession, mentoring is described as a valued relationship and a nurturing process in which an experienced nurse supports the professional growth and career development of another. Mentoring another nurse is a professional means of passing along knowledge, skills, behaviors and values to a less experienced individual who is often referred to as the "mentee" or "protégé" (NLN, 2006).

Overview of Mentoring

The concept of mentoring is not new. It dates back to the ancient Greeks. Young men who demonstrated great leadership potential were mentored by Socrates. During the Middle Ages Master craftsmen would accept promising students as apprentices, guiding them through all aspects of the craft. Mentoring is a process involving informal transmission of knowledge and psychosocial support that is relevant to work, career, or professional development. It entails informal/formal communication between a person who is perceived to have greater relevant knowledge, wisdom, or experience (the mentor) and a person who is perceived to have less (the mentee) (*Idemudia, 2013).* Mentoring is a life educational model based on the principle of a more experienced mentor guiding his or her student, often called a mentee. A mentor may provide spiritual, emotional or financial counseling for their proteges. It is more than a traditional teacher/student relationship (Pollick and Foster, 2017),

Mentoring entails the formation of a relationship or partnership between the mentor and the mentee. It is a process in which a person who is experienced, wise, and trusted guides an inexperienced individual. The mentor acts as a "role model and advocate to pass on life experiences and knowledge. Ali and Panther (2008) stress that mentoring is considered an important role that "every nurse has to assume". According to Canadian Nurses Association (2004) the act of mentoring leads to an ongoing relationship in all domains of nursing practice, administration, education, research, and direct care. Mentoring is a life educational model

based on the principle of a more experienced mentor guiding his or her student, often called a mentee. It is more than a traditional teacher/student relationship.

A mentoring relationship can occur at any phase of an individual's career, whether a new graduate, an experienced nurse assuming a nurse manager or clinical nurse specialist position, or an established clinician taking on a leadership position as the chairperson of a shared governance council (Hnatiuk, 2013). The relationship is a non-reporting one and replaces none of the organizational structures in place. It is additional to other forms of assistance, such as developmental assignments, classroom instruction, on-the-job training, and coaching.

Mentor was an Ithacan noble in Homer's *Odyssey*. A wise counselor to his friend Ulysses. Mentor was entrusted with the care, education, and protection of Ulysses' son, Telemachus (Johnson, 2002). In nursing, mentor is a talented nurse who is willing to share expertise and organizational insight in order to prepare the mentee for greater performance, productivity or achievement in the future (Henk, 2005). A good mentor has leadership experience, is available and responsive, believes in the capabilities of the mentee, has vision, knows how to access professional networks and seeks to enhance political awareness (Escobio, 2005). The mentee is a nurse with a desire to learn, a capacity to accept constructive feedback and coaching, an ability to identify personal and professional career goals, and a willingness to take risks. The mentee exhibits a desire for job success and seeks challenging assignments and new responsibilities. The mentee actively seeks the advice and counsel of an experienced nurse mentor.

In mentoring, trust must exist between both mentor and mentee. Each partner must be willing to devote time and energy to the mentoring process. A foundation of trust between both partners is the key to a successful mentor-mentee relationship.

Perspectives of mentoring in Nursing

Opportunities for nurse mentoring can be found in all areas of nursing: practice, education, administration and research. The clinical practice setting provides an excellent arena for an experienced nurse to share nursing insights with a novice nurse who is motivated to move forward quickly along the continuum from inexperienced novice to expert nurse. Mentoring is a relationship between two nurses based on a mutual desire for more developmental growth in nursing c**areer**.

Clinical experience plays an important role in developing nursing students' learning and in order to enhance clinical experience, it is important to provide students with appropriate supports and guidance. Student nurses benefit from being taught by a trained mentor and to receive practice based teaching relevant to their specific needs (Tichelaar, Riklikiene, Holland, Pokorna, Antohe, Nagy, Warne, & Saarikoski, 2013). When effective, the mentoring process has the ability to produce nurse educators who are committed, caring, well-qualified professionals dedicated to the development of the future generation of nurses and the advancement of the profession of nurses (Hubbard et al., 2010).Mentoring offers students of nursing the opportunity to develop into caring professionals through direct involvement with clinical practice in partnership with one's mentor, thereby reducing the theory practice gap (*Theobald, 2002*).

Model for the Practice of Mentoring

According to Wagner and Seymour (2007) in a Model of Caring Mentorship for Nursing, mentoring is a multidimensional relationship that energizes personal and professional growth

mentoring is about relationship and relationship building. It requires knowing self and committing self to another. The model represents two interacting elements. One element is the internal reflective work of knowing caring self (carer) on cognitive, affective, and transformative levels in relationship with others (the cared-for). The second element is the resulting actions of the carer that emanate from reflective levels, identified as task oriented, interactive, and transformative levels of caring for another. Each level is nonexclusive but rather a continuum of caring capacity.

The basic model of Development of Caring Nurse-Self is the basis for the more complex Caring Mentorship Model (Wagner and Seymour, 2007) which illustrates two people interacting. As the mentor (carer) and mentee (cared-for) begin to form their relationship, they come together as individuals with their own stored experiences, reflective questioning, and their capacity to grow in a mentoring relationship. This relationship needs nurturing and a reflective approach to mature. If the mentoring stays at the cognitive, task-oriented level for either one, there will be little to build connection. The potential of the caring relationship can be limited if the carer is stalled at the two lower levels. Each person enters the relationship with self and others with stored experiences from the past that shape present perspective and interactions. Reflection increases understanding and, thus, one's responsive caring for another.

There is a need to make the transition into a more affective realm of deeper personal understanding that leads to asking, "What am I feeling? Who am I? What relationship do I see?" Such reflective questions allow one to examine the relationship between self and another. This increase understanding of a more interactive caring capability where one sees self and other as distinctive individuals with some relational connection, then this brings two individuals in an interactive mentoring relationship with surface connections (Wagner and Seymour, 2007).

Furthermore, (Wagner and Seymour, 2007) indicated that in a transformative mentoring relationship with shared connections, two people's paths crossing and, in the meeting, an "interaction" occurs that acknowledges human presence and importance. There is a connection, an opportunity for caring exchange of self and life story, which can make a difference for the individuals in their separate ongoing journey, but the relationship does not reach its fullest potential. It does require a sense of self, of one's impact on another, and a willing presence and commitment to enter the relationship in a sharing and meaningful way creates an environment of respect, mutuality, and openness, inviting each to share perspectives and to learn from each other. There is a desire to meet again and continue the relationship. A more effective approach was tutoring the mentors to explore reflective activities with mentees individually.

True mentoring is aimed at the mentee's development not on solving specific problems. Increasing the students' motivation to participate, honoring mutual requests for mentor–mentee pairing, and adding the mentors' creative energy and peer support all increased commitment and relationship building, personal presence and shared self-space increased. Rather than focusing on specific problems, create a being together situation where the mentors and mentees shared time together in activities such as inviting the mentee to attend a conference with the mentor; checking in with a mentee on a clinical day; or just taking a walk. Each of these allows a more natural emergence of trust, respect, meaningful relationship, and problem sharing. The interspersed e-mails and telephone calls sustained the connection because each had entered the other's world in ways that had meaning (Wagner and Seymour, 2007).

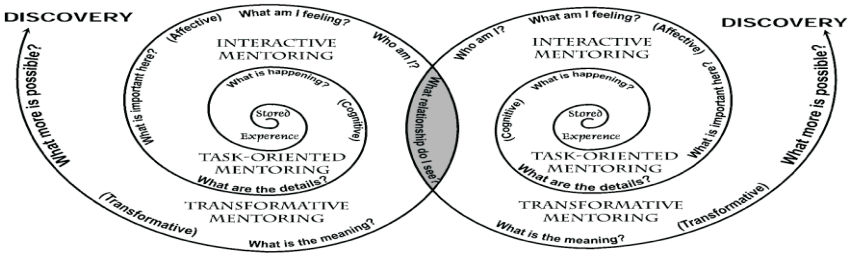
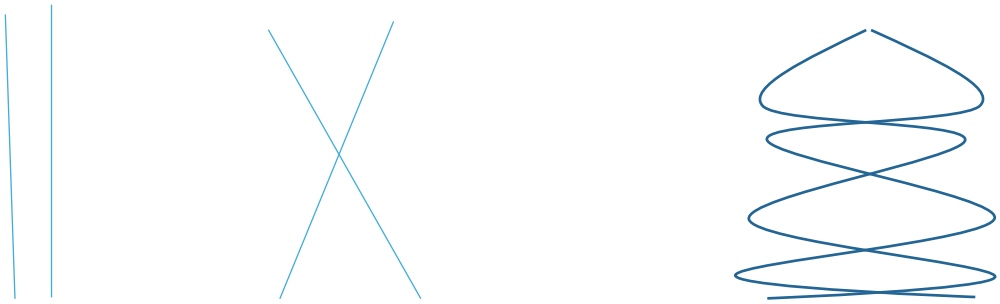


Fig. 1 Caring Mentorship Model (Wagner, 2005b) representing two individuals in a transformative mentoring relationship with shared connections



Separate stories, No relationship

interactive stories, but no binding relationship

co-creating stories, connection dynamic relationship

Fig. 2: Symbolic representation (from left to right) of task -oriented relationship, interactive relationship, and transformative relationship in caring for another (Wagner, 1998)

Features of mentoring

The following are features of mentoring:

i. Mentoring involves a voluntary and mutually beneficial relationship
ii. Purposeful activities that facilitate career development, personal growth, caring, empowerment, and nurturance that is integral to nursing practice and leadership
iii. The relationship that is based on mutual respect and common goals
iv. The process that is developed over time (Hodgson & Scanlan, 2013)

Phases of mentoring

According to Mentorship Resource Centre (2015), Mentorship is a learning relationship between two or more people, and it typically follows four phases:

Preparing

Negotiating

Enabling growth

Coming to closure

Preparing: This is a discovery phase when you find out if mentorship is right for you. The preparing phase is the discovery stage of the mentoring relationship. Discover your own personal motivation and readiness to be a mentor. Get to know your mentee and build rapport. Create a context for the learning partnership you and your mentee will build together

Negotiating: The business phase, when you help your mentee set learning goals. The negotiating phase is the business stage of the

mentoring relationship. Support your mentee by helping them create learning goals. Create a learning agreement with your mentee, to cover shared responsibilities and ground rules. Establish boundaries with your mentee

Enabling growth: This is working phase, when you support and provide feedback to your mentee. This phase is the work stage of the mentoring relationship – this is where mentors will have the most contact with their mentees. Support your mentee's learning and challenge their assumptions through one-on-one mentoring or mentor-led group work. Provide useful feedback to them to help them achieve their desired learning goals

Coming to closure: This is assessment stage, where you assess the value of your mentoring relationship and move forward. The coming to closure phase is the reflection stage of the mentoring relationship. Assess the value of your mentoring partnership. Identify areas of growth and learning. Celebrate the achievement of learning outcomes (Mentorship Resource Centre 2015).

Criteria for Matching Mentee/ Mentor

Accessibility, Approachability, Career interests, Gender sensitivity, Subject matter/experience, age, language, academic standing, personality, assumptions of mentoring, the mentor and mentee have something in common, there is mutual agreement to work together, there is mutual trust, there is clarity of purpose and both of them have the same focus

Mentoring strategies for professional growth

The focus of mentoring is to enhance individual development and professional growth. The mentor should employ the following strategies to achieve the aforementioned:

Motivate: A mentor should be able to motivate students by being enthusiastic about what he or she does. Motivating mentees involves actively engaging them in academic discourses on wide variety of issues of interest.

Cultural sensitivity: A good mentor should be culturally sensitive. Students from diverse background come with different stereotypes and attitudes which may affect mentoring relationship. A good mentor should not make sensitive remarks about a particular race or ethnic remarks that will affect mentee's academic performance or bring about a layback attitude.

Knowledge: The mentor must have very good knowledge of the subject matter and be able to communicate that knowledge to be effective.

Empower and encourage: The mentor should be able to take mentees to the next level of educational achievement. The reason for mentorship is to recreate oneself in another person. In other words, the mentor should be able to clone him/herself in the mentee.

Nurture self-confidence: A good mentor should inculcate and nurture self-confidence in mentees. Self-confidence should be nurtured in students through active engagements in research, clinical work, seminar presentations and other general academic activities.

Teaching by reflection: A good mentor should be able to deliver his or her services though a positive reflection, that is, “doing what you preach” and not otherwise. The mentor's background and life experiences have additional advantages to a successful mentorship (*Idemudia, 2013)*

Characteristics of a good mentor

A good mentor possesses the following qualities:

Knowledgeable and skilful: A good mentor is knowledgeable, skilful and willing to share skills, knowledge and expertise with mentee.

Role Model: Mentor acts as a positive role model. A good mentor exhibits the personal attributes it takes to be successful in the field. By showing the mentee what it takes to be productive and successful, they are demonstrating the specific behaviors and actions required to succeed in the field.

Personal interest in the mentoring relationship: Good mentors do not take their responsibility as a mentor lightly. They feel invested in the success of the mentee. Usually this requires someone who is knowledgeable, compassionate and possesses the attributes of a good teacher or trainer with excellent communication skills.

Exhibits enthusiasm in the field: A mentor who does not exhibit enthusiasm about his/her job will ultimately not make a good mentor. Enthusiasm is catching and new employees want to feel as if their job has meaning and the potential to create a good life.

Expertise in the mentee's area of need: They continually read professional journals and may even write articles on subjects where they have developed some expertise. They are excited to share their knowledge with new people entering the field.

Academic Giant"/Clinical Guru: Values ongoing learning and growth in the field. Mentors are in a position to illustrate how the field is growing and changing and that even after many years there are still new things to learn. Good mentors are committed and are open to experimenting and learning practices that are new to the field. They may choose to teach or attend classes to further develop their knowledge and skills.

Respected Senior Person Colleague: Ideally mentees look up to their mentors and can see themselves filling the mentor's role in the future. Mentees want to follow someone who is well respected by colleagues and co-workers and whose contribution in the field is appreciated.

Focused: A good mentor continually sets and meets ongoing personal and professional goals. Sets a good example by showing how his/her personal habits as reflected by personal and professional goals and overall personal success.

Respect the mentee: A good mentor values the opinions and initiatives of others. A good mentor appreciates the ongoing effort of the mentee and empowers him/her through positive feedback and reinforcement.

Motivator: Motivates others by setting a good example.

Benefits of Mentoring

Benefits to Mentee

Clarity of issues: issues related to life and career are understood better and handled with greater clarity and confidence.

New Insight into the profession: New insight is gained on the culture of the profession and her workplace. This leads to development of different perspective and cultural values about the profession and workplace.

Career satisfaction: Mentoring enhances mentee motivation about the choice of career and this on the long run leads to greater likelihood of job satisfaction, career success and professional development.

Enhanced self-esteem: The newly empowered nurse has high self-esteem which enhances ability to mentor another mentee and further professional development as the cycle continues.

Development of leadership skills: The experience of mentoring allows the mentee to gain insight into and develop leadership skills (Hodgson & Scanlan, 2013).

Benefits to Mentor

There are clearly a range of personal benefits that have the potential to arise from the experience of mentoring students. These include:

Enhances leadership and communication skills: The mentor is able to develop leadership and good communication skills

Psychological satisfaction: Personal satisfaction from aiding and abetting the developmental learning of another. This increases job satisfaction which further motivates mentor to continue with the job leading to retention.

Lasting legacy on health care: Mentoring enhances development of skilled nurses who are motivated to provide quality nursing care. This creates lasting legacy/ impact on the health care.

Self-development through reflective practice: As mentor promotes mentee professional development, the mentor is also becoming more grounded in the profession as further researches are made to pass down to the mentee through evidence based and reflective practices.

Expansion of a repertoire of professional skills: Mentoring enables the mentor to have expanded knowledge on skills such as teaching, facilitation, assessment and feedback. This further helps in career enhancement.

Handing over Nursing legacy to the young nurses: Always have young vibrant people around when his/her strength is becoming weary

Benefits to the Profession

Retention of quality nurses: Through mentoring job satisfaction and career development is promoted this in turn leads to retention of quality nurses

Sustainability of culture and values of the system: Retained nurses have interest of the profession in mind hence they are able to sustain the culture and values of the system they find themselves.

Quality care outcome: Quality care outcome is assured as tested and trusted professionals are developed and retained in the profession.

Better research output: As mentor and mentee are developing themselves, more research output are produced in field of nursing and related fields for evidence based practices.

Empower Profession: Talents and skills being transferred from nursing leaders contributes to the development and growth of the profession.

Challenges of Mentoring

Time consuming and tasking: Mentoring is time consuming as mentor has an assigned task to be performed. The mentee on the other hand is just developing, the mentor cannot move at the expected pace so as to be able to carry along the mentee, hence the mentor is slowed down.

Conflicts of interest: The mentor and mentee are having varied goals leading to clash of interest. This affects the pace of growth and achievement.

Inadequate preparation and support of mentors: At times the mentor may not be prepared for the mentoring role or even the organization may not be supportive of the mentoring activities (McCourt, 2012).

The way forward

According to McCourt (2012) the following are ways of resolving some of the challenges of mentoring. The mentors need and should seek more help and educational guidance in completing education Institutions' assessment documentation; The mentors should have regular updates and relevant in-service training and practice development managers and clinical practice facilitators should work with link lecturers to support **mentors**

Conclusion and Recommendations

A successful leader is one who has a successor. Mentoring process provides the opportunity to leave your steps visible long after your exit. The demand on the mentor may be high but the possible outcome for the mentees, their mentors, and professional development outcome makes it a worthwhile venture.

Mentoring has benefits to mentee, mentor and the profession. It provides a unique opportunity for nurses to influence and develop the practitioners of the future.

Structure formal mentoring program may be necessary for young nurses taking up internship position or employment. Renew orientation for thorough mentoring to build self-esteem to enhance quality nursing practice.

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ECONOMICAL ADAPTATIONS OF VESICO VAGINAL FISTULA PATIENTS IN NIGERIA

Umar, A. B.,
Njoku,C. N.
&
Abdullahi, A. S.

ABSTRACT

Vesico Vaginal Fistular (VVF) affects numerous girls and women every day. The injury leaves women with few opportunities to earn a living and many have to rely on others to survive, or turn to begging or engaged in commercial sex services. In some communities in Nigeria they are not allowed to have anything to do with food production and may be excluded from prayers or other religious observances. This study aims at identifying the economic strategies adopted by the VVF patients in Nigeria and to find out the significance of demographic characteristics on the adoption of the coping strategies among the patients. An expose-facto research design was adopted and using 250 VVF patients in 4 centres across Nigeria as respondents. The data was obtained using a structured questionnaire developed on 4-point likert scale. The results revealed that, respondents do not have adequate economic strategies for reducing the impact of the disease with an aggregate mean score for the table as 2.29 lower than the 2.5 level of agreement. But differences in age and education have significant influence on the adoption of the coping strategies among the patients. It was therefore recommended that there is the need for creation of economic opportunities through empowerment in vocational programmes by agencies to boost the income of women with VVF.

Keywords: Vesico vaginal fistula, economic adaptation strategies, Nigeria

INTRODUCTION

The misery of fistula is relentless, in spite of one's best efforts to stay clean, the smell of leaking urine or faeces is hard to eliminate and difficult to ignore. The dampness causes rashes and infections. The cleaning up is constant, and pain or discomfort may be a continuous disturbing issue as well. The grief of losing a child and becoming disabled exacerbates the pain. The courage many women show in the face of these challenges is extraordinary (National foundation on VVF 2005). The injury leaves women with few opportunities to earn a living and many have to rely on others to survive, or turn to begging or engaged in commercial sex services. In some communities in Nigeria they are not allowed to have anything to do with food production and may be excluded from prayers or other religious observances. Although many women with fistula have supportive families, the smell can drive even loving husband, close relatives and friends away. For many women the profound stigma of social isolation is worse than the physical torment. The pain around loneliness associate with fistula is often compounded by a sense of shame and humiliation.

A careful observation has revealed that fistula has received little attention in the past because it affects mainly the poorest and most powerless members of the society. It is also considered mainly as women's health problems. (Kelly,1995). Kelly further stated that the disparities in incidence of fistula and other childbirth related injuries are enormous. One in 16 women in Sub-Saharan Africa of which Nigeria is one will die as a result of childbirth or pregnancy. In developed regions, the figure is 1

in 2,800. Given these disparities, maternal health is a matter of human right as well as a public health concern. In many places, the right to health services and freedom from discrimination to reproductive choice and even the right to live are yet a reality for women and girls. If giving birth is life affirming for so many, why does it have to be life threatening for so many others, especially poor women. The researcher's motivation for this study was borne out of the deep concern for the health care of women, most especially the girl-child who has fallen victim of this evil disease called Vesico Vaginal Fistula (VVF) with the disability that has eroded their social and economic status including their self-esteem. Unless more fistula centers are able to provide basic education, enlightenment training on income generating skills, and psychological support to help clients reintegrate into their communities, the woman will continue to deteriorate in this health condition. Health education and counseling are key components of post-operative care women are advised on when it is safe to resume sexual relationship and get pregnant. They should be provided with or referred to family planning service. In areas with high HIV prevalence, prevention and counseling is also encouraged. Following surgery, women are sometimes provided with a booklet or card describing their medical history and the need for a caesarean section in the event of another pregnancy (Wall, 2004). The aim of this study is to identify the economic strategies adopted by VVF patients in Nigeria.

METHODOLOGY

Research design adopted is a descriptive research of expost-facto research design (Gay, 1992, Dooley 2003). The study population comprises of all VVF patients in VVF centers of the six geopolitical zones in Nigeria (South East, South South, South West, North East, North Central and North West). UNFPA (2011) estimated that there are about one million women living with fistula in Nigeria. This study found a total of 836 VVF victims in the four sampled VVF centers in Nigeria. from this number, a sample size of 250 respondents was used for the study based on a sample size selection chart by Isaac, Michael and Smith (1981) that reveals that for a population of 500-1000, a sample size of 250 is sufficient for generalization.

A Multi-stage sampling technique was used were Nigeria is stratified into 6 geographical zones in the first stage. 4 zones were randomly selected here and in the second stage, one VVF centre was purposively selected from each of the four zones. Proportionate sampling technique was then used in the third stage to draw sample size required from each centre based on the available number of patients in each of the selected centers.

Table 1. Sample Size Determination Table

Geo-political Zone	VVF Centre	Population	Sample size
South East	Abakiliki	71	22
North East	Gombe	416	124
North Central	Ilorin	289	86
South-South	AkwaIbom	60	18
Total		836	250

Instrumentation

A self-developed structured questionnaire was used to assess the psychological strategies adopted in reducing the impact of VVF in the patients. The questionnaire contains thirty (34) statements in four sections A- C. Section A obtains the demographic information of the respondents from eight responses, section B contains statements on psychological problems associated with of VVF, and section C contains statements on psychological strategies adopted in reducing the impact of VVF. The statements were prepared using a 4-point modified Likert scale that reflects the respondents' feelings. The responses were scored as follows: SA = Strongly Agree (4 points); A = Agree (3 points); D = Disagree (2 points); and SD = Strongly Disagree (1 point). An aggregate mean of 2.5 is adopted as the level of agreement for individual statements on the Likert type scale. The 2.5 was obtained as follows; 4+3+2+1= 10, 10/4= 2.5. the questionnaire was validated by vetting from experts and was passed through a pilot study to ensure reliability. The reliability index of 0.942 was obtained for the Cronbach's Alpha, Spearman-Brown equal length Coefficient gave an index of .868 while the Guttman Split-Half Coefficient was 0.926. The internal consistency coefficient for the items within the instrument was 0.971. These observed reliability coefficients are approximately equal to one. According to Anastasi (1980), the closer to 1 the reliability coefficient the more reliable the instrument. Thus, the designed instrument could be said to be reliable and internally consistent for the study.

The questionnaire was administered on the respondents with the help of four (4) research assistants one each from among the staff working in the selected centers to ensure ease of access and understanding of cultural differences that occur among respondents. The data collected for the study was analyzed using the Statistical package for Social Sciences (SPSS). Descriptive statistical tools of frequencies, percentages, mean and standard deviations were used in analyzing the data. Inferential statistics including the chi-square procedure and one-way analysis of variance (ANOVA) were used to test significances among variables. The hypotheses were tested at 95% confidence interval (P = 0 5)0

RESULTS

Out of the 250 questionnaires distributed, 249 were adequately completed and analysed giving a response rate of 99.6%. The demographic variables of Age, Marital status and Educational status and Location (Geo-political Zone) were presented in Table 2.

Table 2. Respondents' socio-demographic characteristics

Variables	Variable options	Frequency	Percent
Age	10-15 years	75	30.1
	16-21 years	78	31.3
	22-27 years	55	22.1
	28 years and above	41	16.5
	Total	249	100.0
Marital status	Married	98	39.4
	Separated	73	29.3
	Divorced	45	18.1
	Widowed	28	11.2
	Single	5	2.0
	Total	249	100.0
Location (Geo-political Zone)	Abakiliki South East	21	8.4
	Gombe North East	124	49.8
	Ilorin North Central	86	34.6
	AkwaIbom South-South	18	7.2
	Total	249	100.0

An analysis of the demographic data showed that 75 (30.1%) of the subjects were between the age of 10 and 15 years. Subjects who were between 16 and 21 years were 78 (31.3%) while 55 (22.1%) of the total number were between 22 and 27 years. Only 41 (16.5%) of the subjects were above 27 years. This age is examined as a possible factor in the adoption of strategies for reducing the impact of the disease among the subjects. By marital status, 98 (39.4%) of the subjects were married while 73 (29.3%) were separated from their spouses and 45 (18.1%) were divorced. Subjects who were widowed were 28 (11.2%) while 5 (2.0%) were single. This classification clearly shows that the disease primarily affects the rate of marriage among its subjects; this is clearly indicated by the number of subjects who were separated from their spouses and those that were divorced.

The locations of the centers as indicated in the table showed that 21 (8.4%) were from South East geopolitical zone while 124 (49.8%) were from North East geopolitical zone. Those from North central geopolitical zone were 86 (54%) while 18 (7.2%) were from South - South Geo-political zone. By this distribution, the study could be said to have covered most of the VVF centers in the Federation.

Table 2 Mean and standard deviation of respondent's responses on economical adaptation strategies

Economic Adaptation	Mean	SD
Receive support from children and family members	2.80	0.758
I receive reimbursement from medical schemes	1.99	0.861
I receive in-kind help from friends and relatives	2.43	0.669
I trade to make some money for my upkeep	2.07	0.849
I reduce my expenses in order to cope financially	2.71	0.770
I am contented with the small money I make	2.61	0.910
Financially, I am satisfied	2.06	1.012
I receive social relief to survive	2.17	0.775
I borrow from money lenders	1.98	0.803
I use cash and savings	2.07	0.875

Table 2 revealed that, respondents do not have adequate economic adaptation strategies for reducing the impact of the disease. Aggregate mean score for the table is 2.29 and is by far lower than the 2.5 which indicated that the adaptation of the economic strategies by the subjects is inadequate. Though, the respondents agreed that they get support from children and family members and that they reduce their expenses in order to cope financially as well as be contended with the little money they make but the overall impression is that the economic strategies are not adequate.

Table 3 Mean and standard deviation on adopted economic strategies of the different age groups

		Mean	Std. Dev.
10-15 years	75	2.08	0.267
16-21 years	78	2.40	0.294
22-27 years	55	2.38	0.451
Above 27 years	41	2.35	0.434
Total	249	2.29	0.377

The adopted economic strategies where lowest among the lower age bracket of 10 to 15 years. But the subjects who were within the age range of 16 to 21 years and those between 22 and 27 years were almost of equal opportunities. Subjects who were above 27 years had relatively lower adaptation level for the economic strategies.

Table 4: Mean and standard deviation adopted strategies by educational status

		adopted economical strategies analysis	
Educational status	N	Mean	Std. Dev.
No formal education/Islamic	127	2.23	0.327
Primary	53	2.30	0.407
Secondary	62	2.39	0.444
Tertiary	7	2.41	0.038
Total	249	2.29	0.377

The subjects were completely at par in the adaptation of the economic strategies. This would mean that education play no major role in the adaptation of the strategies for reducing the effect of the disease among the subjects. In the overall assessment, though the adaptation of the economic strategies was higher among subjects with higher educational attainment but the variability was relatively small.

Hypothesis 1: The economic strategies adopted for reducing the effect of VVF among patients in Nigeria are not significant. This hypothesis was tested with One-way analysis of variance (ANOVA). The result of the One-way analysis of variance use for the test is summarized in Table 5.

Table 5. ANOVA of economic strategies' adaptation for reducing the effect of VVF among patients

Source of variation	Sum of Squares	df	Mean Square	F	Sig.	Decision
Between Groups	3.574	3	.962	19.258	.001	Ho rejected
Within Groups	15.369	245	.157			
Total	18.147	248				

(F-critical at df (3, 245) = 2.60, P < 0.05)

As presented in Table 5, the subjects were of the view that the economic strategies adopted for reducing the effect of VVF was significant. The calculated F-ration (3, 245) = 19.258 was higher than the critical F-ratio of 2.60 at the 3, 245 degrees of freedom and at the probability level of 0.05. Moreover, the observed level of significance for the test is 0.001 (P < 0.05). This means that there is no evidence to retain the null hypothesis that the economic strategies adopted for reducing the effect of VVF among patients in Nigeria is not significant could thus be rejected.

Hypotheses 2: There is no significant difference among VVF patients in their adaptation of strategies for reducing the impact due to differences in their age groupings. This hypothesis was tested with the one-way analysis of variance (ANOVA) because of the multiple levels of the independent variable (age groupings of the subject) involved.

Table 6. ANOVA of adaptation of strategies for reducing the impact of VVF among patients

Source of variation	Sum of Squares	dF	Mean Square	F	Sig.	Decision
Between Groups	2.469	3	.823	15.598	.000	Ho rejected
Within Groups	12.927	245	.053			
Total	15.397	248				

(F-critical at df (3, 245) = 2.60, P < 0.05)

The aggregate mean scores of the adaptation of the three strategies by the subject was used as the dependent variable. The test revealed that the subjects differ significantly in their adaptation of the coping strategies for reducing the impact of the disease by their age groupings. The observed F-value for the adaptations of the strategies is 15.598 a value higher than 2.60 for the critical value at the 3, 245 degree of freedom. The observed level of significance (P) for the test is 0.000 ($P < 0.05$). To determine the age group that was significantly different from the others a post hoc test was performed on the means using the Scheffe procedure.

Table 7: Mean separation test on the adaptation of the strategies by age groupings of the subjects

Age	Age	Mean Difference	Std. Error	Sig.
10-15 years	16-21 years	-.21(*)	.03	.000
	22-27 years	-.27(*)	.04	.000
	Above 27 years	-.21(*)	.04	.000
16-21 years	10-15 years	.21(*)	.03	.000
	22-27 years	-.01	.04	.983
	Above 27 years	.00	.04	1.000
22-27 years	10-15 years	.22(*)	.04	.000
	16-21 years	.01	.04	.983
	Above 27 years	.01	.04	.989
Above 27 years	10-15 years	.21(*)	.04	.000
	16-21 years	-.00	.04	1.000
	22-27 years	-.01	.04	.989

* The mean difference is significant at the .05 level.

The result revealed that the observed significant variability in the adaptation of the strategies by the different age groups was between the subjects who were between 10 and 15 years and the rest of the subjects in the other different age groupings.

Hypotheses 3: There is no significant difference among VVF patients in their adaptation of strategies for reducing the impact due to differences in their educational attainment. The educational attainment of the subjects was used in this test to determine the role of education on the adaptation of the coping strategies by the subjects. The aggregate mean scores of all the strategies were used as the dependent variable.

Table *8*: Mean scores on the adaptation of strategies by educational levels of the subjects.

Educational levels	N	Mean	Std. Deviation	Std. Error
No formal education/Islamic	127	2.44	0.208	0.018
Primary	53	2.50	0.246	0.034
Secondary	62	2.59	0.304	0.039
Tertiary	7	2.64	0.013	0.005
Total	249	2.50	0.249	0.016

As presented in Table *8, t*he mean scores which clearly showed that educational level is a major factor in the adaptation of the strategies by the subjects. There tended to be a trend where adaptation of the strategies varies positively with increase in educational attainment of the subjects.

Table *9:* One-way analysis on adaptation of the strategies by subjects' level of education

Source of variation	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.152	3	.384	6.604	.000
Within Groups	14.245	245	.058		
Total	15.397	248			

(F-critical at df (3, 245) = 2.60, P < 0.05)

The result in Table 9 revealed that the subjects of the different educational background differed significantly in their adaptation of the strategies (P < 0.05). The observed F-values for the test is 6.604 and it is higher than the critical value of 2.60 at the same degree of freedom (3, 245). The observed level of significance (0.000) for the test is lower than 0.05 (P < 0.05). This means that null hypothesis can be rejected since there is no basis for its retention. Therefore, the null hypothesis that there is no significant difference among VVF patients in their adaptation of economic strategies for reducing the impact due to differences in their educational attainment is thus rejected. The mean separation test was conducted to determine the level of education of the subjects that was significantly different from the others using the Scheffe procedure. The result of the test is summarized in Table *9.*

Table 10: Scheffe post hoc test

Educational status	Educational status	Mean Difference	Std. Error	Sig.
No formal education/Islamic	Primary	-.06330	.03943	.463
	Secondary	-.15497(*)	.03736	.001
	Tertiary	-.19951	.09361	.211
Primary	No formal education/Islamic	.06330	.03943	.463
	Secondary	-.09166	.04511	.251
	Tertiary	-.13621	.09697	.579
Secondary	No formal education/Islamic	.15497(*)	.03736	.001
	Primary	.09166	.04511	.251
	Tertiary	-.04455	.09614	.975
Tertiary	No formal education/Islamic	.19951	.09361	.211
	Primary	.13621	.09697	.579
	Secondary	.04455	.09614	.975

* The mean difference is significant at the .05 level.

Table 10 revealed that the significance obtained in the adaptation of the strategies was between the secondary schools' certificate holders and those who had no formal education. Between subjects with secondary school education and those with tertiary education, no significant difference was observed in their levels of adaptation of the strategies. And between those with no formal education and those with tertiary education, no significant difference was observed in their levels of adaptation of the strategies.

DISCUSSION OF FINDINGS

This study investigated the economic strategies adopted by the VVF patients in Nigeria. The result of the test showed patients do not have adequate economic strategies for reducing the impact of the disease but the level of adaptation of the strategies for reducing the impact of the VVF among the patients was significant. This finding agrees with Melah, Massa, Yahaya, Bukar, Kizaga, and el-Na- Faty (2007) where it was opined that changes and adaptation of strategies like the improved access to basic essential obstetric care, family planning services, and timely referral when and where necessary where factor that would likely lead to better development in the management of VVF. The report stated that the Universal education will provide a long-term solution by improving the standard of living and quality of life and that equally important are media and community- based programmes on the ills of teenage marriage and child pregnancy using cultural and religiously-based values to give sound advice in a male dominated society, reaching out to men with traditionally palatable messages that will change their attitude and practices to taking responsibility in reproductive health could be a winning strategy .the findings here are in line with the report of Sambo (2003) where it was stated that the traditional attitude of the husband, family and the society as a whole is a major problem in VVF management. The report pointed out that VVF patient in most Nigerian societies are considered as outcast and that this is especially made worst by the presence of urine leakage, which is considered as dirty derogatory and an obstacle to worship and prayer. The study further stated that this difference between societies regarding the case of VVF patients is mostly in terms of the attitude towards patients. In societies where there is sympathy towards the patient and the patients are accepted by societies, VVF is not a social menace, but where the contrary occurs VVF becomes a very critical issue. This negative attitude, also serve as a means by which all the parties dissociate themselves from the source of the problem. For this reason, the society does not associate itself with the cause of VVF and therefore the consequent need to avert and change practices resulting to its occurrence. This study also finds out that patients of 16-20 years have more positive strategies than other age groups. Also, the strategies improve with increase in level of education of the patients.

Kindin (2001), who pointed out that social stigma is more damaging than the physical effects of VVF. Because of the nature of the injury, many sufferers have become abandoned by their husband and families and shunned by their former friends. The finding here is consistent with the report of Imelda (2005) where it was stated that the problem leads to the husbands who invariably divorce the victims due to urinary incontinence and a study from Zaria and Kano established that 80% -90% of VVF patients were divorced. This finding is consistent with the report of Kabir Iliyasu, Abubakar and Umar (2004) who reported that traditionally, there is a resentment of operation delivery and that women who deliver by operation are mostly ridiculed and seen as half women, because of the tendency to associate operation with fear of normal delivery

and reproductive failure. The report stated that for this reason, most women boycott hospitals and clinics.

The test of Hypothesis I focused on the significance of the adaptation level of the economic strategies for reducing the impact of the disease among the subjects. The result of the chi-square revealed that the level of adaptation of the strategies was statistically significant. The null hypothesis was therefore rejected. Thus, this finding is a reflection of Ijaiya and Aboyeji, (2004) where it was stated that there are levels at which social issues affect women, such as: involvement in socio-economic issues and politics, marriage/family, education and health care. Nigeria's 6th periodic country report (2004-2006:187) states that gender stereotypes continue to be reinforced in Nigeria at a series of agents of socialization, such as the family, schools and even churches and mosques. According to the report, the media have become the custodian as well as disseminator of gender roles, stereotypes, prejudices and discriminatory cultures. That girls and boys grow up in Nigerian society to accept male superiority over females and patriarchal structures has become an unquestionable phenomenon. Teachers, religious leaders, parents, police officers and artists in Nigeria usually all work towards promoting obnoxious customary beliefs and practices that violate the rights of women. Consequently, customary practice such as female genital mutilation, preference for male child, and widowhood rites are still prevalent in most parts of Nigeria

Differences between subjects of different marital statuses in the adaptation of the strategies were tested in hypothesis two. The one-way analysis of variance was used in the test and the result showed that the subjects differed significantly in their adaptations of the strategies by their marital status. From the related mean scores, it was observed that the adaptation of the strategies was particularly low among subjects who were single, divorced and separated. The widows and the married subjects were more disposed to the adaptation of the strategies than the other groups. The finding here is consistent with the report of Imelda (2005) where it was stated that the problem leads to the husbands who invariably divorce the victims due to urinary incontinence and a study from Zaria and Kano established that 80% -90% of VVF patients were divorced. Hypothesis three tested for significant difference between subjects of different educational qualifications in their adaptation of the strategies. The result for the one-way analysis of variance used for the test revealed significant difference between the groups. The null hypothesis was therefore rejected. However, it was observed that general adaptation of the strategies did not varies directly by educational attainment of the subjects as those with secondary school education were found to have higher adaptation levels of the strategies than their counterparts with tertiary education. The finding here agrees with Sambo (2003) who reported that there is a generally high level of illiteracy about the danger of childbirth and its complications. This is made worst in a population where the educational level is very low. The effect of low literacy is also further complicated by the withdrawal of girls from school for the purpose of marriage and subsequent early age at first childbirth.

Conclusion and Recommendations

The findings of this study reveal that subjects of VVF do not have adequate economic adaptation strategies for reducing the negative impact of the disease. The study revealed that age and educational attainment play a role in the level of adaptation of the strategies.

Based on the findings from the analyzed data and test of the study's hypotheses, the

researcher wishes to make the following recommendations: Enlightenment campaign of subject should be one of the major ways of increasing awareness and adaptation of the investigated strategies. Effort should be made to employ counsellors who will be working hand in hand with medical personnel among the VVF patients so as to increase their psychological dispositions towards effective adaptation of some of the psychological strategies for reducing the impact. There is a need to enlightenment and increased interaction among VVF patients. There is a need for creation of economic opportunity through the various empowerment programmes and agencies.

Special effort should be made to encourage and support unmarried patients who suffer from the disease. There should be an effective educational policy which will prohibit girls at certain age from marriage. This policy will help in the problem of early marriage and give basic education to the girl-child.

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COMPARATIVE ANALYSIS OF SOCIO-ECONOMIC STATUS OF PARENTS AND STUDENTS' ACADEMIC PERFORMANCE IN TWO SELECTED SECONDARY SCHOOLS IN JOS SOUTH, PLATEAU STATE, NIGERIA

Gaknung, B. K.,
Oyedele, E. A,
Gotodok, K. H.,
Enwelum, J. C.
&
Dajwal, J. M.

ABSTRACT

The gap in performance between students and academic excellence constitute a great source of worry and serious concern as well as discomfort to both parents, school administrators, and policy makers responsible for the education of students in secondary school. The study adopted correlational study design and sampled 161 students. The instrument used in this study was a self-developed questionnaire. Three hypotheses were tested. Findings revealed that 78.2% of the parents of student of government school were of low socio-economic status while 50% of the parents of students of private school were of an average socio-economic status. Further findings revealed that a good number of students 38.6% from government school had low academic performance while most students 63.3% from the private school had a very high academic performance. Lastly, findings showed that parents income had influence on the academic performance of students.

INTRODUCTION

In the current era of globalization and technological resolution, education is considered as a crucial step for every human activity (Farooq, 2011). It is considered as the life line for efficient and suitable stable development of human society. Education is a process by which the mind of human being develops through learning at home, streets, religious institutions like the churches and mosques, schools, colleges or universities. It is also a process whereby a person develops attitude and abilities that are considered to have value and relevance in the society. It is the best legacy a nation can give to her citizens especially the youth. Education helps to develop individual`s personality by making him/her knowledgeable, competent, capable and skillful. Every nation hoping to have a bright future needs to emphasize education because it is the only way too much development (Memon, 2010).

Education must be considered as a key investment in modern economics because as previously seen with the framework of a knowledge-based economy, there are strong and positive correlation between economic activity and education in explaining economic growth (Olayangu, 2014). It is a catalyst to the development of individuals, society and the nation as a whole (Asiru, 2014). It is an important tool for social growth, development and interaction of all elements in the society for its economics, social and political benefits and plays a critical role in human capacity building and skill acquisition (Dagbo, 2014).

Despite the fact that the development of any nation depends largely on the quality of

education of her citizen, the academic performance of most Nigerian youth in secondary school is decreasing. This has become a major concern for education stake holders and researchers. According to Achieng (2012), family type, poor funding, bad home condition are some factors that cause poor performance amongst student. He also found that home factor, student factor and unfavorable institutional/school environment are the cause of failure over a period of time. It has been observed that students exposed to the same lesson by the same teachers, perform differently when they are examined (Adesehinwa, 2013). This shows that outside the school environment, other factors influence students' academic performance.

The socio-economic status (SES) of a family is based on family income, parental educational level, parental occupation and social status in the community (Memon, 2010). Researches have been done to ascertain the level of impact SES of parent has on students' academic performance. It is generally believed that parents with high SES often have more success in preparing their young children for school because they typically have access to a wide range a resource and can advise their children on the right way to go due to their exposure and access to resources while parents with low SES have little resources which cannot promote and support children's development and school readiness. Parent may have inadequate skills for such activities as reading to and with their children and they may lack information about childhood, immunization and nutrition (Okioga, 2013). Children from low socio-economic status have fewer stimulating experience and learning materials and even in their first three years life are more likely to have lower cognitive scores and increased behavioral problems (Sektan, Mcdelland and Acock, 2010).

Most families in Nigeria are poor and cannot adequately afford 3 square meals not to talk of meeting the educational needs of their children. This indeed has serious implications on the health, learning and performance of less privileged students in school, as such, student from such families are forced to miss classes, unable to do their assignments and most seriously are driven from school due to non-payment of school fees. All these have significant effect on the development of the child (Ushie, Onongha and Owolabi, 2012). Ushie also stated that family background is the foundation for children's development, as such, family background in terms of family type, size, socio-economic status and educational background play important role in children's educational attainment and social integration. However, Singh and Singh, (2014) argued that the SES of parents have no significant effect on the educational achievement of student rather, the health status of children has a major role in determining the educational achievement.

Akhtar (2012), disclosed that higher grades achievers were not from the upper and lower classes rather students from middle class parents have scored better than others. It is against this background that this study therefore attempts to compare the academic performance of students with the parents' socio-economic status and find out the influence of the socio-economic status of parents on academic performance among students of two selected secondary schools in Jos South, Plateau State.

According to Jesen (2013), the gap in performance between students and academic excellence constitute a great source of worry and serious concern as well as discomfort to both parents, schools, managers, policy makers and various governments responsible for the education of students in secondary school. Experience has shown that among the secondary school students, there exists some difference which influence student academic performance. In the light of this, the main problem of this research is to compare the academic performance of students with the

parent's socio-economic status and find out if there exists an influence of socio-economic status of parents especially health workers on the academic performance among students of two selected secondary schools in Jos South, Plateau State.

Hypotheses

1 There is no significant difference in the mean score performance of students in public and private secondary schools based on the parents' level of income.

2 There is no significant difference in the mean score performance of students in in public and private based on the parents' level of education

3 There is no significant difference in the mean score performance of students in public and private based on the parents' type of occupation.

METHODOLOGY

The study adopted a correlational study design in which questionnaire was used to gather relevant data from stratified randomly selected students of the two selected secondary schools. The target populations of study were public and private secondary school students in Plateau State. Convenient sampling technique was used in selecting representative schools for this research. Schools were selected because of their accessibility, proximity and availability to the researcher. Stratified sampling technique was used to select student from JSS2, JSS3, SS2 and SS3. These classes were chosen due to the fact that the students had a cumulative grade point of their last class. The instrument used for data collection was questionnaire. Test re-test method was used to test for the reliability of instrument, pilot study was done with 12 students; 8 from the public school, 4 from the private school and the reliability co-efficient was calculated to be 0.7364 using Pearson`s reliability coefficient.

RESULTS

Hypothesis 1

There is no significant difference in the mean score performance of students in public and private secondary schools based on the parents' level of income. Independent t-test analysis of variance was used to test this hypothesis at .05 level of significance and presented in Table 1.

Table 1: Independent t-test of school type by parents' level of income and academic performance

Grouping variable	N	Df	Mean	SD	t-value	Sig.
Public school	17	49	23.47	9.19		
					1.27	.599
Private school	34		23.88	5.87		

Not significant at 0.05; df = 100; critical t-value 1.96

As presented in Table 1, the calculated t-value of 1.27 was less than the critical t-value of 1.96 at 0.05 level of significance, the implication of this result is that, the null hypothesis which states that, there is no significant difference in the mean score performance of students in public and private secondary schools based on the parents' level of income was retained. Therefore this means that parents income had no influence on the academic performance of students in either public or private schools .i.e. whether the parents of these students earned high amount of money or low amount money, it did not influence the academic performance of the students so from the findings, although most parents 79 (78.2%) were low income earners, a good number of the students 62 (61.3%) had an average, good and very high performance while 39 (38.6%) performed poorly

Hypothesis 2

There is no significant difference in the mean score performance of students in public and private school based on the parents' level of education. One-way analysis of variance was used to test this hypothesis at 0.05 level of significance and presented in Table 2.

Table 2: ANOVA of parents' educational level and academic performance

	SS	df	MS	F	Sig.
Between Groups	1052.74	4	263.185	1.797	0.136
Within Groups	14058.33	96	146.441		
	15111.07	100			

As presented in Table 2, since the calculated probability value (P value) of 0.136 for public was greater than the significant level of 0.05. Therefore, the null hypothesis which states that there is no significant difference in the mean score performance of students of public and private based on the parents' level of education is hereby accepted. Therefore this means that parent's level of education had no influence on the academic performance of students of the above mentioned schools, i.e whether the parents of these students were highly educated or not, it did not influence the academic performance of the students so from the findings, although most parents 85 (84.1%) had a secondary, diploma and HND/degree education, most of the students 39 (38.6%) performed poorly while only 7 (6.9%) had a very high performance and 26 (25.7%) had a good performance

Hypothesis 3

There is no significant difference in the mean score performance of students of public and private based on their parents type of occupation. One-way analysis of variance was used to test this hypothesis at 0.05 level of significance and presented in Table 3.

Table 3: ANOVA statistics on parents type of occupation and academi c performance

	SS	df	MS	F-value	Sig.
Between Groups	793.936	6	132.323	0.869	0.521
Within Groups	14317.140	94	152.310		
Total	15111.076	100			

As presented in Table 3 the calculated probability value (P value) of 0.521 for public school and private school is greater than the significant level of 0.05, Therefore, the null hypothesis which states that there is no significant difference in the mean score performance of students of public schools and private based on the parent's occupation is hereby accepted. Hence, this means that parent's type of occupation had no influence on the academic performance of students of the above-mentioned school. i.e. whether the parents of these students were civil servants (health workers) or not, it did not influence the academic performance of the students so from the findings, although most parents 39(38.6%), were health workers most of the students 39(38.6%) performed poorly while only 7(6.9%) had a very high performance and 26(25.7%) had a good performance

DISCUSSION OF FINDINGS

The result showed that students' academic performance was independent of their parent's level of income i.e. whether or not the parents earn high or low, it doesn't affect the students' academic performance. This finding agrees with the findings of Machebe, Ezegbe and Onuoha (2017) which revealed that academic performance of students in senior high schools in Japan were relatively the same irrespective of whether their parent is in the high, medium or low-income level explaining that most mothers in Japan stay out of work to take care of the home and children's education so are actively involved in the children's school activities and at such, students' performance was not based on parents income. However the finding of this study disagrees with the findings of Joseph (2016), Dahie, Mohamed and Moalim (2016), Juma (2016), Abdu-Raheem (2015) Udida, Ukwayi and Ogoda (2012) and Osonwa, Adejobi, Iyam and Osonwa (2013) which states that just like other factors such as parents educational level and parents occupation, parents level of income has a significant positive relationship on students' academic performance reason being that low income earning parents have so much work to do in other to make ends meet and so do not usually have time for their children which results in low academic performance unlike the high income parents. Juma (2016) concluded by saying that low income earning parents may not be able to afford the resources required by the students to perform well while the high-income earning parents are able to pay school fees on time, avail the necessary learning materials and set a conducive learning environment at home resulting in a better academic performance of their children

The findings of the study also showed that there is no significant difference in the mean score performance of students in public school and private school on their parents' level of education. This implies that parents' level of education has no influence on the students' academic performance so whether or not the students perform well, it is independent of their

parents' level of education i.e. regardless of parents' educational level it doesn't affect the students' academic performance. These findings agree with the findings of Udida, Ukwayi and Ogooda (2012) which states that parent's educational level had no influence on students' academic performance but rather individual's cognitive ability determines performance. However, the findings of this study does not agree with the findings of Eshetu (2015), Dahie, Mohamed and Moalim (2016), Juma (2016), Abdu-Raheem(2015), Ogunshola and Adewale (2012) and Joseph (2016) who explained that parents with high level of education highly appreciate the value of education and thus set a more conducive and stimulating learning environment for their children and help them out with their assignments while the illiterate and semi-illiterate parents struggle with the feeling of inadequacy and may not be able to help their children out their academic problems thus hindering a good academic performance

Findings showed that there is no significant difference in the mean score performance of students of Government Secondary School Kufang, along Domkart Bally Road, opposite Solomon Lar Park, Jos South, Plateau State and Believers High School, Ewarewah Street, Miango Junction, Jos South, Plateau State based on their parents' occupation. This implies that parent's type of occupation has no influence on the students' academic performance. So, the students' performance is not dependent on their parent`s occupation. That means parents type of occupation does not influences how well the student will perform. The findings agree with the findings of Eshetu (2015) which states that since most of salaried employment opportunities are opened for educated ones, as a result occupation might not be the reason for the achievement difference of students' rather educational status of parents however, these findings disagrees with the findings of Udida, Ukwayi and Ogooda (2012), Usaini and Abubakar (2015) and Juma (2016). While Usaini and Abubakar (2015) posited that fathers nature of occupation determines the take home income and time they would have with their children as fathers who take home good salary and has time to spend with his children is able to interact with them and in the process, help them in resolving school needs and provide financial support and moral support which influences the child psychologically to perform well, Udida et al (2012) revealed that parents with formal occupation had better position and assurance of monthly salaries that were used to buy books and stationery for their children. They have stable and constant income that enables them to spend much on their children education while parents with informal occupation, who are mainly self-employed with an occupation that has no guarantee of turnover, cannot afford to spend much on their children. Therefore, parents with informal occupation mostly fail to provide enough for the education of their children while parents with formal occupation make sufficient provision for the education of their children.

Conclusion and Recommendations

It was observed that parent's socio-economic status did not affect the academic performance of students but rather, the health status of the students greatly influenced their academic performance so from the result gotten, most students (76.5%) especially from the government school when asked the reason for missing school said they missed school often, due to ill health despite the fact that most of their parents were health workers who were expected to know the importance and value of health. Since most of them were low income earners, they probably do not have enough resources to Cather for the health needs of their children and have a poor health seeking

behavior. This school abseentism due to ill health resulted to majority of the students having a very low academic performance

Based on the outcome of this study, it was concluded that, there was no significant difference in the mean score performance of students in public and private schools based on their parents' income level, educational level and type of occupation. This means that whether or not the parents earned high or low amount of income, whether or not they were educated and whether or not they were civil servants (health workers), it did not affect the academic performance of students.

With regards to the observations made during the research and outcomes obtained in this study, the following recommendations are made: the school authority will need to improve the school's standard of education by providing adequate and modern facilities within the class rooms like charts, good seats, within the laboratory by providing equipment's for practice, within the school compound by providing adequate security, equipment for play and relaxation

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UTILIZATION OF SELF MEDICATION AMONG STUDENTS OF TECHNICAL COLLEGE, OSOGBO, OSUN STATE, NIGERIA.

Bello, M. A.,
&
Akeusola, A O

ABSTRACT

This study tends to determine the level of utilization of self-medication among students of Technical College, Osogbo. A descriptive survey research design was adopted while the target populations are students in technical college. Stratified sampling technique was used to select 292 respondents but only 202 respondents were finally used for the study. The instrument used was questionnaire to extract information from the respondents. Results were presented in tables, and charts. Research findings showed that, the level of utilization of self-medication is high and the frequently self-medicate once or twice a week. The study indicated that the drugs mostly used for self-medication are anti-malaria, eye/ear drops, antibiotics, anti-allergies and analgesics/antipyretic and the most common ailment for which the respondents reported to have practiced self-medication were headache, chills and Catarrh The research findings showed that factors influencing decisions on self-medications include family and friends advise, previous medical prescription, and advice from private practioners. Three hypotheses were testes and finding showed that there was no significant relationship between gender and the practice of self- medication, there was no significant relationship between the presence of long-standing illness and the practice of self-medication and there was no significant relationship between the perception of the students about the health system in Nigeria and the practice of self–medication. It is therefore recommended among others that, people should be educated about the harmful effects of irresponsible self-medication and adequate information should be provided on self-medication.

Keywords: Utilization. Self-medication. Students

INTRODUCTION

Self-care is a broad concept encompassing all what people do for their own selves to establish and maintain health, prevent and deals\with illness including hygiene, nutrition. Lifestyle, environmental factors and medication (Al Khatja, Handu, James, Oloom and Sequeria, 2006). The world self-Medication Industry (WSMI) defined self medication as the treatment of common health problems with medicines especially designed. Label and approved for use without medical supervision. (Ali, Kai, Keat and Dhanaraj, 2012). Self-medication can also be defined as the selection and use of non-prescription medicines to treat self-recognized illness or symptom without a professional advice or prescription.

Medicine which refer to all substances for use in the diagnosis, prevention of treatment of ,a disease fall into two categories which are; Prescription Only Medications (POM) and non-prescription medications, also called Over the Counter Drugs (OTC).

Prescription Only Medications refers to those drugs which are only available on prescription as they are not safe except under supervision of a physician because of toxicity and potential harmful effects (Ali *et al*, 2012). They are prescribed in – line with a medical diagnosis and decision by a licensed health care professional and can only be dispensed from a pharmacy by a licensed pharmacist. OTC medications on the other refer to those drugs that do not require prescription purchase at pharmacy (Gatema, Gadisa, Berhe, 2011) or

other places including supermarkets and small convenience stores and are usually chosen by a self-diagnosis and self-care decision.

Craving for medicine has part mankind from the beginning of time. The taking of drugs, herb or home remedies on one's own initiative or on the advice of another person has traditionally been seen as self-medication. Around the 1960's in the west, self-care and self-medication were regarded as potentially unhealthy practices. This paternalistic approach to medicine, supported by health systems designed to treat sickness (rather than to prevent them), remains a familiar aspect of health care in many countries. Some governments are increasingly encouraging self-care of minor illness, including self-medication. (Bennadi, 2013). Studies carried out on self-medication states that it is a very common practice. Especially in economically deprived communities. Nowadays, health care services are getting costlier and becomes an obvious choice of health care service. Furthermore, it has been noted that purchase of drugs that can only be bought with prescription in developed countries are OTC in developing ones. In addition, lax regulation has resulted in the proliferation of counter free drugs that are in high demand for the treatment of highly prevalent diseases. (Bennadi, 2013).

Modern consumers (patients) wish to take a greater role in the maintenance of their own health and are often competent to manage uncomplicated chronic, and recurrent illness after proper medical diagnosis and with occasional provisional advice e.g use of histamine (H_2) blocker, topical corticosteroid, antifungal and oral contraceptives. They are understandably unwilling to submit to the inconvenience of visiting a doctor for what they rightly eel they can manage by themselves, given adequate information. Self-medication is very common and a number of reasons could be enumerated or it. Urge of self-care, feeling of sympathy towards family members in sickness lack of time. Lack of health services, financial constraint, ignorance, misbelieves, extensive advertisement and availability of drugs in other than drug shops are responsible for growing trend of self-medication. (Phalke, Halbe, Durgawale, 2006).

While self-medication could produce good results by reducing the cost of health especially in developing countries and allow physicians to focus more on serious health problems. Irresponsible self-medication with POM and abuse/misuse of OTC drugs could cause risks such as dependence/addition, bacteria resistance, hypersensitivity reactions, digestive bleeding as well as risk of neoplasia. In addition to these risks, it should be emphasized that the momentary relief of symptoms may actually mask underlying disease. Health professionals have the ability of preventing the risk of self-medication, as they work on three main aspects of professionalism, information, therapeutic advice, education

Information is giving proper instructions and explaining the reason why the drug is prescribed by professionals while prescribing drugs, so that it will be helpful for the patient to understand and help him make his decisions. Given information should be at patient's comprehension level so that it will be helpful for them to understand. Therapeutic advice is giving information about the usage of drugs. If patient is not well informed, they are likely to use medications incorrectly. Lack of therapeutic compliance is a serious problem in both acute and chronic treatment arms. However, if the direction for and the limitations of a given drugs are explained e. g. dose, Frequency of dose, treatment of course, how to take it etc then patients will have a set of guidelines which help them to use drug correctly both now and in future. Inappropriate and erratic self-medication, along with lack of

compliance will only be reduced if patients are informed and understand clearly why certain advice is given.

Inappropriate self-medication is the result of medical model from which people have learnt. By regular educational attitude, we can have an effect on large sectors of the population, and people who in turn, moving directly influence their friends and families. This aspect is particularly important with respect to the self-medication of children by their parents. (Bennadi, 2013). This study tends to determine the level of utilization of self-medication among students of Technical College, Osogbo

Due to innate urge to take active role in the management of self-health, amidst other factors such as low socio-economic status and inadequate health professionals. People especially adolescents tend to self-medicate without adequate knowledge or guidance from qualified personnel. Which can lead to medical (drug resistance and hypersensitivity) social (Juvenile delinquency) and physiological (addition and drug dependence) problems. Hence this study on the level of utilization of self-medication among students of Technical College, Osogbo

Objectives of the study

The following objectives will be accomplished in this study.

1. To assess the level of utilization of self-medication among students.
2. To examine the frequency of utilization of self-medication among students.
3. To identify types of ailment that students use self-medication for.
4. To identify types of drugs that are mostly used for self-medicated among students
5. To assess the factors influencing decisions of utilization of self-medication among students.

Research questions

1. What is the level of utilization of self-medication among students.
2. What is the frequency of utilization of self-medication among students
3. What is the types of ailment that students use self-medication for
4. What is the types of drugs that are mostly used for self-medicated among students
5. What are the factors influencing decisions of utilization of self-medication

Hypotheses

1. There is no significant relationship between the cost of visiting health professional and the practice of self-medication.
2. There is no significant relationship between the presence of long-standing illness and the practice of self-medication.
3. There is no significant relationship between the perception of the students about the health system in Nigeria and the practice of self-medication.
4. There is no significant relationship between the practice of self-medication and knowledge about its health consequences.

METHODOLOGY

The research design employed is a descriptive survey research design. It aimed at exploring the practice of self-medication and knowledge of its health consequences among students of technical college Osogbo, Osun state. Student at technical college Osogbo, were the target population. There were 700 students as at the time the study was carried out. Sample size was determined using Taro Yamane's while stratified sampling technique **was adopted to select 292** students.

Instrumentation

A self-developed questionnaire with structured questions section into A, B ,C and D was used data collection. Dichotomous scale was used to answer questions in Section B to D. The developed questionnaire was be given to the panel of experts for critiquing to ensure face, content and construct validity, and modification made where necessary. To ensure reliability of the instrument, the questions was be pretested. A pilot study will be done by administering 10questionaires to 10 subjects from Laro secondary school, Asubiaro Osogbo the same characteristics with the respondents for the study, the score was 0.82 which was determined by Cronbach Alpha.

RESULTS

Table 1: Demographic charateristics of respondents

Variables		Frequency	Percent
Age	Less than 16years	42	20.8
	17-20years	102	50.5
	21-24years	52	25.7
	24 years and above	6	3.0
	Tota1	202	100.0
Gender	Male	170	84.2
	Female	32	15.8
	Total	202	100.0
Class	Year 1	12	5.9
	Year 2	68	33.7
	Year 3	122	60.4
	Total	202	100
Religion	Islam	84	46.5
	Christian	104	51.5
	Traditional	4	2.0
	Total	202	100.0
Ethnicity	Yoruba	192	95.0
	Igbo	6	3.0
	Others	4	2.0
	Total	202	100.0

Table 1 showed that 21 (20.8%) respondents are less than 16 years old, 51 (50.5%) fall between 17 – 20 years of age, 26 (25.7%) fall between 21 – 24 years and the remaining 3 respondents are 24 years of age and above. Findings further showed that 85 (84.2%) of the respondents are male while the remaining 16 (15.8%) are female. Also, table 1 showed that 6 (5.9%) of the respondents are in year 1, 34 (33.7%) are in year 2 and 60 (59.4%) are in year 3. 1 of the respondents did not respond to the question. The table further revealed that 47 (46.5%) of the respondents practice Islam, 52 (51.5%) practice Christianity and remaining 2(2.0%) of the respondents practice Traditional religion. Lastly, 96 (95%) of the respondents are Yoruba, 3 (3.0%) are Igbo and 2(2.0%) did not indicate their ethnicity.

Table 2: The Level of Utilization of Self-Medication Among Students

	Frequency	Percent
Regular	108	53.5
Not regular	94	46.5
Total	202	100.0

As presented in Table 2, 108 (53.5%) respondents take medicines to treat any condition without the prescription from a doctor regularly while 94 (46.5%) do not take medicines without doctor's prescription. This result concludes that the level of utilization of self-medication among Students is regular.

Table 3: the frequency of utilization of self-medication

Responses on How often?	Frequency	Percent
Daily	10	5.0
Twice a week	44	21.8
Weekly	28	13.9
Occasionally	10	5.0
When needed	4	2.0
Once in a blue moon	2	1.0
Due to how long it is	2	1.0
Unspecified	102	50.5
Total	202	100

Table 3 showed that out of the 100 respondents who take medicines without the doctor's prescription, 10 (5.0%) take medicines on a daily basis, 44 (21.8%) take medicines twice in week, 18 (13.9%) take medicines weekly, 10 (5.0%) take medicines occasionally, 4 (2.0%) take medicines when needed, 2 (1.0%) take medicines once in a blue moon, 2 (1.0%) take medicines due to how long it is and the remaining 102 (50.5%) did not specify how often they take medicines without doctor's prescription. In conclusion, the frequency of utilization of self-medication among students are twice a week and weekly.

Table 4: Types of Ailment that students used self medication for

		Frequency	Percent
Headache	Yes	180	89.1
	No	22	10.9
	Total	202	100
Diabetes	Yes	50	24.8
	No	152	75.2
	Total	202	100
Chills (cold)	Yes	128	63.4
	No	74	36.6
	Total	202	100
Catarrh	Yes	124	61.4
	No	78	38.6
	Total	202	100
Sore throat	Yes	84	41.6
	No	118	58.4
	Total	202	100
Stomach pain	Yes	100	49.5
	No	102	50.5
	Total	202	100
Diarrhoea	Yes	46	22.8
	No	156	77.2
	Total	202	100
Pain	Yes	48	24.8
	No	152	75.3
	Total	202	100.0
Constipation	Yes	48	24.8
	No	144	71.3
	Total	202	100

As presented in Table 4, 180 (89.1) of the respondents usually treat headache without doctor's guidance while the remaining 22 (10.9%) do not treat headache without the doctor's guidance. Also, 128 (63.4%) of the respondents usually treat chills (cold) without a doctor's guidance while the remaining 74 (36.6%) do not. This study observed that 124 (61.4%) of the respondents usually treat catarrh without a doctor's prescription while the remaining 78 (38.6%) do not. Findings in this study also showed that 84 (41.6%) of the respondents usually treat sore throat without a doctor's guidance while remaining 118 (58.4%) do not treat it without a doctor's guidance. This result observed that 100 (49.5%) of the respondents usually treat stomach pain without a doctor's guidance while the remaining 102 (50.5%) do not. The result of this study showed that 46 (22.8%) of the respondents usually treat diarrhoea without a doctor's prescription while the remaining 156 (77.2%) do not. Out of the 202 respondents 48 (24.8%) treat pain without a doctor's guidance while the remaining 152 (75.3%) do not treat pain without a doctor's guidance. Lastly, 48 (24.8%) of the respondents treat constipation without a doctor's guidance while 144 (71.3%) do not treat it without a doctor's guidance. In conlusion, headache, Chills and Catarrh are the types of Ailment that students used self medication for.

Table 5: Drugs that is mostly used for self-medication among students

		Frequency	Percent
	Yes	168	83.2
Anti-malaria	No	34	16.8
	Tota1	202	100.0
African traditional	Yes	112	55.5
medicine	No	90	46.6
	Tota1	202	100.0
Antacids	Yes	36	17.8
	No	162	80.2
	Total	202	100.0
Analgesics/antipyretics	Yes	60	29.7
	No	134	66.3
	Total	202	100.0
Antibiotics	Yes	104	51.5
	No	98	48.5
	Total	202	100.0
Eye / ear drops	Yes	116	57.4
	No	86	42.6
	Tota1	202	100.0
Alcohol	Yes	28	13.9
	No	174	86.2
	Total	202	100.0
	Yes	66	32.7
Anti-allergies (e.g.,	No	136	67.3
Piriton)	Total	202	100
Concaine	Yes	24	11.9
	No	178	88.1
	Total	202	100
	Yes	114	56.5
Concoction	No	90	44.6
	Total	202	100
Ibu-400, paracetamol	Yes	4	2.0
	No	198	98.0
	Total	202	100

Result showed that the following drugs were taken without doctor's prescription in no particular other. Out of the 202 respondents, 168 (83.2%) of the respondent take anti malaria while 17 (16.8%) do not take anti malaria. Also, 112 (55.5%) of the respondents take African traditional medicine while the remaining 90 (44.6%) take orthodox medicine. Further findings revealed that 36 (17.8%) respondents take Antacids while 162 (80.2%) do not take antacids. Report of this study showed that 60 (29.7%) of the respondents take analgesics / antipyretics while 134 (66.3%) of them do not take it. Also, finding showed that 104 (51.5%) of the respondents take antibiotics while 98 (48.5%) do not take antibiotics. This study revealed that 116 (57.4%) of the respondents use eye/ear drops while 86 (42.6%) do not use it. The report showed that 28 (13.9%) respondents takes alcohol while 174 (86.2%) do not take alcohol. The findings of this study showed that 66 (32.7%) of the respondents take anti-allergies (e.g., Piriton) while 136 (67.3%) to not take anti-allegies. Also, 24 (11.9%) respondents take cocaine while the remaining 178 (88.1%) do not take cocaine. Result showed that 114 (56.5%) of the respondents take concoction while 90 (44.6%) do not take concoction. Lastly, 4 (2%) of the respondents take other drugs such as Ibu-400 and paracetamol while the remaining 198 (98%) do not take such drugs. we can summarize that, Anti-malaria, African traditional medicine and Eye / ear drops are drugs that is mostly used for self-medication among students

Table 5: factors influencing your decisions

		Frequency	percent
Self decision	Yes	76	37.6
	No	126	62. 4
	Tota1	202	100
Family and friends' advice	Yes	116	57.4
	No	86	42.6
	Total	202	100
Previous medical prescription	Yes	130	64.4
	No	72	35.6
	Total	202	100
Mass media	Yes	74	36.6
	No	128	63. 4
	Total	202	100.0
Advice from private practitioners	Yes	114	56.4
	No	88	43.6
	Total	202	100.0

Findings on Table 5 showed that 76 (37.6%) of the respondents utilize self-decision in determining the drugs to take while the remaining 126 (62.4%) do not do so. Result further revealed that 116 (57.4%) of the respondents utilize family and friends' advice in determining the drug to take while 86 (42.6%) do not utilize family and friends' advice. Results showed that 130 (64.4%) of the respondents depend on previous medicine prescription in determining the drug to take while 72 (35.6%) do not depend on such

previous prescriptions. Report showed that 74 (36.6%) of the respondents utilize the mass media determining which drug to take while the remaining 128 (63.4%) do not utilize the mass media. Lastly, 114 (56.4%) of the respondents utilize advice from private practitioners in determining the drug to take while the remaining 88 (43.6%) do not utilize such. From the result, we can conclude that, family and friends' advice, previous medical prescription and advice from private practitioners were factors that influence respondent's decision on self-medication.

Hypothesis one

There is no significant relationship between gender and the practice of self-medication.

Table 6: Pearson product moment between gender and self-medication

Variable	N	Mean	SD	r-cal	Sig.
Gender	90	18.23	2.14	0.081	0.075
self-medication	94	19.00	2.01		

Not significant at 0.05; df = 200; critical r-value = 0.098

As presented in Table 6, the calculated r-value of 0.081 was less than the critical r-value of 0.098 at 0.05 level of significance with 200 degrees of freedom. With this result, we can concluded that, there was no significant relationship between gender and the practice of self- medication.

Hypothesis two

There is no significant relationship between the presence of long standing illness and the practice of self-medication.

Do you take medicines to treat any condition (e.g. headache, diarrhoea, fever, etc. without the prescription from a doctor? Do you have any long-standing illness that required treatment? Crosstabulation

Table 7: chi-square table for relationship between the presence of long standing illness

Yes	No	Total	Chi-square	Sig.
13	41	54	.029	.866
12	35	47		
25	76	101		

From table 7, degree of freedom (df) = 1, $\mathbf{x}^2$ tab = 3.841, $\mathbf{x}^2$ cal = 0.029. Therefore, we accept the null hypothesis. This implies that, there is no significant relationship the presence of long-standing illness and the practice of self-medication.

Hypothesis three

There is no significant relationship between the perception of the students about the health system in Nigeria and the practice of self-medication.

Do you take medicines to treat any condition (e.g., headache, diarrhea, fever etc. without the prescription from a doctor? * what do you think about the health system in Nigeria? Does it meet the major health needs of the populace? Cross tabulation

Table 8: chi-square of relationship between students' perception of health system

Yes	No	Total	Chi-square	Sig.
28	24	52	.077	0.782
28	23	47		
52	47	99		

From the results in Table 8, at degree of freedom (df) 1, $\mathbf{x}^2$ tab = 3.841 was greater than $\mathbf{x}^2$ cal =0.077. Therefore, accept the null hypothesis which states that, there is no significant relationship between the perception of the students about the health system in Nigeria was retained.

DISCUSSION OF FINDINGS

This study tends to determine the level of utilization of self-medication among students of Technical College, Osogbo. The demographic characteristics of this study showed that majority of the respondents are 17 – 20 years of age. Findings further showed that majority of the respondents are male and they are in year 3. Findings further revealed that respondents are majorly Islam and Christianity. Lastly, majority of the respondents are Yoruba.

The research finding showed that the level of utilization of self-medication is high. This is in line with the study of Gutema and Gadisa (2011) who conducted a similar study at Michelle University, Ethopia and observed that the level of utilization of self-medication is high. Findings of this study showed that the frequency of respondents' self-medication is once or twice in a week.

The study showed that the most common ailment for which the respondents reported to have practiced self-medication were headache, chills and Catarrh. Ali, Kai, Heat and Dhariaraj (2012) also indicated in a similar study conducted at a private university at Malaysia that the most prevalent symptom responsible for self-medication was headache, followed by cough and cold, fever and chills and then stomach pain.

The study indicated that the drugs mostly used for self-medication are anti- malaria, eye/ear drops, and antibiotics. Lamikanra (2012) who also conducted a similar study in south eastern Nigeria found that antibiotics were the most commonly self-medication followed by anti-malarias. The research findings showed that factors influencing decisions on self-medications include family and friends advise, previous medical prescription, and advice from private practioners. A similar study conducted by Alghanim (2011) on "self-medication practice among patients in a public health care system" indicated a similar result showing that factors influencing decisions on self-medication are mostly private pharmacies, followed by left over prescription including and family and friends.

Implications for nursing

1. The World Health Organisation and WSMI identifies the importance of self medication and therefore advocates for its responsible especially nurses.
2. Nurses must educate the patients about irresponsible self medication and its associated.
3. The patients must be properly attended to and their conditions properly managed to ensure their confidence in professional orthodox practitioners.

4. They must be given adequate information about the use of drug outside the health facility
5. There should be proper follow-up of clients to ensure adherence with medical advice.

Conclusion and Recommendations

Self is an important aspect of self-care that is characterized by the selection and use of medicines to treat symptoms or minor health problems without the guidance or prescription of qualified professional personnel and is based on the innate nature of human beings to play an active role in the management of their own health.

It is a common knowledge that are not enough doctors and pharmacies in developing countries, which has made the WHO and WSMI to support responsible treatment of self-identified problems in order to reduce cost of health, reduces pressure on medical services and allow the limited health practitioners to focus on more serious health problems. But irresponsible self-medication involving the abuse of prescription drugs and misuse of OTC drugs is overwhelmingly common among the populace with their attendant health risks. At the end of this study, it was discovered that majority of the respondents were aware of the health risks associated with self-medication but practice it due to certain reasons that were also identified in study.

Information obtained showed that the respondents were aware of health risks of responsible self-medication, but practice it due to certain reasons including high cost of visiting health professionals, lack of time etc. Therefore, in view of this, the following recommendations are to be encouraged to reduce risks of self-medication.

Government

The government should promote the proper training of health professionals in order to increase the number of competent health care provider capable of meeting the health needs of populace. Also, government should promote the establishment of less costly health facilities including primary health centre well stocked with necessary equipment's required for their proper functioning.

Health Practitioner

They should have adequate knowledge of proper management of cases. Also, provide adequate information whenever self-medication must utilized to ensure its proper utilization.

Members of the community

They should visit heat facilities for proper management of cases. Also, follow all prescribed orders regarding the use of drugs

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STRESS MANAGEMENT MECHANISMS AND LECTURERS' JOB PERFORMANCE IN KWARA STATE COLLEGES OF EDUCATION

Ibraheem, M. A.,
Atunde, M. O.,
Rejuaro, F. M.,
Umar, N. J.,
Imam, A. A.
&
Umar, G. A.

ABSTRACT

This study examined the relationship between stress management mechanisms and Job performance among lecturers' in Kwara State College of Education. A descriptive research design was adopted for this study. Three hundred and sixty-nine (369) respondents were selected through stratified sampling technique. Data were collected with the use of questionnaires titled: "Stress Management Mechanisms Assessment Questionnaire" (SMMAQ) and "Lecturers' Job Performance Assessment Questionnaire" (LJPAQ). Data collected were statistically treated with descriptive and inferential statistics such as mean, standard deviation, Pearson Product Moment Correlation Coefficient tests and Regression Analysis. The findings of the study revealed that: physiological focused individual coping mechanisms ($\beta = 0.736$, t cal. =14.05, $p < 0.001$) has a significant positive contribution to lecturers' job performance. The study further revealed that job-related organizational stress management mechanisms showed an insignificant positive contribution to lecturers' job performance ($\beta = -0.038$, t cal.= -1.21, $p=0.196$, $p>0.05$). The study concluded that there is a significant relationship between stress management mechanisms and lecturers job performance in Kwara State colleges of education. Based on the conclusion, we recommended that the College management should make provision for physiological needs necessary for staff motivation and the lecturers should adopt various coping mechanisms in order to enhance their performance at work place.

Keywords: Stress Management Mechanisms, Job Performance

INTRODUCTION

The term stress was defined as a condition or feeling experienced when a person perceives that demands exceed the personal and social resources the individual is able to mobilize (Sultana (2012). Anbazhagan and Soundar (2013) viewed stress as a dynamic condition in which an individual is confronted with an opportunity, constrained and demands on doing what he desires which will lead to important outcomes. Stress is manifested as tension, irritability, inability to concentrate, feeling excessively tired trouble sleeping, increased blood pressure, difficulty breathing, stomach upset, sweating palms and tight muscles that may cause pain and trembling (Betonio, (2015); Usoro & Etuk (2016). Workers who are stressed are also most likely to be unhealthy, poorly motivated, less productive and less effective at work and their organizations are less likely to be successful in a competitive market. These various symptoms of stress can be brought about by pressures at home and at work. Nnuro, (2012) highlighted that, the causes of occupational stress include, perceived loss of job security, lack of safety, complexity of repetitiveness and lack of autonomy in the job. In addition, occupational stress is caused by lack of resources and equipment; work schedules such as working late or overtime and organizational climate (Karihe, Namusonge & Iravo, 2015). Sources of stress among lecturers

according to Yusoff, Khan and Azam (2013) may also include: pace, variety, meaningfulness of work; workloads; role conflict, multiple supervisors or managers; career development opportunities; role ambiguity and balancing home and work life.

Yusoff, Khan and Azam (2013) investigated the relationship between job stress, performance and emotional intelligence among faculty members taken from two universities of Pakistan, they found that a negative relationship exists between job stress and performance, whereas a strong positive was found between emotional intelligence and job performance. Usoro and Etuk (2016) also in their study on work load related stress influence on job effectiveness among university lecturers in Akwa Ibom and Cross River States, Nigeria, they observed that workload related stress significantly influences the job effectiveness of lecturers in terms of publication, community service and teaching effectiveness.

Stress management mechanisms, is an intervention designed to reduce the impact of stressors in the workplace which have an individual focus or organizational focus, aimed at increasing an individual's ability to cope with stressors (Karanja, 2014). In addressing the stress and stressors at various stages, variety of stress management mechanisms or strategies have to be adopted to prevent exposure of the individual staff to stressor and strengthen their coping mechanism. Betonio, (2015) and Nnuro, (2012) suggested various strategies cub with stress at work places, the strategies ranges from most casual maneuvers to complicated form of problem solving. Based on the level of operation of management process, four major categories of stress management mechanisms have been suggested for this study, namely; physiological focused individual coping mechanisms, work-focused individual coping mechanisms, job related organizational stress management mechanisms and health maintenance organizational stress management mechanisms.

Physiological focused stress management mechanisms are divided into three specific areas. The first area consists of activities which engage the individual in some sort of physical exercises or work, the second is centered on those practiced specifically for the purpose of relaxation such as meditation and other relaxation techniques, while the third category has to do with the use of dieting, seeking professional counseling/ treatment and the use of alcohol or drugs. Some of the physiological individual coping strategies for improving the physical and mental strength to deal with stress from all sources according to Burns and Burns (2016), Cooper and Straw (2014), and Wayne (2015) include: physiological fitness, meditation, stretching exercise, aerobic exercises, massage, acupressure, spa, abdominal breathing, biofeedback, laughter and music and nature. Segal, Smith, Robinson and Segal, (2017) and Luthans, (2013) however, suggested some work-focused individual coping mechanisms for reducing job stress. These include: creating a balanced schedule; leaving earlier in the morning; planning regular breaks; employees not over-committing themselves; and prioritizing tasks. Mate-Siakwa (2014) added that employees can manage their work stress level by clarifying job description and requesting for a transfer. Other forms of work-focused individual coping mechanisms include: readjust life goals, self-control, time management and keeping a stress diary (Vaishnavi, 2016). While it is necessary for individuals to design their own mechanisms to reduce stress to an acceptable level, it is equally important for organizations to develop programs that will help employees reduce their stress. Some of the job-related organizational stress management mechanisms as noted by Moaz *et al.* (2016) and Peretomode (2015)

which are: selection and placement, job enrichment, job redesign, effective and equitable performance appraisal and reward system, participation in decision making, building teamwork and creating a conducive work environment. Health maintenance organizational stress management mechanisms are a form of stress management mechanisms where organizations provide facilities at their premises for physical fitness such as gym, swimming pools, as well as psychological counseling. They hold seminars and workshops to help employees in understanding the nature and sources of stress, its ramifications and possible ways to reduce its negative effects (Moaz *et al.*).

Colleges of education are institutions of higher learning with teaching and research facilities which offer teacher education programmes and awards Nigerian Certificate in Education (N.C.E.). Its principal mission is the production of teachers at the primary and junior secondary levels. The objectives of colleges of education to include: producing highly motivated, conscientious and efficient classroom teachers for all levels of the educational system; and providing teachers with the intellectual and professional background adequate for their assignment and ensuring their adaptability towards changing situations (NPE, 2013). Lecturers as, human resources in colleges of education are constantly faced with a lot of academic and administrative responsibly, hence, increasing the pressure daily academic demands. In this regard, Yusoff, Khan and Azam (2013) opined that, academic staff members are always under constant pressure for meeting daily activities; resultantly they suffer from work place pressures such as job stress. In view of the above, it suffices to note that, stress among lecturers is inevitable and it has become a daily life work experience. It is however, necessary for determine coping strategies among lecturers to sustain the health and productivity on the job.

Management of tertiary institutions like colleges of educations in Kwara State, Nigeria, has over time been a contentious issue most especially on the job performance of lecturers. Unfortunately, lecturers in colleges of education in Kwara State do not perform to the expected standards and neither do they seem to address the needs of students. The lecturers' performance/productivity level is still less satisfactory than expected and consequences have been predictable as there are rising concerns over issues of poor quality of instructional delivery, missing results, stagnant promotion as a results of poor research activities and inadequate professional development, poor job commitment in colleges of education in Kwara State. In view of the above, this study is designed to examine the relationship between stress management mechanisms and lecturers' job performance in Kwara State colleges of education.

Research questions

1. What is the level of stress among lecturers in Kwara State colleges of education?
2. What are the causes of stress among lecturers' in Kwara State colleges of education?
3. What are the mechanisms adopted in the management of stress among lecturers' in Kwara State colleges of education?
4. What is the level of lecturers' job performance at Kwara State colleges of education?

Hypothesis

1. There is no significant relationship between stress management mechanisms and lecturers job performance in Kwara State colleges of education?

METHODOLOGY

The descriptive research design was adopted for this study. The study population consisted of 615 drawn from management staff and academic staff in selected Colleges of Education, Kwara State that is, College of Education Ilorin - 200; College of Education Oro – 165; and College of Education Lafiagi (Technical) - 135). The sample for the study consists of 369 respondents (69 management staff and 300 academic staff) drawn from the study population. The stratified sampling method was used to select schools while proportional sampling techniques was used to select 60% of the population from each College. Two sets of instruments were used for data collection in this study. The first was questionnaire tagged "Stress Management Mechanisms Assessment Questionnaire" (SMMAQ) administered on all lecturers in the sampled Colleges. The questionnaire was a close ended form based on a four (4) point Likert scale rated 4, 3, 2 and 1.

The instruments (SMMAQ and LJPAQ) were face validated by three experts, one in Measurement and Evaluation, Educational Psychology and Educational Management; all at the University of Ilorin. Their independent feedback was used to revise the questionnaires to ensure content validity. The reliability of the instrument was established using the test-retest method. This was done by administering the instruments on forty (40) subjects who did not form part of the main study drawn from Kinsey College of education, Ilorin and Muhyideen College of education, Ilorin. The reliability coefficient of the instrument using Pearson Product Moment Correlation Coefficient Formula was 0.71. Data collected were presented and analyzed with descriptive statistics of mean and standard deviation to answer the research questions 1-4, the inferential statistics of Correlation Matrix and Multiple Regression was used to answer research question 5 as well as analyzing the research hypothesis.

RESULTS

The results of this study were presented in tables based on the research questions and hypotheses.

In the analyses of research question 1, a cut-off point of 2.50 was considered. This implies that if Mean > 2.5, the item is accepted and when the Mean < 2.5, the item is rejected. The grand mean values were rated as: 3.50-4.00 for High Level (HL), 2.50-3.49 for Moderate Level (ML) and 0.00-2.49 for Low Level (LL).

Table 1. Mean ratings on the level of stress among lecturers' in Kwara State COEDs

S/N	Items	Mean	SD	Decision
1	I always experience frequent headache after work hours.	2.76	0.52	ML
2	I sometime feel anxious, irritable or depressed when I at work.	2.56	0.85	ML
3	I sometime experience rapid heart beat.	2.60	0.94	ML
4	I sometime feel apathy and loss interest in work	2.78	0.86	ML
5	By the time I get home I am so tired and fatigued	2.94	0.98	ML
6	I sometimes have problem sleeping at home in the night	2.48	0.91	LL
7	Sometimes I have troubles concentrating during working hours	2.68	0.79	ML
8	Sometimes I feel/become angry and start yelling at someone	3.50	0.58	HL
9	I take pain relief drugs every day	2.98	0.92	ML
10	I often feel like quitting my job due to feelings of dissatisfaction	2.22	0.98	LL
	Grand Mean	2.75	0.83	ML

Table 1 indicated that becoming angry, start yelling at someone (3.50) and taking pain relief drugs everyday (2.98) are highest level of stress exhibited by the the lecturers of Kwara State Colleges of Education, followed by tired and fatigue on getting home (2.94). Feeling aparthy and loss of interest in work (2.78), experiencing frequent headahe afterwork hours (2.76), having troubles concentrating during working hours (2.68), experiencing rapid heart beat (2.60) and feeling anxious, irritable or depressed (2.56) showed moderate level of stress while sleeping problem at home in the night (2.48) and feel like quitting job (2.22) are the lowest level of stress exhibited among lecturers in the study. In summary the level of stress among lecturers at Kwara State College of Education was moderate, with grand mean value of 2.75.

For table 2, a cut-off point of 2.50 was considered. This implies that if Mean > 2.5, the item is accepted and when the Mean < 2.5, the item is rejected.

Table 2. Mean ratings on the causes of stress among lecturers'

SN	Items	Mean	S. D	Decision
1	Motivational factors (irregular payment of salaries, arrears, benefits, allowances, stagn ation in promotion etc.).	3.97	0.72	Accepted
2	Combination of both administ rative and academic responsibilities.	3.64	0.73	Accepted
3	Lack of adequate equipments/facilities needed to carry out assigned tasks and duties.	3.85	0.51	Accepted
4	Pressure of meeting up with the semester calendar.	3.36	0.88	Accepted
5	Dealing with students' disciplinary problems.			
6	Demands of official work on private time.	3.10	1.03	Accepted
7	Pressure to complete reports, memo s and other communication.	3.04	0.97	Accepted
8	Pressure of having the required publication for promotion.	2.96	0.96	Accepted
9	Pressure to attend workshops, conferences and seminars	2.55	0.99	Accepted
10	Unconducive work environment/ poor working condition.	3.95	0.71	Accepted

Table 2, presents the mean ratings of the opinions of the respondents with regard to the causes of stress. The result from this table showed motivational factors such as irregular payment of salaries, arrears, benefits, allowances, stagnation in promotion etc (3.97), unconducive work environment/ poor working condition (3.95) and lack of adequate equipments/facilities needed to carry out assigned tasks and duties (3.85) have the highest scores on the causes of stress while combination of both administrative and academic responsibilities(3.64), pressure meeting up with the semester calender (3.36), demands of official work on private time (3.10) have the moderate scores on the causes of stress among respondents. Lastly, pressure to complete reports, memos and other communication (3.04), pressures of having the required publication for promotion (2.96) and pressure to attend workshops, conferences including seminar (2.55) form the least causes of stress the respondents. In summary, the most prevalent causes of stress among respondents are motivational factors, poor work environment/ poor working condition, lack of adequate equipments needed to carry out assigned tasks and duties; and combination of both administrative and academic responsibilities

Table 3. Mean rati ngs on the mechanisms adopted in the management of stress among lectu rers' in Kwara State Colleges of Education

SN	Items	X	SD	Decision
	Physiological Focused Individual Coping Mechanisms			
1	Engaging in regular exercises	2.90	0.67	Accepted
2	Reading Newspaper, magazines and interesting novels	3.40	0.61	Accepted
3	Watching sports events like football on the TV or stadium	2.48	0.91	Rejected
	Cluster Mean	2.93	0.73	
	Work-Focused Individual Coping Mechanisms			
4	Taking off time from work	2.75	0.69	Accepted
5	Allocating time to specific tasks according to their degree of importance.	3.48	0.63	Accepted
6	Delegating responsibilities to subordinates.	2.51	1.01	Accepted
	Cluster Mean	2.91	0.78	
	Job Related Organizational Stress Management Mechanisms			
7	Using more flexible work schedules	2.94	0.77	Accepted
8	Offering rewards and incentives	2.03	0.85	Rejected
9	Involving employees in drawing up career development plans.	1.32	1.06	Rejected
	Cluster Mean	2.10	0.89	
	Health Maintenance Organizational Stress Management Mechanisms			
10	Provision of facilities for physical fitness (e.g gym, swimming pool etc.)	2.38	1.03	Rejected
11	Provision of professional guidance and counseling services (psychological counseling)	2.20	0.82	Rejected
12	Organising semina rs, w orkshop and lectures to help lecturers understand about stress and its management.	1.32	1.06	Rejected
	Cluster Mean	1.97	0.97	
	Grand Mean	2.68	0.82	

Table 3 revealed that physiological focused individual coping mechanisms and work-focused individual coping mechanisms were the stress management mechanisms adopted in the management of stress among respondents while job related organizational stress management mechanisms and health maintenance organizational stress management mechanisms were not adopted because they are below the 2.50 criterion score. In summary, the physiological focused individual coping mechanisms and work-focused individual coping mechanisms were the stress management mechanisms adopted in the management of stress among lecturers in Kwara State Colleges of Education.

Table 4. Mean response on the level of Lecturers Job Performance

S/N	ITEMS	Mean	S.D	Decision
	Teaching Activities			
1	Attend lectures punctually.	2.42	1.00	LP
2	Adopts various teaching methods and us e instructi onal materials to aid students' understanding of the topic or concepts.	2.17	1.13	LP
3	Demonstrates adequate knowledge of subject matter.	3.11	0.85	MP
4	Covers course content adequately.	2.72	0.92	MP
5	Measures students learning using multipl e and varie d assessment tools like assignments, 5 minutes test, term papers etc.	3.45	0.76	MP
6	Sets and administer examinations questions to test the ability of students.	3.70	0.74	HP
7	Students attain high level of performance.	2.77	0.95	MP
	Research and Publications			
8	Write and publish text-books promptly.	2.46	0.99	LP
9	Make chapter contributions promptly.	2.93	0.92	MP
10	Publish write -up and researches in both local and international journals promptly.	3.42	0.74	MP
11	Attend key conferences, seminars a nd wo rkshops to deliver paper/write-up.	1.98	1.03	LP
12	Are widely known as a research scholar in areas of specialization.	2.62	0.98	MP
	Grand Mean	2.81	0.92	ME

NB: The mean score statement was interpreted as follows: 3.50 – 4.00 were classified as high performance (HP), 2.50 – 3.49, indicated average performance (AP), and mean values < 2.50 were classified as low performance (LP). This interpretation also applies to the grand mean values.

Table 4, revealed that setting and administration of questions(3.7) is rated as the highest job performance of the respondents while students learning assessment tools (3.45), Publish write-up and researches in both local and international journals promptly (3.42), demonstrating adequate knowledge on subject matters (3.11), makes chapter contributions promptly(2.93), Students attain high level of performance (2.77), covers course content adequately (2.77), widely known as a research scholar in area of specialization (2.62) is rated as average performance among the respondents.Lastly, write and publish text-books promptly(2.46), attending lectures punctually (2.42), adopts various methods of teaching (2.17) and attending key conferences, seminars and workshops to deliver paper/write-up (1.98) is rated as low performance among respondents.

In summary, the respondents are highly rated in teaching activities than research and publications and their level of job performance is moderate.

Table 5. Multiple Regression Ana lysis of the contribution of various stress m anagement mechanisms on lecturers' job performance

Stress management mechanisms	B	S. E	Standardized Beta	t	p-value
Physiological Focused Individual Coping Mechanisms	0.736	0.049	0.613	14.05	<0.001**
Work-Focused Individual Coping Mechanisms	0.551	0.060	0.364	8.06	<0.001**
Job Related Organizational Stress Management Mechanisms	-0.038	0.022	-0.296	-1.21	0.196
Health Maintenance Organizational Stress Management Mechanisms	-0.082	0.022		-2.41	0.006**
Constant	-2.812	0.538	-0.066	-4.86	<0.001

**significant contribution at 0.01 ($p<0.01$), R = 0.91, R2=0.85

Lecturers' job performance = -2.812+0.736*PFICM+0.551*WFICM-0.038*JROSMM -0.082*HMOSMM.

Table 5 showed that physiological focused individual coping mechanisms (β = 0.736, t calc. =14.05, p <0.001) has a significant positive contribution to lecturers' job performance. Work-focused individual coping mechanisms as a stress management mechanism equally showed a significant contribution to lecturers' job performance (β =0.551, t calc. = 8.06, p<0.001). Job-related organizational stress management mechanisms showed an insignificant positive contribution to lecturers' job performance (β = -0.038, t calc.= -1.21, p=0.196, p>0.05). For health maintenance organizational stress management mechanisms, the results revealed a significant negative contribution to lecturers' job performance (β =-0.082, t = -2.41, p = 0.006, p<.001).

DISCUSSION

Finding on the level of stress among lecturers at Kwara State College of Education was moderate, with grand mean value of 2.75. This finding tallied with the findings of Moaz *et al.* (2016) and Peretomode (2015) but negates that of Aasia, Hadia and Sabita (2015) who found that the stress levels among employees in textile sector of Faisalabad is high in certain areas like work overload and long work hours, pressure at work and job insecurity.

The study also revealed that the most prevalent causes of stress among lecturers in Kwara State Colleges of Education were motivational factors, poor work environment/ poor working condition, lack of adequate equipments needed to carry out assigned tasks and duties; and combination of both administrative and academic responsibilities with mean values 3.97, 3.95, 3.85 and 3.64 respectively. The finding on motivational factors as a cause of stress aligns with that of Omoniyi (2013) who found that university lecturers experience stress resulting from poor conditions of service. The finding on lack of adequate equipments needed to carry out assigned tasks and duties is supported by the study conducted by Ukwayi, Uko and Udida (2013) and Bada and Falana (2012) who outlined the causes of stressors among academic staff as high cost of living and inadequate facilities/infrastructures as the main causes of stress among academic staff of

tertiary institutions in Nigeria. The finding on the combination of both administrative and academic responsibilities as a stressor agrees with that of Sulyman (2016) who reported that, workload as a result of pressure arising from the performance of day-to- day academic and administrative duties predispose academic staff to job stress.

The study further revealed that, the physiological focused individual coping mechanisms and work-focused individual coping mechanisms were the stress management mechanisms adopted in the management of stress among lecturers in Kwara State Colleges of Education. The findings are in consonance with that of Ukwayi, Uko and Udida (2013), who found that the predominant strategies employed by academic staff in managing stress include: creating time for leisure activities, taking vital medications, adequate sleep and getting help from a mentor. The finding also lends credence to the finding of Nkemakolam (2016) and Nwosu (2016) that academic staff employed strategies such as physiological activities involving exercises, cognitive and psychological strategies involving positive reappraisal, and interpersonal strategies such as effective use of time.

Furthermore, the study however revealed that, job related organizational stress management mechanisms and health maintenance organizational stress management mechanisms were not adopted. This finding therefore emphasizes the need for College management to develop programs that will help lecturers reduce their stress level, as these programs will help in controlling lecturers' turnover, burnout, health issues, absenteeism and strained relationship with co-lecturers/staff; and as a result, performance will improve.

Consequently, the level of lecturers' job performance in Kwara State Colleges of Education was found to be at moderate level. This finding was in consonance with the findings of Betonio (2015) whose findings revealed that, the overall rating of the effectiveness of the performance of the faculty staff members (academic staff) in all parameters were very moderately satisfactory which means there is still room for improvement to make it an outstanding assessment in the future.

The findings of this study also revealed that, a significant positive relationship exists between physiological focused individual coping mechanisms, work-focused individual coping mechanisms and lecturers' job performance in Kwara State colleges of education while, job related organizational stress management mechanisms and health maintenance organizational stress management mechanisms were not significant. The implication of this finding is that, both individuals and organizations must adopt management mechanisms that must help them to adapt to work, emotional, health and environmental demands thereby enhancing both individual and organizational performance. This is because coping correctly with stressors facilitates successful adaptation, while a failure in this process puts individuals and organizations at risk of poor performance at both the individual and organizational level. In support of this claim, scholars such as Burns and Burns (2016) and Bako (2014) agreed that coping with or managing stressful situations can decrease the level of stress and lessen its negative effects on the emotional, physical or psychological well-being of employee, thereby enhancing their work output or efficiency. Hence, the need for adoption of different stress management mechanisms at both the individual (physiological focused individual coping mechanisms and work-focused individual coping mechanisms) and organizational level (job related organizational stress management mechanisms and health maintenance

organizational stress management mechanisms) for improved lecturers job performance. The findings of this study therefore contradict that of Yu, Keller, Huang and Fanjoy (2016) who found no significant correlation between job performance and coping mechanisms among Chinese Aviation Maintenance Technicians in China.

Conclusion and Recommendations

We concluded that, stress management mechanisms have a significant relationship with lecturers' job performance in Kwara State Colleges of Education. One can also infer that Job-related and Health maintenance organizational stress management mechanisms in the Colleges have not been effective. This appears to have a direct impact on lecturers' performance which was found to be moderate. On the other hand, individual coping mechanisms seems to be working well because they all have significant relationship with lecturers' job performance though at moderate level and also has the tendency to improve lecturers job performance if adequately utilized.

Base on the conclusion of this study, it is evidence that both the College management and individual lecturer have more to do on the management of stress as a way of generating more positive relationship among the two variables. From the foregoing, we recommended that, the College management need to provide the lecturers a good working environment, improve on the school infrastructures and upward review of salaries.

on the part of the lecturers' they should adopt various coping mechanism to sustain the quality of teaching and high productivity in the schools. Both the individual lecturer and organizational level should use or adopt the studied stress management mechanisms in order to enhance the performance of lecturers and the organization at large.

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DICHOTOMY BETWEEN KNOWLEDGE AND UTILIZATION OF DELIVERY CARE SERVICES AMONG WOMEN OF CHILD BEARING AGE IN EDU LOCAL GOVERNMENT AREA, KWARA STATE, NIGERIA

Umar, N. J.,
Olubiyi, S. K.,
Rejuaro, F. M.
Ibraheem, M. A.,
Imam, A. A.
&
Yusuf, A. G.

ABSTRACT

This study determines the knowledge of delivery care and access to delivery care services among women in Edu local government area of Kwara State, Nigeria. A descriptive research design was used for the study. Two objectives were set, three research questions were answered and a null hypothesis was tested in this study. Researchers' designed questionnaire was used as instrument for data collection; a split-half test of reliability was used to determine the reliability of the instrument. Three hundred and sixty women were purposively sampled for the study. The results were analyzed using frequency counts, mean and standard deviation to answer research questions while, Chi-square was used to test the null hypothesis at 0.05 level of significance. The research findings showed that women of childbearing age knowledge about delivery care were poor. This study also showed poor willingness of women of childbearing age to access delivery care services in Edu Local Government Area of Kwara State. Based on the findings of this study, we recommended that efforts should be put in place byEdu LGA, the Kwara State and Federal ministries of health, as well as Non-governmental Organizations to strengthen the existing maternal health services particularly on delivery care services. Health education intervention programmes and faith-based interventions should be instituted to create health awareness on the significance of utilization of delivery care services provided.

Keywords: Delivery care services, delivery related problems, Women of Childbearing

INTRODUCTION

Maternal and child morbidity and mortality are high in most developing countries especially in Nigeria, the high prevalence rate showing maternal mortality ratio of 1:100 higher than the regional average, despite available human and material resources indicating the ugly trends in maternal health situation in Nigeria (FMOH, 2005). Delivery periods are periods that commenced as soon as the labour set in until the period the baby is born. This period is critical to both mother and the unborn child as any slight mishandling of the process of delivery will have a devastating effect on both the health of mother and that of the unborn child. The need for presence of a skilled birth attendant (trained midwife), at this period is critical for both mother and the newborn (WHO, 1999).

It has been reported that Africa accounts for the highest burden of mortality among women and children in the world (Udofia and Okonofua, 2008; Prata, Gessessew, Abaha, Holston& Potts, 2008). Every day, approximately 800 women die from preventable causes related to pregnancy and childbirth, 99% of these deaths occur in developing countries (WHO, 2014). A woman's chance of dying of pregnancy and childbirth in Nigeria is 1 in 13 (UNICEF, 2015). Every single day, Nigeria loses about 2,300 under-five and 145 women of child bearing age

making her the 2nd largest contributor to maternal and under-five mortality rate in the world (UNICEF, 2015).In Nigeria, the use of health facilities during delivery by pregnant mothers is still very low and maternal morbidity and mortality remains a public health problem, the causes of which may be attributed to several factors such as demographic, socio-economic, culture, obstetric and health system factors(Khalid, 2006). Most maternal deaths seem to occur between the third trimester and first week after delivery, this however necessitate skilled attendant at the time of delivery and access to emergency obstetric care remains the most effective measures to reduce morbidity and mortality (De Bernis, Sherratt, Abouzahr& Van Lerberghe, 2003).

Women education plays a significant role in the knowledge about delivery care services. Many women do not ordinarily refuse to deliver their babies and utilize delivery care services but lack of adequate information and knowledge serves as barrier. The Nigeria Demographic and Health Survey 2008 reported that only 10% of deliveries to WCA with no education occurred in health facilities compared to 90% of deliveries to women with education (Nigeria Demographic and Health Survey 2008).It was further reported in a study by Moore, Alex-Hart and George (2011)in GokanaLGA of River State, Nigeria thatsixty four (57.1%) of the 112 mothers in their recent delivery used a health facility while 48(42.9%) did not. They identified factors responsible forutilization of health facility for delivery to include: long distance to health facility 33(68.7%), onset of labour at night 40(83.3%), unavailability of means of transportation 37(77.1%), lack of money for transportation 26(54.2%).Moore, *et al* (2011)further inferred that unsatisfactory services at health facility 26(54.2%), unfriendly attitude of staff of the health facility 34(70.8%), and unavailability of staff at health facility 32(64.0%) are some of the reasons why women did not utilized delivery care services. Improved maternal health is achieved through skilled care at every birth and adequate management of pregnancy, childbirth and the post-partum period *(Camacho, Castro & Kaufman* 2006*).*

It has been observed that many women of childbearing age in Edu LGA delivered their babies at home attended to by unskilled attendants in an unhygienic condition. Delivery of babies in an unhygienic and filthy environment exposed both the mother and the new born baby to high risk of infections and many mothers and newborn babies lose their lives shortly after delivery of baby as a result of complications arising from delivery. The prevalence of maternal death or mortality is on the increase in Edu LGA. as showed by the health records of information unit of LGA (2015), about 15 WCA lose their lives during and shortly after delivery of baby, these losses of lives have become worrisome to not only the researchers but to the authorities of EduLGA. Based on the observed maternal and child morbidity and mortality among women of childbearing age in Edu LGA, this study examinedknowledge of women about delivery care and their willingness to access delivery care services in Edu Local Government area of Kwara State, Nigeria.

Research questions

1. What are the sources of information to women about delivery care services in Edu Local Government of Kwara State?
2. What is the knowledge level of WCA about delivery care services in Edu LGA of Kwara State?
3. To what extent do women utilize delivery care services in Edu LGA of Kwara State?

Hypothesis

There is no significant difference between the knowledge of women of childbearing age about

delivery care services and accessibility of delivery care services in Edu LGA of Kwara State.

METHODOLOGY

This study used descriptive research design to examine the knowledge and accessibility of delivery care services (DCS) among WCA in Edu LGA of Kwara State, Nigeria. The population for this study consisted of all women of childbearing age in Edu Local Government Area, a total of 360 WCA were drawn from the total population of 97,602 females in Edu LGA (National population Census, 2006). The Edu LGA comprises of three traditional districts which has ten (10) political wards with sixty-five (65) health facilities located all around the communities of the LGA. Eleven (11) out of sixty-five (65) health facilities provided maternal health services among others which did not offer such services.

The sample for this study was 360 WCA who were within the ages of 14 – 49 years, either pregnant or has one or more children were purposively sampled from 160 households in the two traditional districts of Edu LGA. A multiple stage sampling method was used to select a study population of 360 WCA from traditional districts in Edu LGA. Thus, multi stage sampling procedure was used as follows; six (6) political wards were selected by simple random sampling, that is, three from each of the two districts (Lafiagi and Tsaragi) respectively, the selection of households from the districts was by systematic sampling and WCA were purposively sampled from the 160 households.

The instrument for this study was researchers 'designed questionnaire which comprises of three sections that covered various components of delivery care services to ensure content validity upon which women knowledge and accessibility to delivery care services (DCS) was defined. This questionnaire was translated into Nupe language and used as interview schedule guide on WCA who could not read nor write in English Language.The question items in section A was amultiple responses form that obtained data from WCA on sources of information about delivery care services. Section B sought information on the knowledge of WCA about delivery care services. This wasas a close-ended type questions designed in the form of Yes or No from which the respondents tick optionsappropriate to them. Section C sought information on the WCA willingness to accessdelivery care services in Edu Local Government Area of Kwara State. Section C was designed in amodified Likert type scale of three (3) point responses and scored as following: A – Always (5points), ST-Some Times (3points) and NA-Not Always - scored (1 point).

The questionnaire was reviewed to reflect DCS components and to ensure face and content validity. The reliability was determined by pre-testing of the instrument using the split-half test of Cronbach statistic of reliability method. The corrected version of the questionnaire and the interview schedule was administered on 50 women of childbearing age in Patigi LGA and the result for the coefficient of reliability was 0.68 using Pearson Product Correlation test. Permission for the conduct of this study was obtained from the authorities of Edu Local Government Area and community leaders of the study areas respectively. The purpose and method of this study was explained to the WCA in various households that were selected for the study and their consents to participate in the studywas obtained.

Frequency counts, percentages, mean and standard deviation were used to answer research questions while the t-test was used to test the null hypotheses at 0.05 level of significance. The points scored by respondents on knowledge and access to DCS were

summarized using percentage mean score from their responses. The knowledge of the respondents on the items on delivery care services (DCS) was categorized into two, that is, high knowledge if respondents chose yes and low knowledge if the respondent chose no. while, on the utilization it was categorized into three and scored as very high utilization if the respondent chose always, high utilization if the respondent chose not always and poor utilization if the respondent chose not at all.

RESULTS

Research question 1: What are the sources of women information about delivery care services in Edu Local Government, Kwara State?

Table 1: sources of information of women of childbearing age for delivery care services

Sources of information	Frequency	Percentage (%)
Mass Media	180	37.5
Health workers	240	50.0
Family members	120	25.0
Friends/Acquaintances	100	20.8

.0%), mass media (37.5%) and family members (25.0%) while, information through friends/acquaintances was the least (20.7%).

Research Question 2: What is the knowledge level of women of childbearingabout delivery care services in health centers of Edu Local Government Area of Kwara State?

Table 2: Knowledge of women of childbearing age about delivery care services

Variables	Yes	No	Not sure
Do you know the signs of labour?	147(81.7%)	27(15.0)	6 (3.3%)
Is it important to deliver baby at health center?	165(91.7%)	9 (5.0%)	6 (3.3%)
Are screening/testing of blood and urine delivery services?	147(81.7%)	18(10.0%)	15 (8.3%)
Is monitoring progress of labour a delivery care service?	147(81.7%)	18(10.0%)	15(8.3%)
Do nurses and midwifes encourage and support you during last delivery?	129(71.7%)	18(10.0%)	33(18.3)
Is caesarian section performed on any delivery related problems?	54(30.0%)	63(35.0%)	63(0%)
Do health workers ensure safe delivery of Baby at the health center?	126(70.0%)	18(10.0%)	36(20.0%)

The Table 2 shows high level of WCA knowledge about the importance of delivery at health centers (81.7%) and about signs of labour (91.7%) respectively. While WCA knowledge about delivery care services such as; screening/testing of blood and urine monitoring progress of labour and monitoring progress of labour as delivery care services provided are equally high. However, WCA knowledge about measures (caesarian section) taken during the prolong labour to save the life of both mother and the unborn baby was very low (30.0%) compared with other delivery care services. Therefore, we can conclude that, the knowledge level of women of childbearing age about delivery care services in health centers of Edu Local Government Area of Kwara State is very high and commendable.

Research question 3: To what extent does women of childbearing age utilize delivery care services in Edu Local Government Area of Kwara State?

Table 3: Utilization of delivery care services among women of childbearing age in Urban and Rural communities

Delivery Care Services	Always	Sometimes	Not at All
I do deliver baby at health center?	60(16.7%)	144(40.0%)	156(43.3)
I do report at health centers as soon as labour pain is felt	18(5.0%)	192(53.3%)	150(41.7%)
I do go for blood and urine screening/testing	294(81.7%)	36(10.0%)	30(8.3%)
I do go for regular monitoring of/my pregnancy and the health of my unborn baby?	294(81.7%)	36(10.0%)	30(8.3%)
Health workers support me during delivery of baby	252(70.0%)	36(10.0%)	72(20.0%)

Table 3 shows that, only few of the WCA always accessed delivery care services especially delivery of babies at health centers (16.7%) and reporting early as soon as labour set in 18(5.0%). Majority (81.7%) of the WCAs attested to always attend antenatal clinic where monitoring of the mother and the fetus is done. However, the health workers attendance to WCA during labour and delivery was equally high especially screening of blood and urine as well as monitoring progress of labour (81.7%) respectively. Therefore, we can conclude that, the extent of women of childbearing age utilization of delivery care services in Edu Local Government Area of Kwara State

Hypothesis

There is no significant difference between Women of Childbearing Age knowledge and accessibility of *delivery care services* in Edu LGA of Kwara State

Table 5: Chi-square tests on the knowledge and utilization of delivery care services

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	76.156[a]	9	.000
N of Valid Cases	360		

Significant at 0.05 level

Table 5 shows p-value of 0.00 (less than 0.05) level of significance; this implies that knowledge has a significant influence on utilization of delivery care services by women of childbearing age in Edu LGA, Kwara State.

DISCUSSION OF FINDINGS

This study examined the women of childbearing age knowledge and accessibility of delivery care services among women of childbearing age in Edu LGA. The finding of this study revealed that majority of WCA has information about delivery care services through health workers and mass media. This finding corroborates study by Ghazal-Aswad, Rizk, Al-Khoori, Shaheen and Thomas (2001), that primary health care physicians were cited as main source of information and corroborated by Omo-Aghoja, Omo-Aghoja, Aghoja, Okonofua, Aghedo and Umueri, et al. ((2009) whose study revealed that media were the main sources of information to the respondents respectively. This finding showed that knowledge of women of childbearing age about delivery care services was very high particularly on the identifications of signs of labour and the importance of women to deliver their babies at health centers respectively. There was also a relatively high knowledge of WCA about delivery care services available in health centers, especially in the areas of routine blood screening and urine testing sessions as well as monitoring the progress of labour and health status of both the mother and the unborn baby by nurses/midwives in health centers. This level of knowledge among WCA about delivery care services have probably been influenced by several factors such as frequent health education by health workers, the WCA previous exposure and visit to ante-natal clinics for health care services and childbirth in health facilities. The women's' previous exposures to health centers for delivery care have subsequently influenced their continual access or patronage of that facility for delivery services. **This study** agreed with study by Amooti-Kaguna and Nuwaha (2000); Paul and Rumsey, (2002); Ambruoso, Abbey and Hussein, (2005); that women tend to deliver with the same provider if a previous delivery went well and tend to change when they are dissatisfied. The deliveries of babies by WCA also depend to a large extend on the attitude of health workers, economic status and social support from the husbands and family members.

This study further reaffirms the position of health belief model as modified by Rosen stock (1988) and later reviewed by Champion and Stretcher (2003) that perception of individual about the benefit he or she derived from a given or performing certain action will be a driving force to seek such benefit. This implied that women high level of knowledge about DCS was as a result of importance of the benefit derived from the ante natal care visits. The finding of this study also corroborates a similar study by Hanan and Abed El Aziz (2014), who observed that women's knowledge about breast self-examination (BSE) showed a highly significant improvement in the frequency and appropriate time to seek medical attention, a shift from pre to post-test. This finding also agreed with Dursin (2000) study on ignorance, lack of funds which push up maternal deaths in Indonesia reported that pregnant women do not get appropriate antenatal care, which is crucial for their health as a result of their ignorance about ANC services.

The result showed that, women of childbearing age utilise delivery care services in Edu Local Government Area of Kwara State was high. The WCA lukewarm attitudes towards delivery care services as revealed in this study was linked to high cost of delivery care services and lack of social support from the families. This result was however similar to study by Falkingham (2003)

who reported that despite the fact that medical services were accessible and free of charge, women in Tajikistan prefer to deliver at home because they perceive available medical services to be of low quality and unsafe. On the contrary in Edu LGA, most WCA believe the ANC and DCS are beneficial to both the mother and the unborn baby. The finding of this study also supported **Moore, Alex-Hart and George (2011) study that** respondents' lack of utilization of health facility for delivery could be linked with their unfriendliness encountered in the previous delivery in health facilities.

Conclusion and Recommendations

In conclusion, despite the availability of maternal health services particularly the delivery care services and their high knowledge about the importance of delivery care services, the WCA **d**oes not showed willingness to access delivery care services by health workers in Edu LGA, Kwara State.This poor willingness to access or utilize DCS might probably be responsible for high incidence of maternal and child death in Edu LGA.

Based on the conclusion of this study it was recommended that: Governments at all levels of health care should strengthen primary health care services by providing necessary delivery care facilities in health centers. Health workers should put in place an effective health education intervention programmer to improve WCA existing knowledge so as to encourage utilization of DCS in Edu LGA. Community and husbands of women of childbearing age should support and encourage women to visit ante natal clinics and deliver their babies in health centers. Government should provide community-based health insurance policy which will make delivery care services accessible and affordable to women in the Local Government Area.

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KNOWLEDGE OF RISK FACTORS AND PREVENTIVE PRACTICES OF HYPERTENSION AMONG OFFICE WORKERS IN YENAGOA LOCAL GOVERNMENT COUNCIL, BAYELSA STATE

Beredugo, L. I
&
Amakoromo, T.

ABSTRACT

This study examined the knowledge of risk factors and preventive practices of hypertension among office workers in Yenagoa Local Government Area Council of Bayelsa State, Nigeria. The research design adopted for this study was descriptive survey design. Stratified random sampling technique was employed to select 269 out of the total population of 1,341 office workers. The instrument used was a self-developed questionnaire with a reliability coefficient of 0.70. The findings of the study revealed that: Majority of the respondents are knowledgeable about the risk factors on hypertension but the respondents' preventive practice level was slightly below average because out of ten preventive practices listed only four were practiced. These include going regularly for check up of health status in the hospital, not drinking alcohol, eating low salt diet among others. It was recommended that, patients' education by physician and other health practioners is very important.

INTRODUCTION

Hypertension is one of the major global concern and also key preventable risk factors for the development of cardiovascular diseases (CVD). The burden of non-communicable disease of which hypertension is inclusive and increasing in epidemic proportions in Africa, and Nigeria is not left out. It is referred to as a "silent-killer"; though it is a preventable as well as controllable disease. According to Erhun, Olayiwola, Agbani, et al. (2005), hypertension is an important public health challenge in both economically developing and developed countries. Hypertension has been identified as a major cause of morbidity and mortality globally including sub-Saharan Africa. Several studies carried out opined that as a major non-communicable disease, and a leading cause of mortality that causes CVD, it is also a leading cause of cerebrovascular accident (CVA) – stroke, coronary heart disease, heart failure, kidney disease, as well as blindness (Ekwunife & Aguwa, 2011). In Nigeria, hypertension seems to be the most common CVD. According to a research survey conducted by Igbokwe and Odo (2012), the work revealed estimated value of over 41 million Nigerians as hypertensive. He went ahead to predict that this figure is expected to increase overtime, hence the need for a renewed effort and an urgent action to tackle the scourge. Their work also revealed that about 20% to 25% of Nigerian's populations are hypertensive.

Study conducted by Jones, Appel, Sheps et al. (2003), also revealed that hypertension affects 20 million people in sub-Saharan African, and this makes it to be the leading cause of hospitalization and mortality. Abdullahi and Amzat (2011), declared that more than 11% of Nigerian adults are living with the illness (hypertension). On the other hand, Omuemu, V. Okojie, O. and Omuemu, C. (2008), states that there is a low level of awareness of hypertension globally. Speaking further, they documented an awareness rate of just 18.55% in Nigeria. Hypertension, according to the British Medical Association (2002), is the persistently raised blood pressure exceeding about

140mmHg (systolic) and 90mmHg (diastolic) at rest. Okoye (2006), also defined hypertension as an elevation in the blood pressure above 140/90mmHg. It characterizes the disease as a progressive cardiovascular syndrome with many causes to the heart and vascular system. The ASH also noted that the early stages of hypertension can begin before an individual develops a sustained elevated blood pressure, and can progress to damage the heart, kidneys, brain, vasculature, and other organs, often leading to premature morbidity and mortality (Giles, 2005).

It is worthy of note that hypertension affects both males and females, and that the risk of developing it increases with age, that is as one gets older. Hypertension detection, prevention and management depend on the various underlying risk factors that serve as influencing agents for the development of this disease. These risk factors include age, race, family history, obesity, physical inactive (Sedentary life style), use of tobacco, alcohol, too much salt in the diet, stress, too little potassium and vitamin D in the diet, and certain chronic health conditions (Mayo, 2012). He further stated that with the increase of high blood pressure as regards to sex, it is more common in men during early middle age. Women on the other hand, are more likely to develop high blood pressure after menopause, though may still occur before menopause. Also with regards to race, high blood is particularly common among blacks, often developing earlier than it does in whites.

Most mechanisms leading to secondary hypertension are well understood. The pathophysiology of essential hypertension remains an area of active research, with many theories and different links to many risk factors. Cardiac output and peripheral resistance are the two determinants of arterial pressure (Klabunde, 2007). Cardiac output is determined by stroke volume and heart rate, stroke volume is related to myocardial contractility and to the size of the vascular compartment. Peripheral resistance is determined by functional and anatomic changes in small arteries and arterioles. An estimated 16.7 million, or 29.2% of total global deaths, result from the various forms of CVDs, many of which are preventable by the action on the major primary risk factors; unhealthy diet, physical inactivity and smoking (Lopez, Mathers, Ezzati, Jamison and Murray, 2006). Studies have revealed that some people are at greater risk of CVDs than others. The Heart Foundation of Australia (2010), is also of the view that the aforementioned risk factors by Mayo (2012) are linked to the development of the disease condition. Although, CVDs typically occur in middle age or later, risk factors are determined to a great extent by behaviours learnt in childhood and continued into adulthood, such as dietary habits and smoking (World Health Organization – WHO, 2010).

According to a study carried out by Froster (2010), among college students at State University of New York, he found out that over 91% of respondents knew hypertension was a major CVD risk factor. In addition, 90% identified smoking, 86.7% identified cholesterol level, and 72% identified exercise as additional factors. Furthermore, several studies have reported that family history of myocardial infection (MI), hypertension, is heart disease and cerebrovascular accident (stroke), significantly increases personal risk perception of the disease (Choi, Rankin, Stewart & Oka, 2008). Smoking, obesity and hypertension were determinant of perceiving CVD risk as high, while diabetic patients did not report high perceived CVD risk (Van Der, et al. 2007). Meanwhile, Haines (2012), is of the opinion that diabetes is another risk factor to hypertension. He says if one has diabetes, the risk of developing hypertension is doubled. He

believes that may be the reason why many elderly diabetics are at the same time hypertensive.

According to a survey study conducted in the United States among adults from 2003 to 2004 reveals that 24% of people who are hypertensive and had blood pressure exceeding 140/90mmHg were unaware of their elevated blood pressure (Smeltzer et al. 2010). The normal level of hypertension according to the Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation and Treatment of High Blood Pressure (JNCT) as one less than 120/80mmHg diastolic. While a blood pressure of 120 to 129/80mmHg to 89mmHg as pre-hypertension, and 140/90mmHg or higher as hypertension.

From every indication, hypertension and its associated risk factors and the practice of prevention still remain a health issue in Nigeria as well as the world. Since it is referred to as a silent killer and because most times, people that are at risk of developing it or have hypertension already do not experience any initial warning signs before the inevitable happens. It is therefore expedient for the researcher to embark on this study. Hypertension which is a preventable condition can reduce the incidence of morbidity, prevention of complications and also abate mortality among office workers and the general public. Hence, this study is aimed at assessing the knowledge of risk factors and preventive practices of hypertension among office workers in Yenagoa Local Government Area Council of Bayelsa State, Nigeria.

The high incidence of morbidity and mortality cases of hypertension and its related complications reveals that majority of the people; including office workers do not have adequate knowledge of the causes, risk factors as well as preventive measures. This implies that one's blood pressure may rise up to a critical level without the person realizing that he or she is seriously sick or have hypertension. Other health conditions are also a major contributing factor to hypertension. Example of which is diabetes mellitus which on its own is a major health catastrophe. As a nurse working in the hospital, interaction with hypertensive patients and observation reveals that majority of the people that are hypertensive are educated yet do not know how to manage their health condition. Some of them, when asked said it is as a result of heredity, others said they do not know but was only diagnosed of having hypertension as they visited the hospital.

Webber (2007), opined that there are many things which contributes to an individual's risk of developing high blood pressure. They include, age, ethnicity, gender, family history, smoking, activity level/exercise, diet, stress, medications and streets drugs, kidney and other medical problems like hormonal imbalance as well as pregnancy induced hypertension found in women during pregnancy. It was also revealed that the magnitude of deaths as a result of hypertension in Nigeria has become such that very urgent attention is needed to avoid an imminent epidemic of CVDs in the country (Igbokwe & Odo, 2012).

Objectives of the study

The study seeks to elicit the knowledge of the risk factors and preventive practices of hypertension among office workers in Yenagoa Local Government Area Council of Bayelsa State, Nigeria.

1. To identify the level of knowledge of risk factors of hypertension among office workers in Yenagoa L.G. A. Council.
2. To assess the preventive practices of hypertension among office workers in Yenagoa L.G.A. Council.

Research questions

1. What is the level of knowledge on the risk factors of hypertension among office

workers in Yenagoa L.G.A Council?

3. What is the preventive practices of hypertension among office workers in Yenagoa L.G.A. Council.

Hypothesis

There is no significant relationship between the level of knowledge of risk factors and preventive practices of hypertension among office workers.

The preventive practices of hypertension among office workers

Determining the preventive measures of the dreaded non-communicable disease among office workers is to a great extent far better than the control or treatment of this condition. Ulasi, Ijoma and Onodugo (2010), stated that working class adults constitute the main risk group for hypertension. According to Erhun et al. (2005), in a study conducted in a University Community in South West Nigeria also reveals that the prevalence rate among working class adults is 21%. Cuppucio et al. (2004) and Iyalomhe, G.B., and Iyalomhe, S. I. (2010), emphasizes that the level of detection, treatment and control of hypertension in West Africa is low and worrisome. Hence the need for proper preventive measures of the risk factors of hypertension. Some of these risk factors of high blood pressure can be prevented, especially if one has the knowledge or is aware that he or she is at risk of developing high blood pressure. Preventive measures of high blood pressure entail avoiding or preventing the known risk factors, such as low intake of potassium and vitamin D, medications (oral contraceptive pills), stress, obesity among others.

Igbokwe and Odo (2012), further opined that life style modification or changes can help one control and prevent hypertension. He further states that this can be achieved through eating healthy foods by applying the Dietary Approaches to Stop Hypertension (DASH). Diets such as fruits, vegetables, whole grains and low fat dairy foods, plenty of potassium, less saturated fats and total fats, decreased salt intake; maintain a healthy weight, increased physical activity (according to ones capability and health status), limit alcohol intake; avoid smoking, manage stress, monitor ones blood pressure regularly at home; practice relaxation or slow deep breathing exercise. McCoy (2012), is also of the view with Igbokwe and Odo (2012) that the prevention or avoidance of the listed risk factors, which he identified ten (10) healthy habits to keep blood pressure down, will help to prevent the development of hypertension. McCoy further stated that stress can cause temporary increase in high blood pressure; scientists are still unaware how stress affects blood pressure.

METHODOLOGY

The research design adopted for this study is descriptive survey design. The study was conducted in Yenagoa is a Local Government Area of Bayelsa State, South-South of Nigeria. The population used for this study consisted of office workers in the Yenagoa Local Government Council in Bayelsa State. The total population of the study was 1,341. From this population stratified random sampling technique was adopted to select 269 respondents. A self-developed questionnaire in line with the research questions, which were divided into three (3) sections of A, B, and C respectively with a total of 26 items. Section A elicited the socio-demographic data of the respondents, Section B covered the knowledge of the risk factors associated with the development of hypertension among office workers and section C dealt with information on the preventive practices of hypertension among office workers. The options on the instrument for sections A, B, and C had Yes and No. The validity of the instrument was done by the researchers. Also, the reliability of the

instrument was established based on a test-retest method and produced a reliability coefficient of 0.70.

RESULTS

Research question 1: What is the level of knowledge on the risk factors of hypertension among office workers in Yenagoa L.G.A Council?

Table 1: knowledge of the risk factors associated with the development of hypertension among office workers

Variables	Yes	No	Total
Hereditary makes one develop hypertension	215 (79.9)	54 (20.1)	269 (100)
Both men and women have equal ch ance of developing hypertension	245 (91.1)	24 (8.9)	269 (100)
Eating more salty diet will increase blood pressure	204 (75.8)	65 (24.2)	269 (100)
Development of hypertension progresses with age	200 (74.4)	69 (25.6)	269 (100
Hypertension causes heart attack	212 (78.8)	57 (21.2)	269 (100)
Hypertension is a leading cause of cerebrovascular accident (stroke)	212 (78.8)	57 (21.2)	269 (100)
Hypertension is highly associated with too much fat	212 (78.8)	57 (21.2)	269 (100)
Eating fatty food causes increase blood cholesterol vessels	201 (74.7)	68 (25.3)	269(100)
Cigarette smoking is a risk factor of having hypertension	84 (31.2)	185 (68.8)	269(100)
Being worried causes one to develop hypertension	87 (32.3)	182 (67.7)	269(100)

Percentages are written in parentheses

Table 1 is a reflection of the level of knowledge of the risk factors associated with the development of hypertension. It shows on the aggregate that greater proportion of the sampled respondents 215(79.9 %) out of 269 had are knowledgeable that family history (hereditary) makes one to develop hypertension. Also, 245(91.1%) had poor knowledge that both men and women have equal chance of developing hypertension. Furthermore, 204(75.8%) had low knowledge that eating more salty diet does not increase blood pressure, 200(74.4%) had poor knowledge that the development of hypertension progresses with age, 212(78.8%) had poor knowledge that hypertension can cause heart attack**.** The analysis further revealed that 212 (78.8 %) of the respondents also had poor knowledge that hypertension is a leading of cerebrovascular accident (stroke), 212(78.8 %) had poor knowledge that hypertension is highly associated with too much fat and 201(74.7 %) had poor knowledge that eating fatty food causes blockage of the blood vessels**.** Lastly, 185(68.8 %) had good (high) knowledge that cigarette smoking is a risk factor of having hypertension and 182(67.7%) also had good knowledge that being worried causes one to develop hypertension. The summarized analysis of table 4.3 indicates that an aggregate

percentage of majority of the sampled respondents are knowledgeable about the risk factors associated with the development of hypertension.

Research question 2: What are the preventive practices of hypertension among office workers in Yenagoa L.G.A. Council, Bayelsa state.?

Table 2: Preventive Practices of Hypertension among office workers

Variables	Yes	No	Total
I go regularly for check up of my health status in the hospital	223 (82.9)	46 (17.1)	269(100.0)
I do not smoke so as to prevent hypertension	72 (26.8)	197 (73.2)	269(100.0)
I don't get worried to reduce the risk of developing hypertension	120 (44.6)	149 (55.4)	269(100.0)
I do regular exercise to prevent hypertension	75 (27.9)	194 (72.1)	269(100.0)
I do not drink alcohol to reduces the development of hypertension	209 (77.7)	60 (22.3)	269(100.0)
I check your blood pressure regularly to prevent development of hypertension	59 (21.9)	210 (78.1)	269(100.0)
I do rest and sleep well to prevent hypertension	95 (35.4)	174 (64.6)	269(100.0)
I do eat good food lik e vegetables, fruits, beans, low fat to prevent hypertension	97 (36.1)	172 (63.9)	269(100.0)
I do eat of low salt diet to prevent the risk of developing hypertension	232 (86.2)	37 (13.8)	269(100.0)
I avoid bad fat in the diet to reduce the risk of hypertension	151 (56.1)	118 (43.9)	269(100.0)

A cursory look at Table 2 is a reflection of the respondents' responses on preventive practices of hypertension. It shows cumulatively that larger proportion of the sampled respondents 223 (82.9 %) out of 269 visits hospital regularly for check up of health status. Only 72 (26.8 %) do not smoke, while 120 (44.6%) do not get worried and 75 (27.9 %) do regular exercise to prevent hypertension. Also, majority of respondents 209 (77.7%) do not drink alcohol to reduce the development of their hypertension and few of the respondents 59(21.9 %) check their blood pressure regularly to prevent the development of hypertension. The analysis further revealed that 95 (35.4 %) of the respondents' rest and sleep well to prevents hypertension. It also shows that 97(36.1%) of the respondents eat good food like vegetables, fruits, beans, low fat to help prevent hypertension. Lastly, majority of 232(86.2%) eat low salt diet to prevents the risk of developing hypertension and majority of 151(56.1%) also avoid bad fat in the diet to reduce the risk of hypertension. Cumulatively, the respondents' preventive practice level of hypertension is slightly below average because out of ten preventive practices only four were adopted which include: going regularly for check up of my health status in the hospital, not drinking alcohol, eat low salt diet and avoid bad fat in the diet to reduce the risk of hypertension.

Hypothesis

There is no significant relationship between the level of knowledge of risk factors and the preventive practices of hypertension by office workers in Yenagoa.

Table 3: Relationship between knowledge of risk factors and preventive practices

Level of knowledge	Level of preventive practices		Total	df	X^2calulated	$X^2_{critical}$
	Good preventive practices	Poor preventive practices				
Good knowledge	27	55	82			
Poor knowledge	109	78	187	1	15.47	3.841
Total	136	133	269			

*significant at 0.05, df = (c-1) (r-1) (2-1) (2-1) =1, Calculated value = 15.47,

As presented in Table 3, the result of the hypothesis using chi-square test revealed that the calculated value of X^2 (15.47) is greater than the critical value (3.841). Based on this, the null hypothesis (Ho) is rejected and the alternative hypothesis (H_1) accepted leading to the conclusion that there is a significant relationship between the level of knowledge of risk factors and preventive practices of hypertension by office workers.

DISCUSSION OF FINDINGS

This study seeks to assess the the knowledge of the risk factors and preventive practices of hypertension among office workers in Yenagoa Local Government Area Council of Bayelsa State, Nigeria. The study revealed that respondents are knowledgeable about the risk factors associated with the development of hypertension, which is in line with the study carried out by Froster (2010), among college students at State University of New York, where he found out that majority of the respondents knew hypertension as a major CVD risk factor; some identified smoking, cholesterol level and also exercise as additional factors. Some results were also similar to the view of Mayo (2012) who identified some risk factors associated with hypertension to include age, race, family history, tobacco use, obese, physical inactive, diet, alcohol consumption, stress and certain chronic conditions.

The study further showed that the respondents' preventive practice level of hypertension is slightly below average because out of ten preventive practices listed, only four were done which include going regularly for check up of my health status in the hospital, not drinking alcohol, eat low salt diet and avoid bad fat in the diet to reduce the risk of hypertension. Most of the results stated above are in line with the view of Igbokwe and Odo (2012) who opined that lifestyle modifications or changes can help one control and prevent hypertension. He further stated that this can be achieve through eating healthy diets, maintaining a healthy weight, increased physical activities (according to one's capability and health status), limiting alcohol intake, avoiding cigarette smoking, managing stress, monitoring one's blood pressure regularly at home, practice of relaxation or sleep, and deep breathing exercise.

The result of the test of research hypothesis using chi-square (X^2) revealed that the calculated value of X^2 (15.47) is greater than the critical value (3.841) leading to the conclusion that there is a significant relationship between the level of knowledge of risk factors and the preventive practices of hypertension among office workers in Yenagoa.

Conclusion and Recommendations

Based on the findings of this study, it is concluded that there is a low level of knowledge of risk factors associated with the development of hypertension and a moderate level of preventive practices of hypertension (indicated by the respondents' knowledge on most of the preventive practices of hypertension) among office workers in Yenagoa Local Government Council. It also concluded that there exist a positive relationship between knowledge of risk factors and the practice of prevention of hypertension by office workers in Yenagoa, Bayelsa State, Nigeria.

It was recommended that, patients' education by physician and other health team form an important part of WHO recommendation. A brief section of advice/ counseling delivered by a physician/nurse practitioner as part of routine primary care; can significantly reduce the rate of alcohol consumption by high risk drinkers. And to reduce B/P in hypertensive patients, individualized therapy is recommended. This therapy should emphasize weight loss for overweight patients, abstinence from alcohol intake, regular exercise, and restriction of sodium intake and in appropriate circumstances, individualized cognitive behavior modification to reduce the negative effect of stress.

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CHILD ABUSE RELATED KNOWLEDGE AND PRACTICE AMONG PARENTS IN ILORIN SOUTH LOCAL GOVERNMENT AREA, KWARA STATE, NIGERIA

Rejuaro F.M.,
Umar, N. J.,
Imam, A. A.,
Ibraheem, M. A.,
Gambar, A. Y.
&
Olatoke, A.M.

ABSTRACT

Despite the serious long-term health and economic consequences, child abuse is still a significant global problem that is deeply rooted in cultural, economic and social practices and is on the increase. Therefore, this study was designed to assess knowledge, attitude and practice of child abuse among parents in Ilorin South Local government Area, Kwara State. Descriptive research design was adopted for this study. A total sample size of 140 parents were used with 1 sample per every 3households adopted. A modified standardized child abuse questionnaire was used in gathering data. For data analysis, frequency, percentages and chi-square test was used to test the hypotheses at 0.05 alpha level of significance. The results revealed that majority of the respondents were within the age group of 31-50 years and were married. 60 (42.9%) of the respondents were self-employed with 85 (60.7%) having 3-4 children. ***Despite the fact that*** *majority of the respondents had high knowledge of child abuse, most of them still practice it. The study also revealed that there was significant relationship between practice of child abuse and the occupation of respondents. The study concluded that the practice of child abuse still exists in the study area and the type of occupation influences the practice of child abuse. Therefore, government should intensify efforts towards eradication of poverty in the country by creating job opportunity with good pay so that parents can adequately provide for their children.*

Keywords: Child abuse, Knowledge, Parents and Child Abuse, Practice.

INTRODUCTION

Child abuse is a global issue that is deeply rooted in the cultural, economic and social practices and is on the increase especially in Nigeria (Adejobi, Osonwa, Iyam, Udonwa, & Osonwa, 2013). According to World Health Organization (WHO, 2016), child abuse is also known as child maltreatment in all forms of physical, emotional ill-treatment, sexual abuse, neglect and exploitation that lead to actual and potential damage to a child's health and development or dignity. Royal Canadian Mounted Police (2008), stated that child abuse is any form of physical, psychological or sexual mistreatment of a child whereby the survival, safety, self-esteem, growth and development of the affected child is disturbed. Leeb, Paulozzi, Melanson, Simon and Arias (2008) also concluded that any act of commission or omission by parents, guardians, caregivers, or other adults that results in harm, potential for harm or a threat of harm to a child (0-18 years of age) even if the harm is unintentional (Gilbert, Spatz, Widom, Braone, Fergusson, Webb & Janson, 2009).

Approximately 800,000 children out of the 3.2 million referrals of child maltreatment in 2007 were substantiated, 34% of these cases were very young children of one year or younger, who died as a result of neglect, about 80% of the

perpetrators were the parents of the children with women taking a higher frequency. Girls were also found to be more likely victims of abuse than boys although infant boys were found to be higher victims of fatalities resulting from abuse (U.S. Department of Health and Human Services (USDHHS), 2009). Child abuse can appear in different forms and there are four major forms of child abuse namely: physical abuse, psychological abuse, sexual abuse and neglect. According to World Health Organization (WHO, 2002) estimation, between 20 to 65 percent of school aged children reported to have been bullied verbally or physically and about 150 million girls and 73 million boys under 18 years were sexually abused. Physical abuse is an act of a person involving contact of another person intended to cause feelings of physical pain, injury or other physical sufferings or bodily harm (Giardino, Angelo & Eileen, 2008). In most cases, children are the victims of physical abuse and are at the risk of developing aggressive behavior or substance abuse, risk of suicidal attempts is also associated with physical abuse, studies have also shown that children with history of physical abuse may meet the criteria for post-traumatic stress disorder (Mash & Eric, 2010).

Children experience abuse in their homes, schools, alternative care institutions, detention facilities, places where children work and communities (UNICEF, 2007). Often times, children are subjected to abuse in the family in the guise of discipline. The family is the most important and the original institution of society for bringing up and protecting children. However, this same institution is the main perpetrator of abuse to the children (Daily Times, 2016). In Nigeria, it is a common act for parents to make use of extreme corporal punishment in dealing with an offending child, the incidence of child sexual abuse is also on the increase, children who have been neglected are seen on the roads fending for themselves. Abuse can have severe implications for children's development. It can affect children's health and ability to learn. It can lead children to run away from home, exposing them to further danger. Abuse destroys children's self-confidence and esteem and undermines their ability to grow into well adjusted adults. It was reported in Daily Times (2016) that exposure of children to violence results in their greater susceptibility to a wide range of lifelong social, emotional and cognitive impairments.

In addition, abuse has a serious impact on the victims' physical and mental health, well-being and development throughout their lives and the society as a whole will continue to pay the price for child abuse and neglect (Butchart & Harvey, 2006; Wafaa, Helal & Louise, 2012). Numerous children have died as a result of abuse and neglect and yet it has received little attention and the laws of the nation do not provide adequate punishment for offenders. Moreover, abuse against children in Nigeria is hard to determine since there is still substantial under reporting and studies have shown that majority of the known perpetrators of abuse in children were the parents (National Family Safety Registry, Annual report, 2010). Therefore, in order to eradicate the practice of child abuse, an assessment of parents' knowledge and practice of child abuse becomes a significant requirement.

Objectives of the study

The specific objectives of this study are to:

1 Assess the level of child abuse related knowledge among parents in Ilorin South Local Government Area, Kwara State, Nigeria

1. Determine the practice of child abuse among parents in Ilorin South Local Government Area, Kwara State, Nigeria

METHODOLOGY

This study adopted a descriptive study design to determine the Knowledge and Practice of child abuse among parents in Ilorin South Local Government Area, Kwara State. Kwara State is located in North Central geo-political zone of Nigeria and South-East of River Niger: Its capital is Ilorin and it is the gate way between the south-east and north of Nigeria. It has about 75000km landmass. It has a population estimate of about 1.054million and comprises of nine local government areas of which Ilorin South is one of them. Ilorin South LGA has its headquarters in the town of Fufu. It has an area of 174km^2 and a population of 208,691 as at the 2006 census and a projected population of 243,120 as at 2011.

Data was collected using a self-structured questionnaire containing 33 items. The knowledge of child abuse amongst the respondents were assessed using yes/no questions while the practice of child abuse was assessed using 5-point Likert scale format of strongly agree, agree, disagree, strongly disagree and don't know. The questionnaires were administered purposively to 140 parents who have children or wards below the age of 18 years and were living/ working in the communities of Ilorin South Local Government Area. The questionnaires were administered by the researchers to parents in every 3 household and 3 offices/shops. Data collection was done over a period of 12weeks after which all questionnaires were collected and were subsequently coded and analyzed using SPSS version (22.0). Both descriptive and inferential statistics were used. Descriptive statistics in form of frequency and percentage table while Chi-square was used in testing the hypotheses generated.

RESULTS

Table 1: Respondents' knowledge of child abuse (n=140)

Question items	Yes N (%)	No N (%)
Are you aware of the term 'child abuse'?	118 (84.3%)	22 (15.7%)
Are you aware that there is a difference between child abuse and child discipline?	130 (92.9%)	10(7.1%)
Do you agree that locking up a child in a room can be used as a form of discipline?	57 (40.7%)	83(59.3%)
Do you agree that shouting at a child in public is a form of abuse?	81 (57.9%)	59 (42.1%)
Do you believe a child should be commended for good behavior?	132 (94.3%)	8 (5.7%)
Are you aware that insulting a child can kill the morale?	109 (77.9%)	31 (22.1%)
Do you believe that your child's needs are of high importance?	124 (88.6%)	16 (11.4%)
Is taking away privileges from a child after an offence a form of discipline?	86 (61.4%)	54 (38.6%)
Is being abused as a child is a predisposing factor for being abusive in the future?	79 (56.4%)	61 (43.6%)

Table 1 shows the majority of the respondents claimed to be aware of the term "child abuse" and the difference between child discipline and child abuse, while large proportion of the respondents agreed that shouting at a child in public, insulting a child can kill the morale of such a child, taking away of privileges from an offending child is a form of disciplinary measure. Furthermore 56.4% of the respondents attested that parents who were abused as children are predisposed to abuse to their children. In the contrary, 59.3% of respondents disagreed that locking up a child is a form of discipline and 94.3% opined that a child should instead be commended for good behavior and 88.6% agreed that their child's needs are of high importance.

Table 2: Respondents' Practice of child abuse (n=140)

Forms of chide abuse	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know
Give a child a hard spanking when he/she offends is a form of abuse	56(40.0%)	60(42.9%)	16(11.4%)	2 (1.4%)	6 (4.3%)
A child should be rewarded for being of good behavior	7(5.0%)	6 (4.3%)	81(57.9%)	46(32.9%)	0(0%)
Starving a child is a good measure for discipline	9 (6.4%)	22(15.7%)	43(30.7%)	64(45.7%)	2 (1.4%)
Shouting at and insulting a child in public is a good measure for correcting the child	12 (8.6%)	26(18.6%)	46(32.9%)	52(37.1%)	4 (2.9%)
It is alright to listen to a child's explanation before punishing him	87(62.1%)	32(22.9%)	13 (9.3%)	4 (2.9%)	4(2.9%)
Children who hawk are simply being trained to assist their family financially	0 (0%)	68(48.6%)	72(51.4%)	0(0%)	0(0%)

Table 2 shows Parents' Practice of child abuse was assessed using a 5-point likert scale ranging from strongly agree to don't know. Many parents strongly agreed to the necessity of giving children a strong hard spanking when he/she offends while on the action of rewarding a child for good behavior,57.9% of parents strongly disagreed. A low percentage of parents agreed that starving an offending child is a form of discipline, while, also a low percentage of parents strongly agreed that shouting or insulting a child in public is a form of correcting a child. Majority of parents (90.0%) claimed a good attitude towards listening to a child's explanation before punishment, as against few who disagreed. Child hawking being training to assist the family financially was seen by many (51.4%) of parents as a child abuse as against 48.6% of parents who practice it.

Table 3: Relationship between practice, knowledge, and occupation of respondents

	Practice			Remark
	chi-square (x^2)	P-value	df	
Occupation	4.687	0.046	2	significant association
Knowledge	1.067.	0.308	1	No significant association

Table 3 reveals the significant relationship that exists between occupation and practice of child abuse with 4.69 greater than P<0.05. However, no significant relationship exists between knowledge and practice of child abuse with 1.06 compared to P>0.05 level of significance.

DISCUSSIONOF FINDINGS

Child abuse is a common practice, despite various sources of information dissemination to the population within and around communities in Nigeria and particularly in Kwara State. The findings of this study revealed that majority of parents were within the mean age group of 40 years and were married, thus qualifying them for the study intended for parents of children below the age of 18 years. Most of the parents were knowledgeable about the term child abuse and knew the difference between child abuse and child discipline contrary to the study carried out by UNICEF, (2013) in Nepal where the level of knowledge was quite low. this study also shows that a high percentage parents were found to be practicing the act of child abuse despite their high knowledge about and the difference between child abuse and child discipline. However, this finding is in contrast to a study conducted in Eastern Anatolian where there was inadequate knowledge but good attitude of parents towards child abuse (Acik, Deveci, & Oral, 2004).

About three quarter of the parents in this study agreed to the necessity of giving a child a hard spanking when he/she commit an offense, this finding disagreed with the 2007 child maltreatment report which listed physical abuse as one of the common forms of abuse (UDSHHS, 2009). This study further revealed that majority of parents are with the opinion that a child should be rewarded for good behavior instead of been starved as a form of child discipline, however, some parents disagreed to shouting and insulting a child in public in order to correct the child. These parents' opinion are in agreement with the 2007 child maltreatment report that psychological abuse being the least practiced form of abuse (USDHHS, 2009).

Most of the parents in this study were found to be practicing the act of child abuse despite their demonstration of high knowledge about child abuse. This may probably be due to the fact that, the child right act is not firmly rooted to protect the children in Nigeria or it could be due to the poor economic status of the respondents since majority were either self employed or unemployed. This study agreed with a study which established significant relationship between socioeconomic status of the parents and the practice of child abuse, which in most cases is child neglect (Sedlak et.al, 2010; Yang, 2010). Therefore, it is not surprising to observe a significant relationship between practice of child abuse and the occupation of respondents in this

study, since the type of occupation most often determine the wages an individual earns which in turn determines the financial/economic status of that individual. In addition, various studies have also shown that the problem of child abuse is common in countries associated with low incomes, poverty, high rate of unemployment, increased level of stress and unstable political situation (Jordan, Welbury, Tiljak , Cukovic-Bagic 2012; Al-Habsi, Roberts, Attari & Parekh, 2009).

Conclusion and Recommendations

This study concluded that a significant relationship exists between occupation and practice of child abuse but revealed no significant relationship between knowledge and practice of child abuse among parents in Ilorin South LGA at P>0.05 level of significance.

This implies that child abuse still occurs in Ilorin South LGA Although, most of parents demonstrated high knowledge of child abuse and their attitude towards child abuse was relatively commendable but the practice of child abuse is still high in our societies. Therefore, more adapted educational and counseling approach should be put in place for parents, guidance and families in the community at large.

Based on the conclusion of the study, it was recommended that, a nationwide awareness should be created in order to educate parents on the difference between actions that are abusive and actions that are geared towards child discipline. Also, parents should develop a good relationship with their children such that the children can report whatever happens to them with utmost confidence, this will help improve the diagnosis and legal dealings of child sexual abusers.

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KNOWLEDGE OF SLEEP DEPRIVATION AND ACADEMIC PERFORMANCE AMONG NURSING STUDENTS IN COLLEGE OF MEDICINE, UNIVERSITY OF LAGOS.

Olubiyi, S. K.,
Folami, F. F.
&
Olatunji, A. A.

ABSTRACT

Sleep is one of our basic needs that play a very important role in a human being's health. It is important for our physical, intellectual and emotional health. Sleep loss not only makes people feel sleepy in the daytime, it is even a possible risk factor for Alzheimer's disease. This study assessed the knowledge of sleep deprivation and academic performance among nursing students in College of Medicine, University of Lagos. The study adopted descriptive survey design and the target population were undergraduate nurses from 200 – 500 level from the Department of Nursing Science, College of Medicine, University of Lagos. A multi stage sampling technique was used select a total of 157 undergraduate nurses as the sample for the study. The instrument used was a self-structured, administered questionnaire. The data obtained was analyzed and the results presented in tables, charts and percentages. The chi-square test was used to compare differences and association between variables. Differences and association were considered significant at p value < 0.05. The result of this study showed that the majority of the respondents have good knowledge about the effects of sleep deprivation and this have an effect on their academic performance. Factors influencing sleep deprivation among students were loud music, heat, overcrowding in the room, roommate's disturbance, assignments, chores in the room and using of mobile device (e.g. Phone, tablets). It was therefore recommended that sleep deprivation should be avoided at all cost through proper time management.

Keywords: Knowledge, sleep deprivation, academic performance, nursing students

INTRODUCTION

Sleep is critical for memory consolidation, learning, decision making, and critical thinking. Sleep is thus necessary for the optimal operation of key cognitive functions related to academics, and perhaps social success in higher education. Sleep deprivation is known to lead to irregular sleep patterns, daytime sleepiness, exhaustion, inattentiveness, and increased risks for obesity, diabetes, cardiovascular disease, hypertension, mood disorders, substance abuse, and other health issues. Sleep loss (=7hours per night) can have lasting negative effects on the cardiovascular, endocrine, immune, and nervous systems (Sixto & Sanchez, 2013). To compensate for a lack of sleep, students today appear to be developing a higher level of dependence on energy drinks and other caffeinated beverages that continues into adulthood. Both sleep deprivation and poor sleep quality are particularly prominent in young adult and college student populations **(**Steven, Gilbert & Cameron, 2010).

The amount of sleep a young adult needs is not clearly known, but is thought to be 8 hours. Most college students are sleep deprived, as 70.6% of students report obtaining less than 8 hours of sleep. The impact of educational major on sleepiness and sleep duration is not well studied, but the effect may be substantial. As reported at an Architecture School in the Midwest, only 4% of students obtained at leastz7 hours of sleep at night; the average sleep

duration was 5.7 hours, with 2.7 "all-nighters" per month. Eighty-two percent (82%) of college students believe that inadequate sleep and sleepiness impact their school performance. Students rank sleep problems second only to stress in factors that negatively impact academic performance (American College Health Association, 2012). Sleep deprivation focuses on the importance of sufficient sleep for a proper outcome in all spheres of life. Motivation and home environment have a positive relationship with academic achievement optimally sleep affects students learning process and academic achievement (Borse, Deepak, Bansode, Hitesh, Modak, Rasika & Yadav, 2013).

Students who stay up late tend to have lower academic performance, poor quality of sleep and maladjustment to college life. In College of Medicine, University of Lagos, lack of sleep among nursing students has been identified as one of the academic situational constraints that diminish students' performance. Marwa, Abd El-Kader and Mohammad (2013), observed that higher academic performance during the years at university is highly related to career success. Moreover, academic performance influences the future educational attainment and income, which, in turn, affect the health and quality of life. In addition, sleep debt accumulated during the week often leads to prolonged sleep periods or catch-up sleep on weekends causing severe day-to-day irregularities of sleep patterns in adolescents and young adults, insufficient sleep time, with associated sleepiness, fatigue, inattentiveness, sleep deprivation has been identified as a major cause of poor academic performance among high school and college-aged students. This study tends to assess the knowledge of sleep deprivation in relation to academic performance among nursing students in College of Medicine, University of Lagos.

Objectives of the study

The specific objectives of this study are to:

1. Assess the knowledge of sleep deprivation among nursing students in College of Medicine, University of Lagos.
2. Determine the effect sleep deprivation in relation to academic performance among nursing students in College of Medicine, University of Lagos.
3. Identify factors influencing sleep deprivation in relation to academic performance among nursing students in College of Medicine, University of Lagos.

METHODOLOGY

The study was a descriptive survey. The target population was undergraduate nurses from 200 – 500 level of the Department of Nursing Science, College of Medicine, University of Lagos. A multi stage sampling technique was used select a total of 157 undergraduate nurses as the sample for the study. The instrument used was a self-structured developed questionnaire. It was made up of four (4) sections: - Section A: it reflects the demographic characteristics of the respondents; section B: shows knowledge of sleep deprivation, section C: shows the effect of sleep deprivation in relation to academic performance while section D: shows factors influencing sleep deprivation in relation to academic performance. Likert scale was used and decision key is strongly agreed=4 Agreed=3 Undecided = 2, Disagreed =1 Strongly disagreed =0 The developed questionnaire was given to a panel of experts for critiquing to ensure face, content and construct validity, and modification made where necessary. The reliability was established through, test retest method and yielded a coefficient of 0.75. Only 151 students that were eligible took part in the study. The questionnaire was administered by the researchers and data was analyzed and presented in tables, and percentages. The chi - square test was used to test Hypothesis.

In this study, 151 students were involved and all the respondents took part and were eligible for final analysis with a response rate of 100%. The majority of the respondents were females (90.7%) most of whom are single. The majority of the respondents 124 (82.1%) reside in the hostel and 78 (51.7%) of the respondents' last CGPA were between 2.5-3.49 and 86 (57.0%) were within the age range 23-26years

Table 2: Knowledge on sleep deprivation.

Sleep deprivation is …….	SA (%)	A (%)	U (%)	D (%)	SD (%)
Not sleeping well.	81(53.6)	58(38.4)	9(6.0)	2(1.3)	1(0.7)
Doesn't affect my academic performance.	24(15.9)	54(35.8)	30(19.9)	28(18.5)	15(9.9)
Has no known effect on students?	16(10.6)	37(24.5)	13(8.6)	67(44.4)	18(11.9)
Propagated by academic work load.	62(41.1)	46(30.5)	19(12.)	24(15.9)	0
Detrimental to physiologic balance.	90(59.6)	59(39.1)	2(1.3)	0	0
Means not getting at least 6 hours of sleep.	29(19.2)	72(47.7)	24(15.9)	21(13.9)	5(3.3)
A normal phenomenon with every student.	12(7.9)	36(23.8)	23(15.2)	62(41.1)	18(11.9)
Important to remain alert and functional in class.	81(53.6)	43(28.5)	17(11.3)	9(6.0)	1(0.7)
Necessary for optimal academic success.	5(3.3)	22(14.6)	14(9.3)	71(47.0)	39(25.8)
Allows one to cover more ground in reading.	9(6.0)	55(36.4)	34(22.5)	50(33.1)	3(2.0)
Caffeine addiction leads to sleep deprivation.	55(36.4)	76(50.3)	13(8.6)	6(4.0)	1(0.7)
Alcohol contributes to sleep deprivation.	22(14.6)	37(24.5)	27(17.9)	39(25.8)	26(17.2)
Occur through perpetual use of tea.	17(11.3)	37(24.5)	23(15.2)	49(32.5)	25(16.6)

Table 2 shows that majority of the respondents 101(66.9%) have good knowledge about the effects of sleep deprivation. This is because the 73% of the respondents know that sleep deprivation is not sleeping well, 56% knows that it can be propagated by academic work, 79% knows that sleep deprivation is detrimental to physiologic balance, 54% knows that it is important to remain alert and functional in class and 63% of respondents knows that caffeine addiction leads to sleep deprivation. In summary, the respondents' knowledge score about the effects of sleep deprivation is 66%

Table **3:** Effect **of sleep** deprivation **on a**cademic **p**erformance

Sleep deprivation can:	**SA (%)**	**A (%)**	**U (%)**	**D (%)**	**SD (%)**
Affect my cognition.	19(12.6)	46(30.5)	21(13.9)	43(28.5)	22(14.6)
Affect my academic performance.	24(15.9)	39(25.8)	22(14.6)	42(27.8)	24(15.9)
Lead to serious sleep disorders.	47(31.1)	80(53.0)	4(2.6)	5(3.3)	15(9.9)
Bring about physical illness.	46(30.5)	71(47.0)	12(7.9)	15(9.9)	7(4.6)
Makes me doze off in class.	41(27.2)	83(55.0)	11(7.3)	11(7.3)	5(3.3)
Lead to mental illness.	12(7.9)	26(17.2)	30(19.9)	50(33.1)	33(21.9)
Makes me late to class**.**	51(33.8)	61(40.4)	18(11.9)	16(10.6)	5(3.3)
Causes me to over sleep on weekends.	45(29.8)	42(27.8)	24(15.9)	26(17.2)	14(9.3)
Makes me irritable towards others.	11(7.3)	28(18.5)	48(31.8)	50(33.1)	14(9.3)
Affects my assimilation rate.	50(33.1)	34(22.5)	28(18.5)	19(12.6)	20(13.2)
Affects retention	39(25.8)	55(36.4)	35(23.2)	17(11.3)	5(3.3)
Causes frustration.	59(39.1)	50(33.1)	34(22.5)	8(5.3)	0
Lead to drug abuse.	21(13.9)	35(23.2)	42(27.8)	46(30.5)	7(4.6)
Lead to suicidal ideations.	2(1.3)	4(2.6)	32(21.2)	79(52.3)	34(22.5)
Causes failure in academic performance.	55(36.4)	76(50.3)	13(8.6)	6(4.0)	1(0.7)
Can lead to the use of sleep stimulants.	22(14.6)	37(24.5)	27(17.9)	39(25.8)	26(17.2)
Causes truancy	17(11.3)	37(24.5)	23(15.2)	49(32.5)	25(16.6)

Table 3 shows that Sleep deprivation have an effect on the respondents' academic performance such as Leading to serious sleep disorders (57%,) Bring about physical illness (54%), Makes me late to class (54%), causes failure in academic performance (62%)

Table 4: Factors affecting quality of sleep

Questions	SA (%)	A (%)	U (%)	D (%)	SD (%)
Loud music	63(41.7)	59(39.1)	18(11.9)	5(3.3)	6(4.0)
Having the lights on	2(1.3)	105(69.5)	7(4.6)	37(24.5)	0
Academic workload	19(12.6)	46(30.5)	21(13.9)	43(28.5)	22(14.6)
Use of caffeine products	24(15.9)	39(25.8)	22(14.6)	42(27.8)	24(15.9)
Drinking products containing cola	47(31.1)	80(53.0)	4(2.6)	5(3.3)	15(9.9)
Heat	69(45.7)	56(37.1)	11(7.3)	13(8.6)	2(1.3)
Overcrowding in the room.	84(55.6)	43(28.5)	21(13.9)	3(2.0)	0
Having the lights off	16(10.6)	33(21.9)	37(24.5)	46(30.5)	19(12.6)
My roommates disturb my sleep.	84(55.6)	52(34.4)	12(7.9)	3(2.0)	0
Noise from my neighbors next door interferes with my sleep.	18(11.9)	37(24.5)	33(21.9)	39(25.8)	24(15.9)
Pending exams and tests	28(18.5)	80(53.0)	20(13.2)	16(10.6)	7(4.6)
Anxiety keeps me awake.	47(31.1)	65(43.0)	20(13.2)	15(9.9)	4(2.6)
Assignments keep me awake mostly.	70(46.4)	27(17.9)	24(15.9)	23(15.2)	7(4.6)
Emotional stress from home affe cts my sleep.	2(1.3)	4(2.6)	32(21.2)	79(52.3)	34(22.5)
Chores in the room.	55(36.4)	76(50.3)	13(8.6)	6(4.0)	1(0.7)
Menial job affects my level of sleep.	22(14.6)	37(24.5)	27(17.9)	39(25.8)	26(17.2)
Going for all night reading interferes	17(11.3)	37(24.5)	23(15.2)	49(32.5)	25(16.6)
Watching television late into the night.	5(3.3)	6(4.0)	18(11.9)	63(41.7)	59(39.1)
Use of mob ile device (e.g phone, tablets) late into the night	105(69.5)	37(24.5)	7(4.6)	2(1.3)	0

Table 4 showed that factors influencing sleep deprivation among students as revealed by this study include:- loud music (80.8%), heat (82.5%), overcrowding in the room(84;1) roommates disturbance(91.0%), assignments (63.3%), chores in the room (96.7%) and using of mobile device (e.g phone, tablets), roommates disturbance, assignments, chores in the room and using of mobile device (e.g phone, tablets, i-pads) (99%).

Table 5: Relationship between sleep deprivation and the level of study

Class level	Sleep deprivation?		Total	X^2	df	p-value
	Yes	No				
200L	25	11	36			
300L	24	11	35	2.586	3	0.460
400L	30	6	36			
500L	33	11	44			
Total	112	39	151			

*significance level at ≤ 0.05

Table 5 shows that there is no significant relationship between sleep deprivation and the level of study of nursing students with a p-value >0.05

Table 6: Relationship between sleep deprivation and academic performance of the students

CGPA	sleep deprivation		Total	X^2	df	p-value
	Yes	No				
				3.915	2	0.141
4.5-5.0	5	0	5			
3.5-4.49	46	22	68			
2.5-3.49	61	17	78			
Total	112	39	151			

*significance level at ≤ 0.05

Table 7 shows that there is no significant relationship between sleep deprivation and academic performance of the students with a p-value > 0.05

DISCUSSION OF FINDINGS

This study assessed the knowledge of sleep deprivation and academic performance among nursing students in College of Medicine, University of Lagos. The demographic characteristics showed that majority of the respondents were females (90.7%) most of whom are single. Majority of the respondents 124 (82.1%) reside in the hostel and 78(51.7%) of the respondents' last CGPA were between 2.5-3.49 and 86(57.0%) were within the age range 23-26years.

The result of this study showed that majority of the respondents have good knowledge about the effects of sleep deprivation. This agrees with a study by Luo, Feng & Li (2013) showed that

Chinese medical students generally understood sleep disorders to be an important problem and that sleep problems were considered as significant clinical issue by 93% of the students, and they believed that people with sleep disorders should seek treatment. But the result contradicts the study of Sivagnanam (2013), on the knowledge, belief, and practice of sleep hygiene among final year medical students of six medical colleges of Tamil Nadu, India, the findings revealed inadequate knowledge and many misconceptions regarding sleep.

This study showed that Sleep deprivation have an affect their academic performance with resultants effects such as missing out on notes in class. This result is consistent with a study carried out by Thomas, McIntosh, Lamar and Allen (2017) on Sleep deprivation in nursing students: The negative impact for quality and safety which also revealed that majority of participants 60.8% only slept 5-6 hours before class or clinical experience and often felt sleep deprived.

Factors influencing sleep deprivation among students as revealed by this study include: loud music, heat, overcrowding in the room, roommate's disturbance, assignments, chores in the room and using of mobile device (e.g phone, tablets, i-pads). This agrees with result of ramanik, Sherpa & Shrestha, (2012) on Nepal where 31.5% of medical students suffered from sleep deprivation due to late night internet surfing and use of mobile device to browse (e.g phone, tablets, i-pads) late into the night. This result disagrees with the result of a study conducted by Hampton (2012) on the Impact of the lack of sleep on academic performance in college students, the researcher found that there is a high significance ($p<.001$) for the effect that sleep has on a student's academic performance or grade point average. Hampton (2012) found that the less sleep a student receives the lower their self-reported GPA was. This finding was also corroborated by Munson, (2011) who observed that students that are sleep-deprived can therefore lose up to 30% of what they studied up to two days earlier.

Due to the fact that too little sleep leaves them drowsy and unable to concentrate the following day, impairs memory and physical performance and invariably can causes mood swings and hallucinations.

Conclusion and Recommendations

From the result we thereby conclude that majority of the respondents have good knowledge about the effects of sleep deprivation and this have an affect on their academic performance. Factors influencing sleep deprivation among students are loud music, heat, overcrowding in the room, roommates' disturbance, assignments, chores in the room and using of mobile device (e.g phone, tablets,). It is therefore recommended that sleep deprivation should be avoided at all cost by effective time management.

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EFFECT OF HEALTH EDUCATION INTERVENTION ON KNOWLEDGE OF BIRTH PREPAREDNESS AMONG PREGNANT WOMEN ATTENDING PRIMARY HEALTH CARE IN ZARIA METROPOLIS

Olokoba, E. O.;
Umar, A. B.
&
Hayat, M. G.

ABSTRACT

Birth preparedness is a comprehensive strategy to improve the use of skilled providers at birth and the key intervention to decrease maternal mortality. The aim of this work was to assess the level of birth preparedness among pregnant women attending Primary Health Cares in Zaria Metropolis. A quasi experimental design was adopted. A questionnaire was administered to 160 respondents divided into two groups: (80) for the experimental group and control (80) groups. The analysis revealed that there were significant differences in the knowledge level of respondents on birth preparedness in the study group and the control group. The level of respondents who have good knowledge from the study group increased from 20 (25.0 %) before intervention to 61(76.3 %) after intervention (P = 0.001). The independent sample t-test on level of birth preparedness showed that the observed t-calculated (-7.586) is greater than the t-critical (1.96) at the probability level of significance of 0.001 (P < 0.05). Thus, we concluded that health education has an effect on pregnant women's knowledge of birth preparedness.

Keywords: birth preparedness, pregnancy, maternal mortality, health education

INTRODUCTION

Almost all maternal deaths (99%) occur in developing countries. More than half of these deaths occur in sub-Saharan Africa and almost one third occur in South Asia. Maternal death is being addressed by Millennium Development Goal 5, which aims to decrease maternal mortality ratio by 75% by 2015 (WHO Fact Sheet, 2016). In 2012, the World Health Organization (WHO) reported that close to 10 million women suffer complications related to pregnancy or childbirth (WHO, 2012). In 2013, an estimated 289,000 women died worldwide, down from 523,000 in 1990. The number of maternal deaths decreased by 43% between 1990 and 2015. Globally, the maternal mortality ratio (maternal deaths per 100 000 live births) fell by nearly 44% over the past 25 years (WHO, 2015). But 800 women a day are still dying from complications in pregnancy and childbirth globally- equivalent to 33 an hour *(The Guardian, 2014)*.

From a survey carried in 2011 and 2012 a non-governmental organization, Nigerian Urban Reproductive Health Initiative, NURHI, reported that about 1,999 women die in Kaduna State annually following complications arising from childbirth. This huge loss of life has been attributed to early-age and late-age birth, lack of child spacing and access to health care facilities among others (Premium Times, 2017). A major strategy that can reduce the maternal mortality ratio is making a birth plan or birth preparedness (Acharya, Kaur, Prasuna, and Rasheed, 2015). This is defined as a set of knowledge, behaviours and actions undertaken by women, families, communities, health care providers and facilities to enhance the survival of women and new-borns during pregnancy, childbirth and the postpartum period. It is the

advance planning and preparation for delivery in order to improve maternal health outcomes. However, the application of this concept varies and there is no single agreed upon definition (Fishel, 2001; Roxana and Barco, 2004).

Birth preparedness is a comprehensive strategy to improve the use of skilled providers at birth and the key intervention to decrease maternal mortality (JHPIEGO, 2004). Every pregnant woman is at risk of pregnancy complications which are unpredictable and can lead to morbidity or mortality of herself or her baby (JHPIEGO, 2004). Hence, the concept of birth preparedness in which the family and community should have an advanced planning and preparation is to ensure safety and well-being of the women and new born throughout pregnancy, delivery and after delivery. Skilled care before, during and after childbirth can save the lives of women and newborn babies (WHO, 2016). Good plans and preparations will increase utilization of skilled care and reduce delays in accessing care in case of pregnancy and delivery complications (Urassa, Pembe and Mganga, 2012). It encourages women, households, and communities to make arrangements such as identifying or establishing available transport, setting aside money to pay for service fees and transport, and identifying blood donor in order to facilitate swift decision-making and reduce delays in reaching care once a problem arises.

A study in Zaria Northern Nigeria showed extremely 'poor' knowledge on maternal health by women and men. Only 3% of the men and 1% of the women had 'good' knowledge and perception of maternal health, but a considerable number (44.2% men and 55.7% women) 'fair' knowledge (Butawa, Tukur, Idris, Adiri and Taylor, 2010). A study in Osogbo Southwest Nigeria showed that six-tenth of the women recognized complications such as massive bleeding, prolonged labour, malposition, retained placenta and very high fever at delivery as serious that could have fatal outcomes. One-tenth attached, no seriousness to vaginal bleeding during delivery.

In Nigeria, the education of a mother is shown to strongly affect the type of antenatal care provider, type of person providing assistance during delivery, access to health care facilities among other health indicators (Health Reform Foundation of Nigeria, 2006). The level of education is positively associated with the knowledge of birth preparedness and danger signs. This may be explained by the fact that there is the possibility that education exposes pregnant women to lots of information (Ibrahim, Owoeye and Wagbatsoma, 2013). The study was aimed to assess the knowledge of birth preparedness among pregnant women attending Primary Health Care centres in Zaria.

METHODOLOGY

This study employed a quasi-experimental design with pre and post intervention components. The effect of a health education intervention on knowledge of birth preparedness among pregnant women attending Primary Health Care Centers in Zaria metropolis was assessed. **Zaria** (latitudes 11°1□30" to 11°13□30□□N and longitudes 7°36□0□□ to 7°46□30□□E) covers an area extent of 6100 hectares with a population of approximately 992,958 as at year 2017 according to Population City (http://population.city/nigeria/zaria/). Zaria Local Government Area has 13 political wards. The Local Government area has a secondary health facility, 16 primary health care centres and 29 health posts which all offer maternal and child health (MCH) services. Sabongari Local Government area on the other hand has 8 political wards, a secondary health facility, 16 primary health care centres and 12 health posts which all offer maternal and child health (MCH) services. This information was obtained from monitoring and evaluation unit

of the department of health in the two local government areas respectively.

The study population comprised of pregnant women of reproductive age (15 – 49 years) who are in their third trimester and are residents of Zaria metropolis, Zaria and Sabon Gari Local Government. The minimum sample size was determined using the formula for comparing two proportion according to Robert (1997):

$$n = \frac{D\,[Z_{\alpha} + Z_{\beta}]^2 \; x\,[(P_1 x\,(1-P_1) + (P_2 x\,(1-P_2))\,]}{(P_2 - P_1)^2}$$

Where

n = required minimum sample size per comparison group

D = design effect (assuming in the following questions to be 2)

Z_{α} = Z score corresponding to 95% level of significance i.e. 1.96

Z_{β}= Z score corresponding to 80% statistical power of the study i.e. 0.84

P_1 = estimated level of birth preparedness of obstetric danger signs from a previous study 17% (Hailu *et al.,* 2010)

P_2 = estimated level of birth preparedness of obstetric danger signs at the end of the study 37%

A total of 160 pregnant women were recruited in the study (80 for intervention group and 80 for control group). The inclusion Criteria: Pregnant women who are within the third trimester and are willing to participate while the exclusion Criteria: Pregnant women who are in first and second trimester. Multistage sampling technique was employed, the study Local Government Areas (LGAs): Zaria and Sabon Gari were purposively selected. Stage I - Selection of wards: using simple random sampling by balloting; two (2) wards each were selected from the two LGAs: Sabon Gari LGA: Jushi and Samaru wards and Zaria LGA: Tundunwada and Kwarbai A wards. Stage II – Selection of health facilities: one primary health care facility was selected randomly from each of the randomly selected wards: Primary Health Care Babandodo, Primary Health Care Tundunwada, Primary Health Care Jushi and Primary Health Care Samaru. Stage III - Selection of pregnant women: from each of the randomly selected primary health care facilities, 40 pregnant women (20 each for control and intervention groups) were randomly selected, making a total of 160 women.

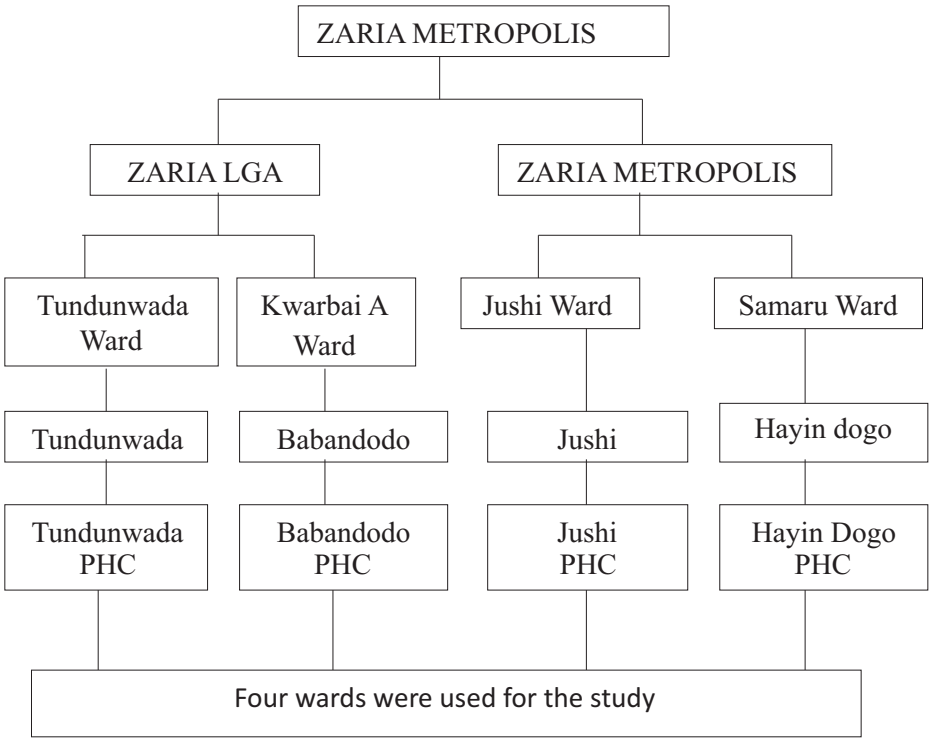

Figure 1: Selection of PHCs from the four wards

Source: authors conceptualisation

Semi-structured adopted modified safe motherhood questionnaire from John Hopkins programme for International Education in Gynaecology and Obstetrics (JHIPEGO, 2004). The questionnaire composed of two (2) sections A and B. Section A: socio-demographic section collected data regarding socio-demographic characteristics. While section B: level of mother's knowledge regarding birth preparedness. Knowledge score on birth preparedness comprises of ten (10) questions. A score of < 40% translates to poor knowledge, 41-59% average knowledge and > 60% as having good knowledge on birth preparedness.

Validity of Instrument. Advocacy visit and meeting with the persons in charge of selected primary health care centres in Zaria metropolis was carried out by the researcher for self-introduction and explanation on the study objectives. One research assistant from each of the selected primary health care centres were selected by the researcher to assist in the data collection process. The research assistants were taken through the objectives and methodology of the study. They were exposed to practical experiment, conducting interviews and pre-testing the questionnaire. The researcher and the assistants administered the pre-questionnaire to the literate pregnant mothers to answer, while questionnaire was interpreted to the illiterate mothers. The questionnaire was administered to them by face to face interviews after explanation and interpretation they were given opportunity to answer the questions appropriately before the intervention. The pregnant women in the study group were asked to return back for the intervention after four weeks. Their names, phone numbers and home address were collected for contact.

Intervention

The health education intervention was designed based on component of birth preparedness. A flier was also designed which contained picture on the component of birth preparedness which serves as teaching aid guide to the pregnant woman, one health education interaction section. A single interactive session was conducted for the women in each of the four selected PHCs which lasted for a period of 40 minutes. After the session when the teaching was completed, questions and answer session were created for more clarity in place of doubt.

Post-Interventions

For administration of post questionnaire: The researcher and the assistant began a follow up call after 12 weeks of intervention. Assessment was carried out after 12 weeks of the intervention to assess the effect of health education program on birth preparedness where the post-questionnaire was administered to the women on the various PHC centers on the immunization clinic days, those that were not available were followed up in their residential places respectively. Level of knowledge on obstetric danger signs in pregnancy was scored before and after intervention for the study group as follows: Above 60% good knowledge, 50% to 59% average while less than 50% was scored as poor (WHO, 2015). Data obtained were analysed using descriptive statistics (frequency, percentages, mean, an standard deviation) and hypothesis was tested using t-test. Chi-square was used to test homogeneity of the control and invention group with p value at 0.05, ANOVA test was also used.

RESULTS

Table 1: Distribution of groups and socio-demographic data

	Study				Control			
	Frequency	%	X^2	P value			X^2	P value
Age group (years)								
15-24	26	32.5			29	36.2		
25-34	42	52.5			40	50		
35-44	8	10			7	8.8		
45 and above	4	5			4	5		
Religion								
Islam	53	66.3	8.450	0.006	50	62.5	5.000	0.025
Christianity	27	33.7			30	37.5		
Level of Education								
Informal	21	26.3			22	27.5		
Primary	15	18.7	11.700	0.008	17	21.3	11.700	0.008
Secondary	32	40			31	38.7		
Tertiary	12	15			10	12.5		
Occupation								
Housewife	25	31.2			27	33.7		
Petty trader	19	23.7			19	23.7		
Student	11	13.8	8.750	0.068	10	12.5	12.500	0.054
Civil servant	13	16.3			13	16.5		
Others	12	15			11	13.8		
Marital status								
Single	23	28.7			20	25		
Married	54	67.5	49.525	0.000	56	70	53.200	0.000
Widow	3	3.8			4	5		
Ethnic group								
Hausa/Fulani	39	48.7			38	47.5		
Yoruba	13	16.3	25.700	0.000	12	15	23.500	0.000
Igbo	10	12.5			11	13.8		
Others	18	22.5			19	23.7		
Parity								
0-1	22	27.5			22	27.5		
2-3	47	58.7	25.525	0.000	58.7	29.4	25.525	0.000
4 and above	11	13.8			11	13.8		

From Table 1, the age group 25 – 34 accounts for the majority of the respondents (52.5%). About a quarter (26.3%) have informal education while others have attained one level of formal education, 31.2% were housewives and about 67.5% were married.

Table 2: Distribution of groups by level of knowledge of birth preparedness before intervention.

Statement	Study group n = 80						Control group n = 80					
	< 40% Poor knowledge		41-59% Averaged knowledge		> 60% Good Knowledge		< 40% Poor Knowledge		41-59% Averaged knowledge		> 60% Good knowledge	
	F	%	F	%	F	%	F	%	F	%	F	%
Birth preparedness should start as soon as pregnancy is diagnosed	36	45	23	28.7	21	26.3	41	51.2	21	26.2	18	22.6
Birth preparedness should start 3 moths be delivery	30	37.5	27	33.7	23	28.7	28	35	30	37.5	22	27.5
Birth preparedness should start few weeks to delivery	33	41.2	26	32.5	21	26.3	35	43.7	25	31.2	20	25
Identification of transport is part of birth preparedness	62	77.5	18	22.5	10	12.5	41	51.2	27	33.7	12	15
Identification of bl ood donor is part of birth preparedness	49	61.2	19	33.7	12	15	48	60	21	26.2	11	13.7
Identification of health facility is part of birth preparedness	22	27.5	32	40	26	32.5	18	22.5	37	46.2	25	31.2
Birth preparedness entails saving money for delivery	37	46.5	27	33.7	16	20	35	43.7	28	35	17	21.2
There is need to identify who will escort you to skilled care	19	23.7	21	26.2	40	50	16	20	26	32.5	38	47.5
Birth preparedness entails preparing clean items for birth	22	27.5	29	36.2	29	36.3	19	23.7	24	30	31	38.7
Substantial amount of money should be saved in preparation of birth	53	66.2	16	20	11	13.7	52	65	19	23.7	9	11.2

Table 3: Distribution of group by level of knowledge for birth preparedness before and after intervention.

Statement	Before intervention n= 80						After intervention n= 80					
	< 40% Poor knowledge		41-59% Averaged knowledge		> 60% Good Knowledge		< 40% Poor Knowledge		41-59% Averaged knowledge		> 60% Good knowledge	
	F	%	F	%	F	%	F	%	F	%	F	%
Birth preparedness should start as soon as pregnancy is diagnosed	36	45	23	28.7	21	26.3	9	11.2	13	16.3	58	72.5
Birth preparedness should start 3 moths be delivery	30	37.5	27	33.7	23	28.7	6	7.5	9	11.3	68	81
Birth preparedness should start few weeks to delivery	33	41.2	26	32.5	21	26.3	7	8.7	13	16.3	60	75
Identification of transport is part of birth preparedness	62	77.5	18	22.5	10	12.5	9	11.2	3	3.8	68	85
Identification of blood donor is part of birth preparedness	49	61.2	19	33.7	12	15	5	6.2	12	15	63	78.8
Identification of health facility is part of birth preparedness	22	27.5	32	40	26	32.5	5	6.3	8	10	67	83.7
Birth preparedness entails saving money for delivery	37	46.5	27	33.7	16	20	12	15	14	17.5	54	67.5
There is need to identify who will escort you to skilled care	19	23.7	21	26.2	40	50	2	2.5	11	13.8	67	83.7
Birth preparedness entails preparing clean items for birth	22	27.5	29	36.2	29	36.3	4	5	18	22.5	58	72.5
Substantial amount of money should be saved in preparation of birth	53	66.2	16	20	11	13.7	12	15	18	22.5	50	62.5

Table 4: Distribution of groups by level of knowledge for birth preparedness After intervention

Statement	study group n = 80						Control n = 80					
	< 40% Poor Knowledge		41-59% Averaged knowledge		> 60% Good Knowledge		< 40% Poor Knowledge		41-59% Averaged knowledge		> 60% Good knowledge	
	F	%	F	%	F	%	F	%	F	%	F	%
Birth preparedness should start as soon as pregnancy is diagnosed	9	11.2	13	16.3	58	72.5	41	51.2	21	26.2	18	22.6
Birth preparedness should start 3 moths be delivery	6	7.5	9	11.3	68	81	28	35	30	37.5	22	27.5
Birth preparedness should start few weeks to delivery	7	8.7	13	16.3	60	75	35	43.7	25	31.2	20	25
Identification of transport is part of birth preparedness	9	11.2	3	3.8	68	85	41	51.2	27	33.7	12	15
Identification of blood donor is part of birth preparedness	5	6.2	12	15	63	78.8	48	60	21	26.2	11	13.7
Identification of health facility is part of birth preparedness	5	6.3	8	10	67	83.7	18	22.5	37	46.2	25	31.2
Birth preparedness entails saving money for delivery	12	15	14	17.5	54	67.5	35	43.7	28	35	17	21.2
There is need to identify who w ill escort you to skilled care	2	2.5	11	13.8	67	83.7	16	20	26	32.5	38	47.5
Birth preparedness entails preparing clean items for birth	4	5	18	22.5	58	72.5	19	23.7	24	30	31	38.7
Substantial amount of money should be saved in preparation of birth	12	15	18	22.5	50	62.5	52	65	19	23.7	9	11.2

Table 5: Difference mean levels of knowledge in both control and experimental groups on birth preparedness before intervention.

	Study group n = 80				Control group n = 80						
Level of knowledge	F	%	Mean	SD	F	%	Mean	SD	t	P	df
Poor	36	45	45.8	± 17.4	33	41.2	45.9	± 17.4	.011	0.991*	79
Average	24	30			26	33.8					
Good	20	25			20	25					
* Not sig			Mean 45.8	S.D ± 17.4			Mean 45.9	S.D ± 7.4			

From the analysis on Table 5, majority of the respondents from both the study and control groups had poor knowledge on birth preparedness as represented by 36(45%) and 33(41.2%) before intervention. Also, 24(30%) for study group and 27(33.8%) control group had average knowledge and 20(25%) and 20(25%) having good knowledge before intervention. The analysis from the table showed that there was no statistically significant differences in the level of knowledge as regards to birth preparedness from both the study group and the control group before intervention (p value = 0.99).

Table 6: Knowledge on birth preparedness before and after intervention

	Study group Before n = 80				Study group After n = 80						
Level of knowledge	F	%	Mean	SD	F	%	Mean	SD	T	P	df
Poor	36	45	45.8	± 17.4	7	8.7	63.8	± 11.9	-9.738	0.001	79
Average	24	30			12	15					
Good	20	25			61	76.3					
F = Frequency			Mean 45.8. S.D ± 17.4				Mean 63.8. S.D ± 11.9				

There was a notable improvement on the knowledge of respondents on birth preparedness as represented by 36(45%) having poor knowledge before intervention and 61(76.3%) having adequate knowledge after intervention (Table 6). 24(30%) had average knowledge before intervention and 12(15%) had average knowledge after intervention (p value 0.001).

Table 7: Independent t-test of birth Preparedness before and after intervention (treatment group)

variables	N	Mean	SD	t-cal	df	P
Knowledge on Birth preparedness (Before)	80	45.87	17.43			
				-7.586	158	0.001
Knowledge on Birth preparedness (After)	80	63.80	11.95			

*significant at 0.05 level; critical t-value 1.96

Table 7 revealed that health education has effect on pregnant women's knowledge towards birth preparedness. Therefore, the null hypothesis that health education programme does not have effect on pregnant women's knowledge towards birth preparedness was rejected (P = 0.001

Table 8: Independent t-test of birth preparedness pre and post test (control group)

variables	N	Mean	SD	t-cal	df	P
Knowledge on Birth preparedness (Before)	80	45.88	17.47			
				-0.687	158	0.493
Knowledge on Birth preparedness (After).	80	47.73	16.57			

*significant at 0.05 level; critical t-value 1.96

Table 8 revealed that there is no significant difference in the level of knowledge of pregnant women towards birth preparedness during pregnancy (P = 0.493).

DISCUSSION OF FINDINGS

From the sociodemographic characteristics majority 90% of the respondents were within 14-44 years of age. This was predictable because most women marry at this age and would like to have babies during this period in life to continue their generation. Despite the warning on the risk of maternal death for mothers with age range of 11-20 years, low income communities especially in Nigeria still practice teenage marriage. These findings are consistent with the study (Markos and Bogale, 2014) who found that older women were more likely to seek maternal healthcare than younger women. Similarly, in Nigeria, women in the middle child bearing ages were more likely to use maternal health services than women in early and late child bearing.

in relation to the level of education 80% were between the primary level to tertiary level with the remaining 19% had informal education. It is revealed that women who had at least primary education are more likely to be prepared for birth and its complications compared to those who did not. These findings have also been observed in the study conducted in Mpwapwa district Tanzania, rural Uganda, North Ethiopia and Indore City India (Agarwal *et al.,* 2010). This might be due to the fact that educated women knows the importance of planning for birth, adhere to counseling provided at antenatal care, and also have the capability of making decisions on issues related to their health. Also, a study done in Arizone central Ethiopia indicated that women who had no formal schooling are found to attend antenatal care less likely (Muhammedawel and Mesfin, 2013). It is obvious that more educated mothers tend to have better awareness on warning signs of obstetric complications. It also might be related to the fact that educated women have better power to make their own decision in matters related to their health.

From the study, it was found that women with parity range of 2-3 were 57.1%. This could be attributed to the fact that women with more children are more likely to prepare for birth and its complication than primiparous women (first time delivery). In typical Nigerian societies, cultural beliefs and lack of awareness inhibit preparation for delivery during pregnancy.

To ascertain the knowledge about birth preparedness among women attending PHCs in Zaria Metropolis. Research question two

investigated the knowledge of respondents about birth preparedness before and after intervention. There were significant differences in the mean scores before intervention mean sore = 45.8 and after intervention mean score = 63.8 and T = -9.738 while p = .001 of the respondents before and after the intervention to the study group who received intervention have good knowledge of birth preparedness than those who do not receive intervention. This finding is in consonance with the study conducted by Mutiso *et al.* (2008) who reported appreciable good knowledge of birth preparedness among respondents in Nairobi after intervention. The significantly good level of knowledge translates to practice. This might suggest that health education intervention may have been responsible for the good level of knowledge on preparedness among study group.

From the findings, respondents reported that birth preparedness entails the identification of transport (85%), health facility (86.3%) and saving of money for delivery (67.5). This is consistent with the study conducted in India by Siddaharth et al. (2010) where the knowledge on birth preparedness though they had only assessed three instead of the six aspects of birth preparedness. Deoki (2009) found a lower proportion of respondent on knowledge of birth preparedness (47.5%) in the same area of study. Almost the same knowledge of birth preparedness was found in Adrigat, Ethiopia (52%) (Mihret *et al.,* 2006).

Conclusion and Recommendations

From this study, the level of knowledge on birth preparedness reveals a remarkable difference on mean score before intervention and after intervention. Before the intervention, the pregnant women's knowledge was poor as compared to after intervention. Therefore, health education session on knowledge on birth preparedness was effective and can be used as a measure of inculcating birth preparedness.

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

Kayode, O., Oluseye, O. M.

&

Oluwatosin, O. A.

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).

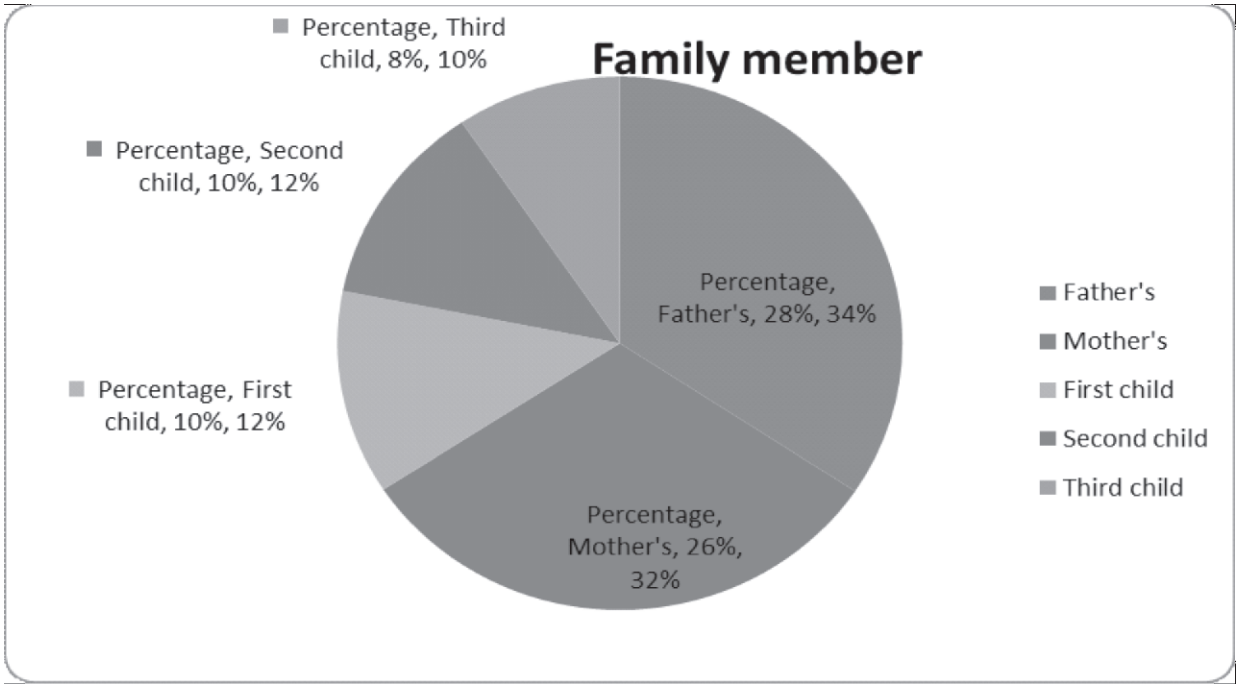

Figure 1: Frequency distribution of family members

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).

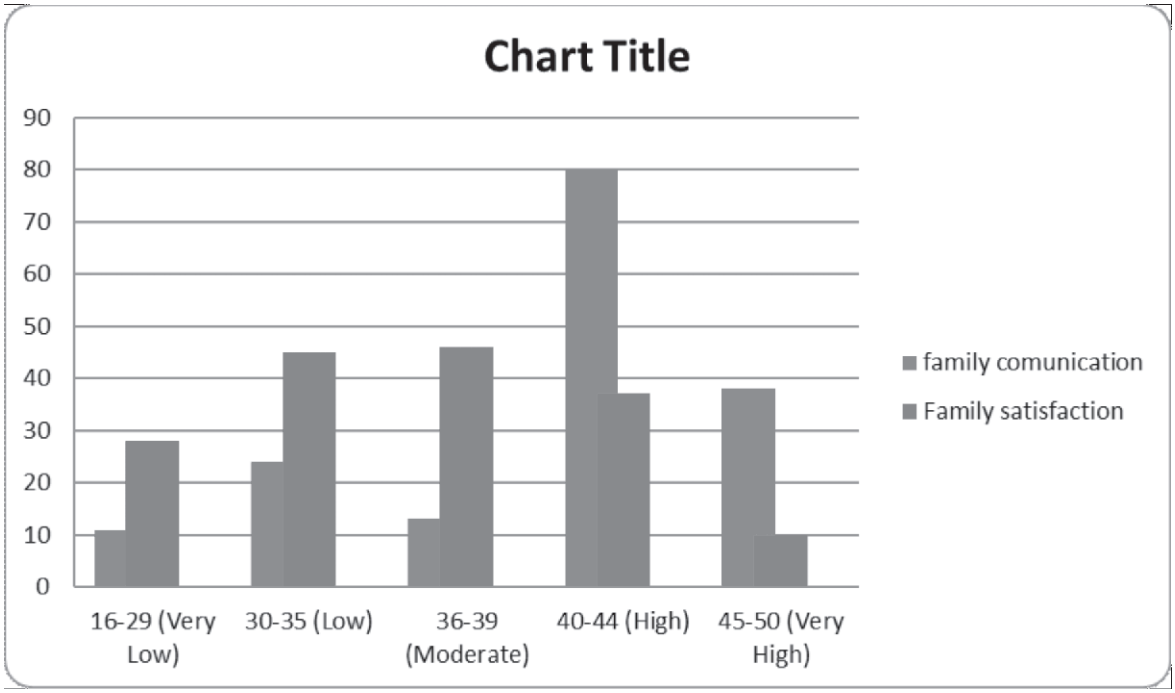

Figure 2: Frequency Distribu tion of participants Scores on Famil y Communication and satisfaction Scale

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

Olubiyi, S. K.,
Maitanmi, J. O.,
Unuakhe P. M.
&
Ajao, E. O.

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

Okpala, P. U.,
Nwaneri A.
&
Osuala E.

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

Beredugo, L. I.,
Emmanuel L,
Oniso, J. I.
&
Aluye-Benibo, D.

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

Esewe R. E.

&

Amadi H. O

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.

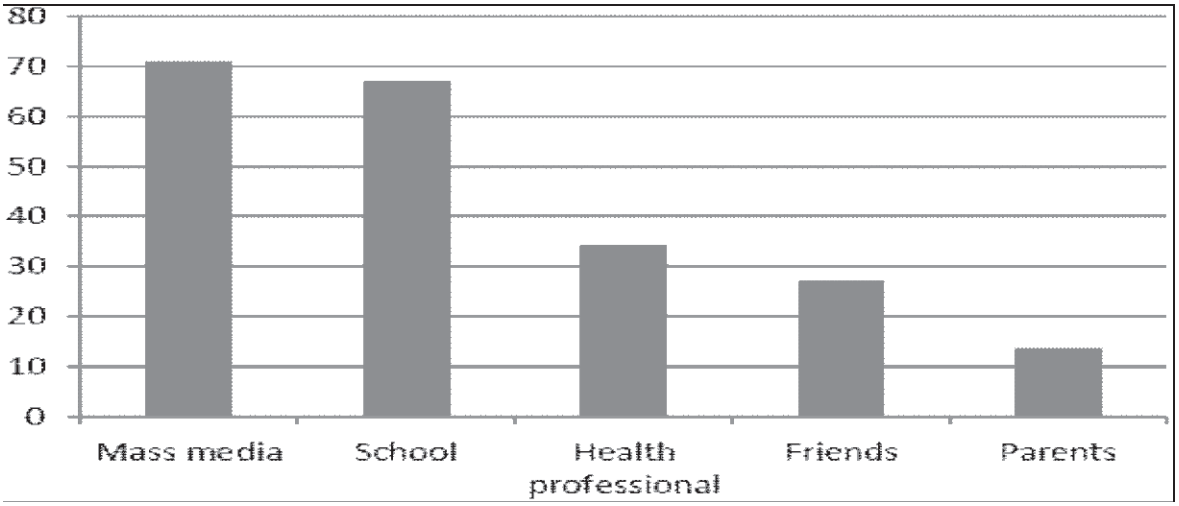

Figure 1: Source of Information

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.

Ohaeri, B. M.

&

Yusuf A. G

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.

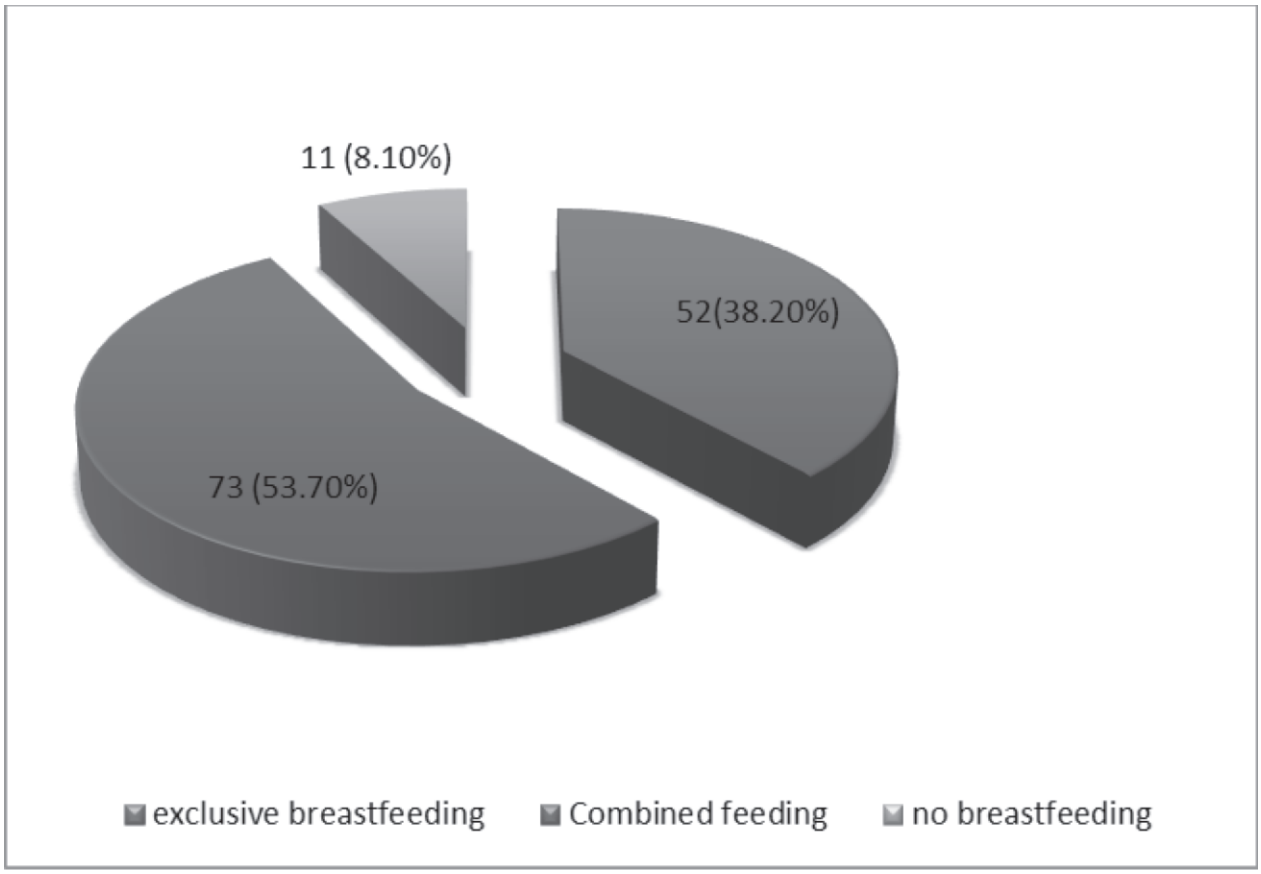

Figure1: Methods of feeding

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.

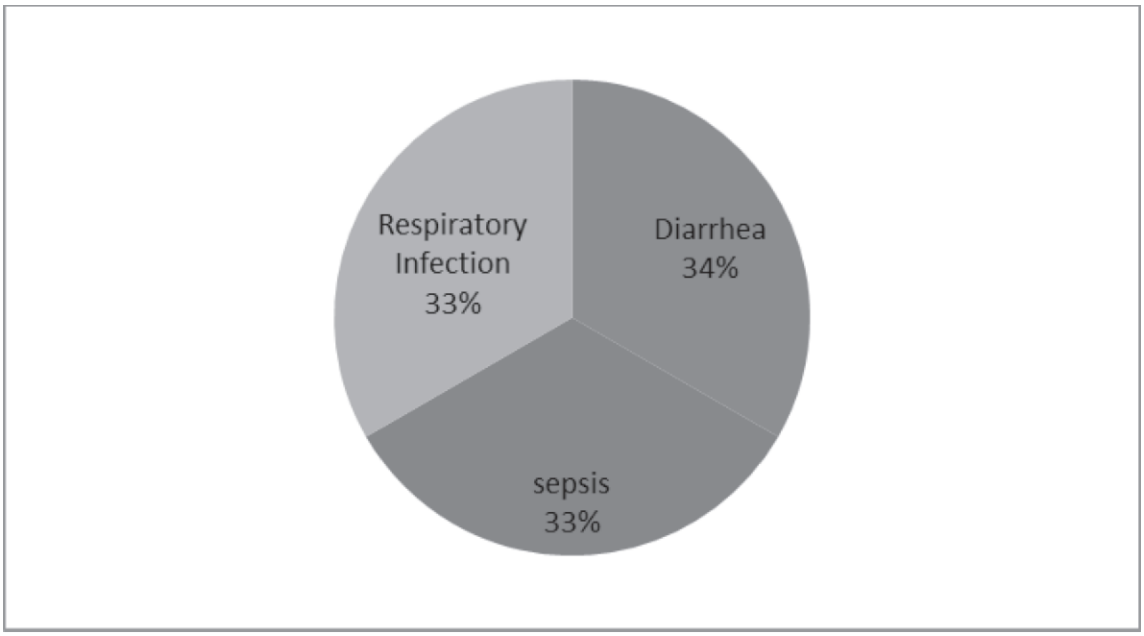

Figure : Summary of Incidence of common childhood illness during early infancy

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.

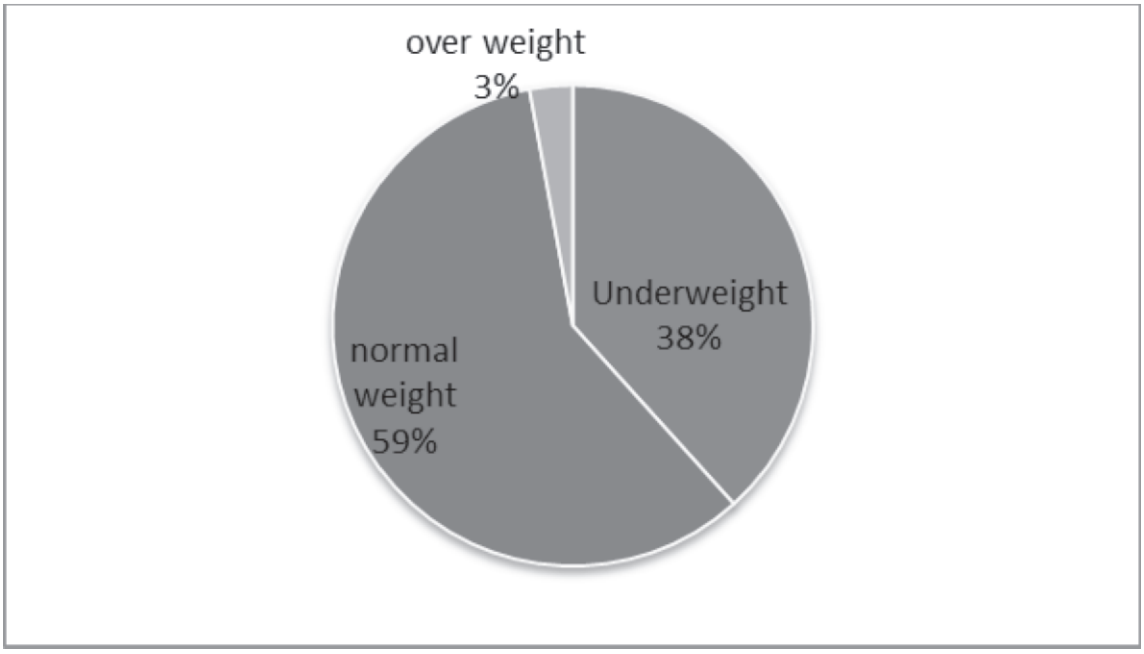

Figure : Cumulative birth weight of infants in the study

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.

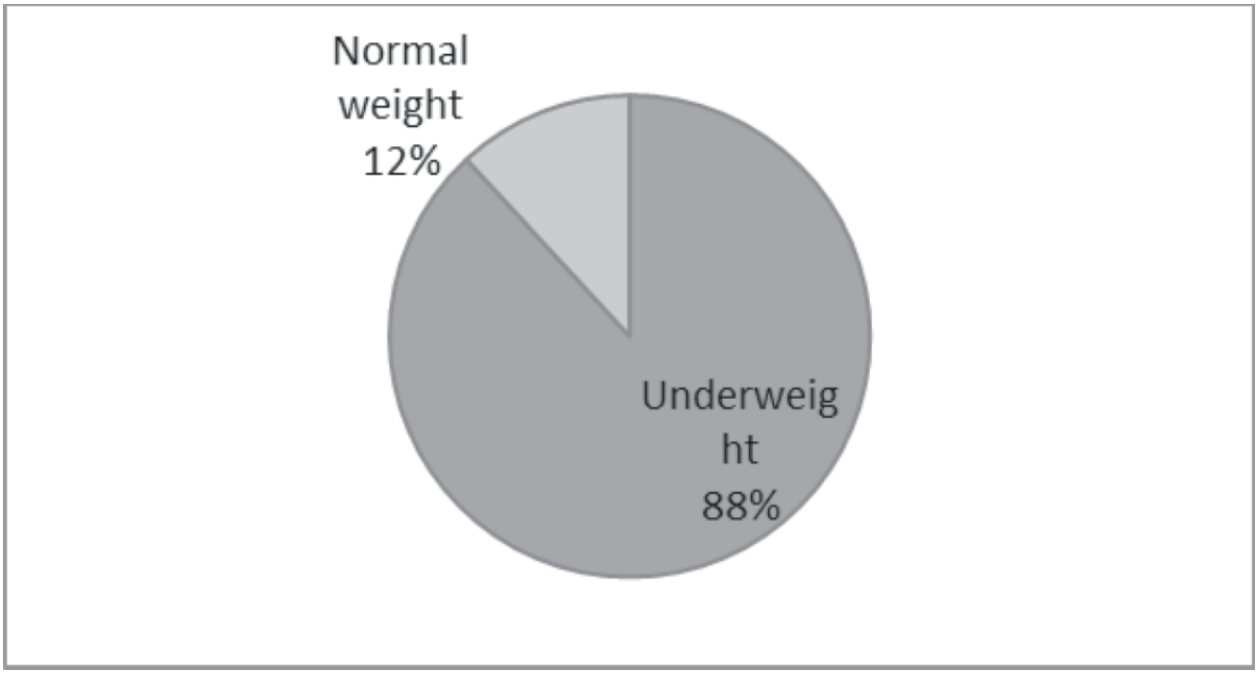

Figure : Cumulative weight of infants after 6 months of feeding in the study area

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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