

KNOWLEDGE, ATTITUDE AND PRACTICE OF CERVICAL CANCER SCREENING AMONG WOMEN IN NSUKKA LGA OF ENUGU STATE

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Abstract: The study examined knowledge, attitude and practices of cervical cancer screening among women in Nsukka LGA. of Enugu State. Three research questions and three hypotheses guided the study. Descriptive survey research design was adopted. The population comprised of 1,322 (471 educated and 851 uneducated) women attending primary healthcare in Nsukka LGA. The sample for the study was 266 respondents. Proportionate sampling technique was used to get 20% of the population. The instrument for data collection was researcher's made, structured and validated questionnaire titled "Knowledge, Attitude and Practice of Cervical Cancer Screening Questionnaire (KAPCCSQ)". The instrument was administered and collected on the spot with the help of two research assistants who are healthcare workers. Frequency counts and percentages were used to answer research question 1, while mean (X) and SD were used to answer research questions 2 and 3 respectively. The hypotheses were tested using chi-square and t-test statistic. At the level of data analysis, only 248 women were used. Findings revealed that women in Nsukka LGA. of Enugu State have high level knowledge of cervical cancer screening (81.6%). The attitude towards screening was also positive (X=2.55) while the practice of cervical cancer was at low extent (X=2.42). Significant difference does not exist between the two groups of women studied regarding the level of knowledge possessed (P>0.05) while differences existed with respect to attitude and practice of screening (P<0.05). It was concluded that majority of women possess high level of knowledge and attitude towards cervical cancer screening with negative dispositions to practice of it. Based on the findings, the researchers recommend among others that Enugu State government through the Ministry of Health should ensure that the cost of cervical cancer screening is highly subsidized or made free while efforts should be intensified to break the barriers to practice of cervical cancer screening.

Keywords: Cervical cancer, Cancer screening, Knowledge, Attitude, Practice

Introduction

Cervical cancer is one of the most frequent reproductive health challenges in women of all ages especially women of childbearing age. Cancer is generally a name given to a group of over 100 diseases in which cells begin to grow out of control (American Cancer Society (ACS), 2015). Human body cells naturally try to grow new cells in order to replace old ones that die but sometimes this process can go abnormal resulting in the formation of a mass called tumor. Tumor formation can be malignant (that is

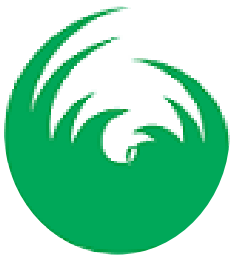
can spread to cause cancer) and can spread. They can invade nearby tissues (cancerous) and can spread to other parts of the body notably cervix, breast, colon, prostate, liver and other organs and systems of the body (American Cancer Society, 2015). The existence of cancer at the cervix is known as cervical cancer.

Global statistics show that cervical cancer is one of the frequent cancers among women and 80% of cases occur in the developing world (Okunnu, 2010). According to Okunnu's report, one woman dies of cervical cancer in

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every two minutes worldwide and that 80% of these deaths occur in developing nations. Globally there are nearly 1.5 million cases of clinically recognized cervical and about 85% occur in developing countries including Nigeria and Enugu State.

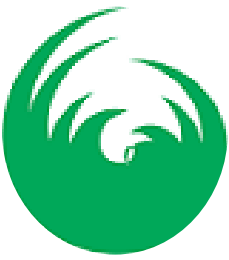
In Nigeria, for every two women who die of breast cancer, one dies from cervical cancer worldwide. According to the Cervical Cancer Global Crisis Card (2017), Nigeria ranks 5th among countries with regards to death count from cervical cancer, after India, China, Brazil and Bangladesh. Ndejjo et al (2016), estimate shows that every year, 14089 women are diagnosed with cervical cancer while 40.43 million women are at risk of developing cervical cancer and that 8,240 die from the disease due to low level of knowledge of the disease.

The most important risk factor in developing countries is infrequent cervical screening or lack of accessible cervical screening services. Another very important risk factor in the development of cervical cancer is infection with a high-risk strain of Human papilloma virus. Fortunately, there are measures that offer prevention for this cancer that devastates families, which include screening approaches and vaccines that are efficacious in preventing the infections and precancerous changes that can lead to cervical cancer (Amine, Sanaa, Majjaoui, Zakia, Jamal & Chakib, 2016). This goes to show that cervical cancer remains the commonest genital tract cancer yet it is largely preventable by effective screening programmes.

Cervical screening is a health intervention used on population of woman at risk of developing cervical cancer (World Health Organization (WHO), 2018). Cervical cancer screening is the process of detecting and removing abnormal tissue cells in the cervix before it develops. It is not undertaken to diagnose the disease but to identify individuals with a high probability of having or developing the disease at the precancerous stage. Screening for Cervical cancer has several benefits. Screening allows for early detection and treatment thus

minimizing the incidence and mortality rates in women. Furthermore, screening identifies and allows for early detection of cervical cells that have become or have the potential to become cervical neoplasia or cervical cancer. There are several screening techniques which women can undertake to minimize the contraction of the disease and possibly avoid the health consequences associated with it. A number of cervical cancer screening are currently available worldwide that have proven to be effective in the early detection of precancerous lesions. Prominent among the screening include cervical biopsy, colposcopy, cone biopsy, cervical cytology or pap smear, human papilloma virus (HPV) test, and visual inspection with acetic acid (VIA) or lugol iodine (VILI) (WHO,2013; Abiodum et al, 2013). The most common of these techniques are pap smear or pap test, HPV and CIA. This could be due to the fact that they are relatively cheap to undertake and falls within the income stream of many women especially those from low socioeconomic background. Women from Nsukka LGA are basically from families of low socioeconomic background and may lack the required knowledge of screening.

Cancer of the cervix could be problematic to women especially if they do not possess adequate knowledge of the disease. Knowledge is the information, understanding and skills that one gains through education or experience. According to Donald & Young (2012), knowledge can be defined as the fact of understanding events, issues or objects that are acquired either through learning or experience. Expert submissions have demonstrated that the vast majority of women in some African countries had not heard of cervical cancer and even more knew nothing about cervical screening (Ayayi & Adewole in Al- Meer, Aseel, Al-Khalaf, Al-Kuwari & Ismail, 2011). A study by Wright, Aiyedehin, Akinyink and Ilozumba (2014), Bakari, Takai and Bukar (2015), on awareness and knowledge of cervical cancer among women in South Western Nigeria, North Eastern Nigeria, and in Eastern parts of Nigeria, reported poor or at best, below average



knowledge of cervical cancer. A study carried out among English women also shows little or no knowledge about cervical cancer screening (Ogbonna, 2017). A similar trend was implicated among the Canadian women who also showed low level of knowledge (Aweke, Ayanto Ersado, 2017). Women in Nsukka LGA come from rural background with lots of deprivation in social services including health services and justifies the need for this study to be conducted in the locality. Even with adequate knowledge of cervical screening, attitude towards it may be different among women

Attitude as an organized and consistent manner of thinking, feeling and reacting to people, groups, social issues or any event in one's environment. Attitude can be said to be positive or high when individual response to the task or programme is favourable and when they show commitment to their duties. It can be negative or low when the individual expresses a nonchalant response with regard to what is expected of them in the given situation (Lambert & Scherer, 2009). Attitudinal survey shows that Canadian women living in the urban setting had low dispositions to cervical cancer screening. Touch and Oh (2016), were able to demonstrate that women in Kamfong Speu province of Cambodia had positive attitude towards pap test (74%), HPV (62%). The report however, shows that only 1% of the women studied showed preference to HPV screening. Similarly Koopmeiners, Rhee and Ahlawalia (2014), found Korean women showing positive attitude towards pap smear and the willingness to introduce it to their friends which signifies positive attitude to screening. Women in Nsukka LGA are of rural background unlike their counterparts from advanced economies and may likely possess low level of knowledge of screening but which has not been successfully established hence the present study.

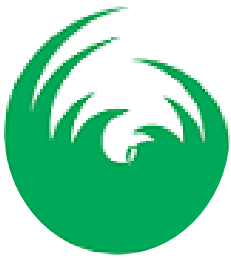
There are studies in Nigeria regarding women's attitude towards screening. For example, Owoeye and Ibrahim (2013), in a study among female staff and students of Niger Delta University shows that even with high level of

knowledge of screening, their attitude towards pap smear screening was found to be low. Aja et al (2015), observes that secondary school teachers in Abakiliki, Ebonyi State (about two thirds) had positive attitude to HPV screening. Positive attitude to screening is good but sometimes the practice of it could be challenging to women.

Despite the negative attitude towards screening by women in literature, the practice of it is the real issue. Practice refers to those measures adopted that are geared towards averting or avoiding hazards. Reproductive health researchers have recommended good practice of cervical screening as one good approach to minimize the disease in women. From the submissions of Peison et al (2013), women are required to go for pap test every 3-5 years with appropriate follow-up. This according to the report has the capacity to reduce cervical cancer incidence to 80%. The WHO in her series of publications has recommended getting women to obtain screening through invitation and educational approach. Similarly barrier protection and/spermicidal gel use of condoms can provide protection against STIs such as HIV and Chlamydia which are risk factors to cervical cancer (Vwalika et al, 2010; WHO, 2014). Women in Nsukka LGA may not be practicing these screening strategies and also may not be observing the screening guidelines which may predispose them further to the disease.

Women in Nsukka LGA refer to the inhabitants of the locality who are attending antenatal clinic in the primary health centres (PHCs) and residing in the locality as at the time of carrying out this study. This is due to the fact that consciousness about reproductive health issues is usually strong among these groups of women if not they could have gone to consult Traditional Birth Attendants (TBAs) within their locality.

Cervical cancer is a preventable disease and should not continue to cause as much morbidity and mortality as it does presently going by expert advice on ways and means of stemming the tide. In general, knowledge about cervical cancer, attitude towards effective screening



programmes and practices could reduce its burden among women. Women in Nsukka LGA may not possess adequate knowledge, attitude and practice of cervical cancer screening which was the focus of this study.

Statement of the Problem

Majority of women in Enugu State are residing in the rural setting with little or no access to health information including cervical cancer screening knowledge, attitude and practice of it. Nsukka LGA is a typical sub-urban setting in Enugu State and the inhabitants of the area are cultural people by nature which may be delimiting the information available to women in the locality including knowledge, attitude and practice of screening.

The researcher as a participant in a health outreach organized by the House of Representative member in the area in 2019, observed some cases of cancer cells growth among many of the women during cervical cancer screening exercise. Although available medical report shows that none of the cases has grown into full blown cancer, there is every likelihood that the discovered cases may progress to full blown cancer in future. Majority of the women tested admitted during interaction with the medical personnel that they were not comfortable going for cervical cancer screening after going through other routine tests for fear of losing their womanhood and sexuality especially those still in their procreation years. This therefore, justifies the importance of carrying out this type of research in this locality. It is in the light of these that the following pertinent questions are seeking for answers; “What is the level of knowledge of cervical cancer screening among women in the locality? What is the attitude of women in Nsukka L.G.A. of Enugu state towards cervical cancer screening?; how do the women practice cervical cancer screening?”

Purpose of the Study

The study specifically sought to:

1. ascertain the level of knowledge of cervical cancer screening among women in Nsukka L.G.A. of Enugu State;

2. identify the attitude of cervical cancer screening among women in Nsukka L.G.A. of Enugu State;
3. examine the practice of cervical cancer screening among women in Nsukka L.G.A. of Enugu State.

Research Questions

The following research questions guided the study:

1. What is the level of knowledge of cervical cancer screening among women in Nsukka LGA of Enugu State?
2. What is the attitude of cervical cancer screening among women in Nsukka LGA of Enugu State?
3. What is the practice of cervical cancer screening among women in Nsukka LGA of Enugu State?

Hypotheses

The following hypotheses were tested at 0.05 level of significance.

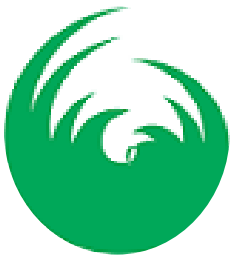
H₀₁: There is no significant difference between the educated and uneducated women in Nsukka L.G.A. of Enugu state on their level of knowledge of cervical cancer screening.

H₀₂: There is no significant difference between the mean scores of the educated and uneducated women in Nsukka L.G.A. of Enugu state on their attitudes of cervical cancer screening.

H₀₃: There is no significant difference between the mean scores of the educated and uneducated women in Nsukka L.G.A. of Enugu state on their practices of cervical cancer screening.

Method

The study adopted descriptive survey research design. The study was conducted in Nsukka LGA of Enugu State. The choice of Nsukka L.G.A. is based on incessant cases of cervical cancer among women in the locality. The population for the study comprised 1,322 (471 educated and 851 uneducated) women attending primary healthcare in Nsukka L.G.A. of Enugu State. The sample for the study was 266 respondents. Proportionate random sampling technique was used to get 20% of the population. The composition of the sample size was 95



educated and 171 uneducated women respectively. This is in agreement with Uzoagulu (2011), who advocated that if a population is in few thousands, the researcher can make use of any level of percent desired.

The instrument for data collection was researcher’s made, structured and validated questionnaire titled “Knowledge, Attitude and Practice of Cervical Cancer Screening Questionnaire (KAPCCSQ)”. The reliability of the instrument was determined using Kuder Richardson K₂₁ reliability estimate for research question 1 which yielded an overall reliability index of 0.83 making the instrument reliable. Cronbach Alpha method was used to determine the reliability of research questions 2 and 3 which yielded reliability indices of 0.80 and 0.82 with an overall reliability index of 0.81. The 266 copies of the questionnaire were administered on educated and uneducated women by the researcher with the help of 3 research assistants who were briefed in a one-day meeting. Out of the 266 copies of questionnaire administered, the researcher and the research assistants were able to retrieve 248 (89 copies from the educated

women and 159 copies from the uneducated women) representing 93.23% retrieval rate. Frequency counts and percentages were used to analyze data related to research question 1, while mean and standard deviation were used to answer research questions 2 and 3.

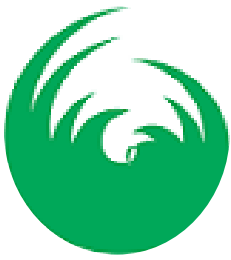
The hypotheses were tested using Chi square and t-test at .05 level of significance. Decision rule was to reject null hypothesis if calculated t-test value was equal to or greater than the critical or table value and not to reject null hypothesis (H₀) if calculated t-value was less than the critical value. For chi square, if the calculated value is greater than the critical (table) value the null hypothesis is rejected, but if the critical value is greater than the calculated value, the null hypothesis is not rejected.

Results

Research Question 1: What is the level of knowledge of cervical cancer screening among women in Nsukka L.G.A. of Enugu State?

Table 1: Frequencies and Percentage Distributions of the Respondents on Level of Knowledge of Cervical Cancer Screening

SN	ITEMS	Educated = 89			Uneducated = 159		
		Correct f %	Incorrect f %	Dec	Correct f %	Incorrect f %	Dec.
1.	I have heard of cervical cancer screening.	51(57.30)	37(42.70)	HL	92(57.86)	67(42.14)	HL
2.	Pap’s smear cytology and visual inspection of the cervix are forms of cervical screening services.	59(66.29)	30(33.71)	HL	41(25.79)	118(74.21)	VLL
3.	Primary prevention of cervical cancer is by life style changes and	61(68.54)	28(31.46)	HL	88(55.35)	71(44.65)	HL



	human Papillomavirus vaccination.						
4.	Screening enhances early detection and control of cervical cancer.	58(65.17)	31(34.83)	HL	96(60.38)	63(39.62)	HL
5.	Cervical cancer is curable if detected early.	50(56.18)	39(43.82)	HL	91(51.32)	68(48.38)	HL
	Cluster Mean Percentage	55.8(62.70)	33.2(37.30)	HL	81.6(51.32)	77.4(48.38)	HL

Key: VLL, Very Low Level. HL, High Level.

The data analyzed on table 1 above show that educated women had high level of knowledge on all the items with an overall high level of knowledge (55.8%). Uneducated women had high level of knowledge on items 1, 3, 4 and 5 with a very low level of knowledge on item 2. Their overall high level of knowledge was (51.32%). Generally, there is a high level of knowledge among the

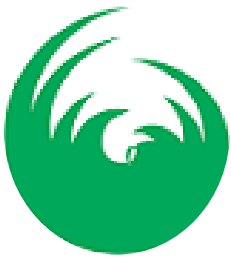
women in Nsukka L. G. A. of Enugu state on Cervical Cancer Screening.

Research Question 2: What is the attitude of cervical cancer screening among women in Nsukka L.G.A. of Enugu State?

Table 2: Mean Response Scores of the Respondents on Attitude Towards Cervical Cancer Screening

SN	ITEMS	Educated = 89			Non Educated = 159		
		\bar{X}	SD	Dec.	\bar{x}	SD	Dec.
	The attitude of cervical cancer screening among women include:						
6.	Cervical cancer screening is not against my religious belief.	2.68	0.91	A	2.63	1.05	A
7.	Early detection by screening decreases complication.	2.63	0.93	A	2.55	0.99	A
8.	I hate cervical cancer screening because it is unpleasant and embarrassing.	2.42	0.89	D	2.58	0.87	A
9.	Screening for cervical cancer shows one is promiscuous.	2.44	0.90	D	2.50	0.85	A
10.	Screening is not likely to change the outcome.	2.38	0.98	D	2.51	0.88	A
	Cluster Mean	2.51	0.92	A	2.55	0.93	A

Key: A, Agree.



Data presented in Table 2 shows the mean ratings of the responses of women attending primary healthcare in Nsukka L.G.A. of Enugu state on their attitude of cervical cancer screening. Items 6 and 7 were rated above the cut-off point value of 2.50 on a 4-point rating scale while items 8, 9 and 10 were rated below the cut-off value for the educated women. On the other hand, the uneducated women agreed on the items stated because they were rated above the cut-off point value of 2.50. Generally, the

above findings indicated that the women agreed of having a positive attitude towards cervical cancer screening. They have cluster mean of 2.51 and 2.55; and standard deviation of 0.92 and 0.93 respectively.

Research Question 3: What is the practice of cervical cancer screening among women in Nsukka L.G.A. of Enugu State?

Table 3: Mean Response Scores of the Respondents on Extent of Practice of Cervical Cancer Screening

SN	ITEMS	Educated = 89			Non Educated = 159		
		\bar{X}	SD	Dec.	\bar{x}	SD	Dec.
The practice of cervical cancer screening among women include:							
11.	I have been vaccinated against human papillomavirus infection.	2.51	0.99	GE	2.42	1.00	LE
12.	I have had a cervical cancer screening test done on me.	2.45	0.91	LE	2.53	0.90	GE
13.	The technique I used for cervical cancer screening test was visual inspection of the cervix with acetic acid.	2.41	0.89	LE	2.32	0.91	LE
14.	I will never have a cervical cancer screening test done on me.	2.40	0.95	LE	2.42	0.94	LE
15.	I will not be vaccinated against human papillomavirus infection.	2.45	0.90	LE	2.40	0.96	LE
Cluster Mean		2.44	0.93	LE	2.42	0.94	GE

Key: LE, Low Extent. GE, Great Extent.

Data presented in Table 3 shows the mean ratings of the responses of women attending primary healthcare in Nsukka L.G.A. of Enugu state on their practices of cervical cancer screening. The mean ratings of educated women range from 2.40-2.51, while the uneducated women mean ranged from 2.32-2.53 respectively. Both groups also have cluster mean of 2.44 and 2.42; and standard deviations of 0.93 and 0.94 respectively. The finding of the above table is an indication that the women

in Nsukka L.G.A. practice cervical cancer screening to a low extent.

Hypotheses

Ho₁: There is no significant difference between the educated and uneducated women in Nsukka L.G.A. of Enugu state on their level of knowledge of cervical cancer screening.

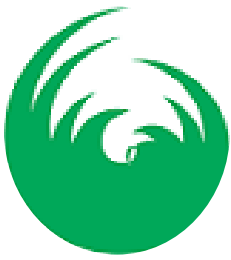


Table 4: Chi square Summary of Analysis Verifying Respondent’s Level of knowledge of Cervical Cancer Screening

VARIABLES	CORRECT RESPONSE	INCORRECT RESPONSE	TOTAL VALUE	Chi-sq	P-value	df	Level of Sig.	Dec
Educated	55.8(62.70)	33.2(37.30)	89	5.51	3.841	1	.05	S
Uneducated	81.6(51.32)	77.4(48.38)	159					

The calculated value (**5.51**) is more than the critical table value (**3.841**) therefore, the null hypothesis is rejected. Therefore, the women’s level of knowledge on the cervical cancer screening in Nsukka L.G.A. in Enugu state is high.

H₀₂: There is no significant difference between the mean scores of the educated and uneducated women in Nsukka L.G.A. of Enugu state on their attitudes of cervical cancer screening.

Table 5: t-test of Significant Difference Between the Mean Ratings of the Respondents on Attitude Towards Cervical Cancer Screening

Groups	N	\bar{x}	SD	df	t-cal	t- crit	Dec
Educated	89	2.51	0.92	246	0.29	±1.96	Not rejected
Non educated	159	2.55	0.93				

Table 5 above presents the t-test analysis of the mean difference in the response opinions of both educated and uneducated women on their attitudes towards cervical cancer screening. The result on Table 5 shows that the calculated t-value (**0.29**) is less than the critical value (± 1.96). The null hypothesis is not rejected. Therefore, there is no significant difference between the mean ratings of educated and uneducated women on their

attitudes towards cervical cancer screening in Nsukka L.G.A. of Enugu state.

H₀₃: There is no significant difference between the mean scores of the educated and uneducated women in Nsukka L.G.A. of Enugu state on their practices of cervical cancer screening.

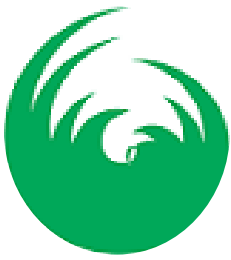


Table 6: T-Test of Significant Difference Between the Mean Ratings of the Respondents on Attitude Towards Cervical Cancer Screening

Groups	N	\bar{x}	SD	df	t-cal	t- crit	Dec
Educated	89	2.44	0.93				
				246	0.14	±1.96	Not rejected
Non educated	159	2.42	0.94				

Table 6 above presents the t-test analysis of the mean difference in the response opinions of both educated and uneducated women on their practices towards cervical cancer screening. The result on Table 6 shows that the calculated t-value (0.14) is less than the critical value (± 1.96). The null hypothesis is not rejected. Therefore, there is no significant difference between the mean ratings of educated and uneducated women on their practices towards cervical cancer screening in Nsukka L.G.A. of Enugu state.

Discussion of Findings

Knowledge Level of Cervical Cancer Screening

The findings of the study revealed that there is a high level of knowledge among the women in Nsukka L. G. A. of Enugu state on Cervical Cancer Screening. The women have high level of knowledge of cervical cancer screening, pap's smear cytology and visual inspection of the cervix are forms of cervical screening services, among others. The finding of the study is in agreement with Ofori, Ebu, John and Siakwa (2013) from their study conducted in Ghana, which indicated that 83.0% participants had good knowledge of cervical cancer only 77% had knowledge of cervical cancer screening services, although 89% respondents correctly identified human papilloma virus as being associated with cervical cancer. On the other hand, Campbell, Adu, and Danwatta (2014) disagreed with the finding of this study in the sense that majority of respondent in the study conducted

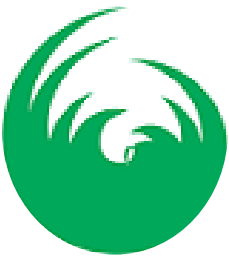
by them (68%) did not know what a cervical smear was. Some who had awareness did not know what it was for and were not interested in undergoing a cervical smear because of some seemingly more pressing issue. However, women should be properly guided on the various aspect of cervical cancer screening.

Attitude Towards Cervical Cancer Screening

The finding of the study revealed that the women in Nsukka L.G.A. of Enugu state agreed that they have positive attitude towards cervical cancer screening. The finding of the study is in accordance with Ojong, Nsemo & Eno (2019) who revealed in their study that most students had positive attitude towards cervical cancer screening. Ferley, Bray, Pisani & Parkin (2010) in their study on knowledge, attitude and practice of cervical cancer screening revealed that despite the good knowledge possessed by respondents, only 35.5% of respondents had positive attitude towards cervical cancer screening. The high rate of positive attitude is attributed to educational background of some of the respondents. Women should be continuously encouraged to be educated in order to be exposed to critical information of their health.

Practice of Cervical Cancer Screening

The finding of the study is an indication that the women in Nsukka L.G.A. practice cervical cancer screening to a low extent. This finding is in line with the view of Urasa & Dary (2011) which revealed that only a few



participants have had a cervical cancer screening. Also, Ezeriogbo & Uche (2012) in their work on knowledge, attitude and practice of cervical cancer screening among secondary school teachers in Enugu state showed that, despite their year of study, only 13.4% practiced cervical cancer screening. However, the practice of cervical cancer screening should be encouraged by the stakeholders in health.

Conclusions: This study demonstrated a high level of knowledge of cervical cancer, positive attitude and low extent of cervical cancer screening practice among the women.

Recommendations: Based on the findings and conclusions of the study, the following are put forward as recommendations:

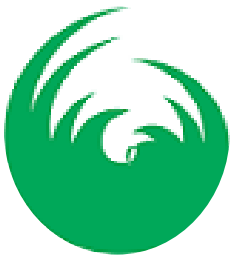
1. Enugu State government through the Ministry of Health should ensure that the cost of cervical cancer screening is highly subsidized or made free.
2. The nongovernmental organization should carry out massive and sustained free community screening for cervical cancer in order to improve the attitude of women in rural areas like Nsukka L.G.A. of Enugu state.
3. Healthcare workers should also use all available opportunities to educate women about cervical cancer whenever they visit health facilities to access care.
4. The local government officials should improve the access to cervical cancer prevention services among this group of women in Nsukka L.G.A. of Enugu State.

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