

## Knowledge Attitude and Practice of Cervical Cancer Screening among Sexually Active Women in Onitsha, Southeast Nigeria

Obiechina N J A FWACS, Mbamara S U FMCOG

Department of Obstetrics and Gynaecology, Nnamdi Azikiwe University Teaching Hospital, Nnewi, Anambra State

### Abstract

**Background:** Cervical cancer is a major cause of death in the developing world. This high fatality is due to late presentation. It is believed that widespread screening of women for precursor lesion and early detection of the invasive disease can lead to a reduction in cervical cancer and cervical cancer deaths. This study assesses the knowledge, attitude and practice of cervical cancer among sexually active women in Onitsha Southeast Nigeria.

**Methods:** Three major layouts in Onitsha were chosen as the areas of study. In these areas, 5 sites each where major economic activities take place were chosen for the distribution of the questionnaire. A total of 400 pretested questionnaires were administered to women who gave their verbal consent to participate in this study. The data were analyzed using SPSS package for windows version 11.0.

**Results:** The result showed that 76(26.85%) of the respondents were aware of cervical cancer screening. Thirty six (47.4%) of the aware group knew that the test was a screening test for cervical cancer. There was significant association between the educational status and the knowledge of Pap test but there was no significant association between the educational status and the utilization of the Pap test.

**Conclusion:** This study shows that there is poor awareness and utilization of cervical screening test in our environment. There is therefore an urgent need to establish an aggressive and sustainable awareness campaign on the preventive nature of cervical cancer and further establish an organized cancer screening programme.

Key words: cervix, cancer, cytology, knowledge practice

Date Accepted for publication: 18th July 2007

Nig J Med 2009; 384 - 387

Copyright©2009 Nigerian Journal of Medicine

### Introduction

Cervical cancer is one of the most common types of cancer in women and is largely attributed to persistent infection with high oncogenic risk Human papilloma virus

(HPV). Cancer of the cervix, although a preventable disease yet it remained the leading malignancy among African women<sup>1</sup> and has a high fatality rate due to late presentation<sup>1, 2, 3</sup>. Cervical cancer is the second most common cancer among women worldwide, with about 500,000 cases annually<sup>4</sup>. It is the most common malignancy among women in Nigeria and the rest of sub Saharan Africa with a poor 5 year survival rate<sup>2, 5</sup>. An estimated national incidence of 250/100,000 and 25 new cases are expected to occur yearly<sup>6</sup>.

Carcinoma of the cervix accounted for 74.6% and 66.2% of all gynaecological malignancies in Benin Southsouth Nigeria and Zaria Northcentral Nigeria respectively<sup>2, 3</sup>. Most of these patients however presented at an advance stage of the malignancy<sup>2, 4</sup>. This poor statistics largely is due to the absence of effective and organized cervical cancer screening programme in Nigeria and other developing countries and also the ignorance of the women to such programmes were available.

The prevention of cervical carcinoma relies on population screening and widespread use of HPV vaccines. The purpose of cervical cancer screening is to reduce the incidence of invasive cervical cancer by detecting and treating the abnormal cervical smears. Cervical cytology "Pap Smear" has been the most successful cancer screening technique of the 20<sup>th</sup> century<sup>7</sup>. Other cervical cancer screening methods include HPV DNA testing, visual inspection with aided and unaided eyes and colposcopy. Cervical cytology is cost effective, acceptable to most women and suitable for widespread screening programs. Recent Meta analysis showed that cervical cytology has a high sensitivity and specificity in the detection of abnormal cervical cytology and its positive predictive value is strongly affected by the disease prevalence<sup>8</sup>. Evidence from countries where there is established, widespread, organized and effective cervical cancer screening programme in place showed a marked fall in morbidity and mortality from cervical cancer.

The success of any programme depends on the knowledge of the general population, utilization and acceptance by the target population. This study is conducted to evaluate the level of knowledge, attitude, acceptability and practice of cervical cytology among sexually active women in Onitsha, Southeast Nigeria. The knowledge derive from this study would contribute in the planning and establishment of effective cervical cancer screening programme in the region.

## Materials and Methods

This descriptive questionnaire based study was conducted in Onitsha, Anambra State, Southeast Nigeria from November 2007 - February 2008. Onitsha is the largest city in Anambra State and it is located about 35km from Awka the state capital. The predominant economic activity of the people is commerce. The health utilities available in the city are health centers, maternity homes, private specialist hospitals, mission hospitals and a General hospital.

The subjects consist of 400 women living in the 3 major lay outs in Onitsha namely Awada, Fegge and Nkpor. In each of these layouts, 5 sites where major economic activities take place were chosen as the core areas where the questionnaires were distributed. Each of these sites was visited only once. Precautions were taken to prevent double participation by the women.

The women were recruited by simple random sampling technique after giving verbal consent to participate in the study. The instrument used was pre-tested, semi-structured, self-administered questionnaire. The questionnaire enquired information on their sociodemographic data, level of knowledge about cervical smear test, beliefs and the practice of cervical cancer screening. The results were analysed using SPSS for windows version 11. Chi square ( $X^2$ ) test was done to ascertain the relationships between categorical variables. The level of significance was accepted if the p value is  $<0.05$ .

## Result

A total of four hundred questionnaires were distributed but only three hundred and four questionnaires were correctly filled and this formed the basis of the analysis. Table I shows the sociodemographic characteristics of the women. The age range of the subjects was 15 - 49 with a mean age of 22.4 years. The majority of the respondents were of age range 25 - 29 years. About eighty nine per cent were above 35 years old. They were mostly married 283 (93.1%) and in a monogamous relation 238

(78.3%). Two hundred and ninety eight (98%) of the respondents were Igbos and mostly Christians. Two hundred and ninety six (98.4%) had some form of formal education.

Only 76 (26.8%) of the respondent have ever heard of cervical screening. The sources of information are as shown in table ii. The major sources of information are media 22(26.8%), nurses 19 (23.8%), Doctors 14(17.1%). Thirty six (47.4%) of the aware group knew that Pap test is a screening test for cervical cancer while 10 (13.2%) feels that it is a screening test for infection and infertility. Five (6.5%) of the respondents feel that it is a test for those practicing family planning while 25 (32.9%) were aware of the test but they do not know the reason for the test as shown table iii.

Table iv reveals that there is a significant association between the educational status and the knowledge of cervical cancer screening ( $X^2 = 13.38$ ;  $df = 3$ ;  $p = <0.05$ ). One in every two respondent has never heard of cervical cancer. Only 45 (14.5%) of the respondents feel that cervical cancer screening is useful while 44 (14.5%) feel that cervical cancer is a preventable disease.

One hundred and fifty seven (66.0%) of the respondents are willing to do Pap smear if offered to them while only 35 (11.5%) are aware that cervical cancer screening service is available in Onitsha. Forty two (13.8%) of the respondents are of the belief that they are at risk of developing cervical cancer. Eight (5.9%) of all the respondents or 23.7% of the aware group have ever had cervical cytology test.

Table v shows the various reasons given by the women why they did not do cervical smear. These reasons include; not aware of the test 249(81.9%); feels that they cannot develop cancer 35(11.5%); and cost 6 (2.0%). Table vi depicts that there is a significant association between the knowledge of cervical cancer screening and its utilization ( $X^2 = 39.265$ ;  $df = 1$ ;  $p < 0.05$ ) while table vii reveals that there is no significant relationship between the educational status and the utilization of the screening test ( $X^2 = 1.459$ ;  $df = 3$ ;  $p > 0.05$ ).

Two hundred and seventy four (90.1%) of the respondents feel that cervical cancer screening test should be done only when recommended by the doctor.

**Table I Socio-demographic characteristics of the respondents**

Age range	Frequency N = 304	Percentage (100%)
15-19	10	3.3
20-24	78	25.7
25-29	118	38.8
30-34	66	21.7
35-39	22	7.2
40-44	6	2.0
45-49	1	0.3
<b>Marital status</b>		
Single	15	4.9
Married	283	93.1
Divorced/separated	2	0.7
Widowed	3	1.0
Remarried	1	0.3
<b>Educational status</b>		
Non formal education	3	1.0
Primary education	5	1.6
Secondary education	96	31.6
Tertiary education	200	65.8
<b>Religion</b>		
Catholic	198	65.1
Protestants	46	15.5
Pentecostals	48	15.8
African traditional religion	3	1.0
Islam	5	1.6
Jehovah witness	4	1.3

**Table II: the sources of information about cervical cancer screening among the aware group**

Source of information	Frequency N=82	Percentage (100.0%)
Mass Media	22	26.8
Friends	8	9.8
Nurses	19	23.2
Medical literature	18	22.0
Medical doctor	14	17.1
Marriage course	1	1.2

**Table III: The understanding of the women about cervical cancer screening test**

Understanding about cervical cancer screening test	Frequency N = 76	Percentage (100.0%)
A screening test for cervical cancer	36	47.4
Test for infection among infertile women	10	13.2
Test meant for those undergoing family planning	5	6.5
Do not know the reason for the test	25	32.5

**Table IV: The relationship between the educational status and the knowledge of cervical cancer screening**

Knowledge of cervical cancer screening	Educational status				Total
	Non-formal education	Primary	Secondary	Tertiary	
Yes	1	1	12	65	79
No	2	4	84	135	225
Total	3	5	96	200	304

X<sup>2</sup>=13.376; df = 3; p<0.05

**Table V: The various reasons why the respondents did not do cervical cancer screening**

Reasons	Frequency N = 304	Percentage (100.0%)
Not aware of cervical cancer screening test	249	81.9
Feels she cannot develop cancer	35	11.5
Cost	6	2.0
Feels she needs her husbands consent	5	1.6
Scared of the possible outcome	4	1.3
No particular reason	0	1.6

**Table VI: The relationship between the knowledge of cervical cancer screening and its utilization**  
**Knowledge of cervical cancer screening**  
**Utilization**

Knowledge of cervical cancer screening	Utilization		
	Yes	No	Total
Yes	16	59	75
No	2	208	210
Total	18	267	285

X<sup>2</sup> = 39.265; Df = 1; p<0.05

**Table VII: Educational status and the utilization of cervical cancer screening**

Educational status	Utilization		
	Yes	No	Total
Non formal education	0	2	2
Primary	0	5	5
Secondary	4	87	91
Tertiary	14	173	187
Total	18	265	285

X<sup>2</sup> = 1.459; df = 3; p :0.05

**Discussion**

The knowledge of cervical cancer in this study population of 49.0% is similar to 37.6% reported among commercial sex workers in Lagos<sup>14</sup> but higher than 13.6% reported from Orlu<sup>12</sup>. The awareness rate of cervical cytology of 26.5% among the study population is very low. This prevalence rate is lower than the reports from Ibadan (69.8%)<sup>9</sup>, Nnewi (87%)<sup>10</sup>, and Abuja (72.9%)<sup>11</sup> but higher than 6.0% from orlu<sup>12</sup> and 16.0% from Aba<sup>13</sup>. The differences can be attributed to the differences in the sociodemographic characteristics of the populations studied. The Abuja, Nnewi and Ibadan studies were done among health care providers whose knowledge ordinarily is expected to be high. The low awareness rate in this study calls to question on how adequate the nation's academic curriculum covers sexual and reproductive issues since over 95% of the study population received some form of formal education. There was a significant association between the educational status and the knowledge of cervical cancer screening but surprisingly this did not translate into utilization of the services. This shows how defective our educational curriculum is in terms of sexual and reproductive health issues.

The compliance of the respondents to cervical cancer screening of 20.3% of the 79 aware respondents is significantly higher than the compliance rate of 7.6% of 97 respondents reported from Ibadan (x<sup>2</sup> = 4.02; p =0.04) and 9.6% of 166 respondents from Abuja<sup>11</sup> (X<sup>2</sup> = 3.96; p<0.0466). There is also a significant association between the knowledge of cervical cytology and its utilization. This contrast shows therefore that knowledge may not be the only factor militating against the compliance.

The common reasons adduced for not doing Pap smear test include: ignorance, cost and belief that it is not their portion to develop cervical cancer. Others include the thinking that they require their husbands consent before they can undertake the screening test. A good number of them also believe that they are not at the risk of developing cancer of the cervix. This brings to fore the

inadequacy of the public health programmes and defective communication.

Cervical cancer screening is highly acceptable to the study population. Most of the women expressed their willingness to do cervical cancer screening test but believed that they require a doctor's recommendation. This exposes the pivotal role of health care providers in sexual and reproductive health education of their patients in particular and the public in general. The use of marriage course as an avenue of passing the information is a welcomed development which should be encouraged and improved upon. This will address the problem of women who are resistant to education by mass media and who are more likely to accept what they are told by their spiritual leaders and friends than by healthcare providers.

The finding that less than half of the aware group knew the reason for the test also shows how defective the

information flow. Their misconception would have affected the rate of utilizing the cervical cancer services.

This study shows a low awareness about cervical cancer screening, high acceptability of the test and low practice rate. Healthcare providers, nongovernmental organizations (NGO), government agencies, women societies and the mass media should rise to the challenges of educating our women on sexual and reproductive health. Healthcare providers should use every opportunity to pass the message of cervical cancer prevention to their patients and increase opportunistic screening. Enlightenment and awareness campaign should include emphasis on the predisposing factors, preventive nature and preventive modalities of cervical cancer like HPV vaccines which have recently been licensed in developed countries.

## References

1. Rogo KO, Omany J, Onyanjo JN, Ojwang SB, Stendalis U. Cancer in African Setting. *Int J Gynaecol and Obstet* 1990; 67: 249 255
2. Gharoro EP, Abedi HO, Okpere EE. Cancer of the Cervix: Aspects of Clinical Presentation in Benin City . *Int J Gynaecol.Obstet* 1999;67: 51 53
3. Emembolu JO, Ekwempu CC. carcinoma of the Cervix uteri in Zaria: Aetiological factors. *Int J gynaecol Obstet* 1988 26: 265 269
4. National population Commission, NDHS, 1999, NPC 2000
5. Papadopoulos AJ, Devaja o, Cason J, Raju KS. The Clinical implications of Human papilloma Virus Infection in the Carcinogenesis and Emerging Therapeutics. In Studd J (ed) *Progress in Obstetrics and Gynaecology vol17* Edinghbour: Churchill Livingstone Publications; 2000: 251 293
6. Adewola IF, Edoziem IC, Babarinsa IA, Akang E.L.U. Invasive and in-situ carcinoma in young Nigerians. A clinic-pathologic study of 27 cases. *Afr J Med Sci* 1997;26:191 193
7. Johannesson G, Giersson G, Day N. the effect of mass screening in Ice Land; 1965 74, on the incidence and mortality of cervical carcinoma. *Int J of cancer* 1978; 221: 418 425
8. Rockville MD. Evaluation of Cervical Cytology Summary; Evidence Report/Technological Assessment 1996 No 5.
9. Canavan Tp, Doshi NR. Cervical cancer. *Am Fam Physcians* 2000(6): 1369 1379
10. Olaniyan OB, Agboghroma OC, Ladepo OP. Knowledge and Practice of Cervical Screening among Female Health Workers in Government Hospitals in Abuja Metropolis Nigeria. *Trop J Obstet Gynaecol* 2000; 17(11):18 20
11. Udigwe GO. Knowledge and attitude and Practice of cervical cancer screening (Pap smear) among Female Nurses in Nnewi Southeastern Nigeria. *Nig J Clin Pract* 2006; 9(1): 48 51
12. Babarinsa LA, Adewole IF. Knowledge and attitude to utilization of cervical cytology screening by female workers in a Nigerian teaching hospital. *Nig Med Pract* 1998; 35(3/4):48 51
13. Ojiyi E, Dike EI. Knowledge and Practice of cervical Cancer Screening at Imo State University Orlu. *Port Harcourt Med J.* 2008; 2:145 150
14. Feyi Wabosi PA, Kamanu C, Aluka C. Awareness and Risk Factors for Cervical Cancer among Women in Aba Southeast Nigeria. *Trop J Obstet Gynaecol* 2005; 22(1): 25 26
15. Onajole AT, Ajekigbe AT, Bamgbala AO, Odeyemi KA, Ogunnowo BO, Osisanya TF, Obilade TT. The Socio-demographic characteristic and the level of awareness of the prevention of carcinoma of the cervix among commercial sex workers in Lagos Nigeria. *Nig Med Pract* 2004; 45(4): 52 55
16. Aboyeji PA, Munir-Deen A. Ajaiya, Abdul-Gafer AJ. Knowledge, attitude and practice of cervical screening smear in Ilorin, Nigeria. *Trop J Obste Gynaecol* 2004; 21(2):114 - 117