



## **CERVICAL CANCER AMONG WOMEN IN CALABAR, NIGERIA: A FIVE YEAR REVIEW**

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### **ABSTRACT**

Cervical cancer is the 3<sup>rd</sup> most gynecological cancer worldwide with more than 85<sup>th</sup> of the global burden occurring in the developing countries. Certain risk factors have been implicated to increase the risk of developing cervical cancer. These include Human Papiloma virus (HPV) infection, co-infection of HPV with STIs, Multiple sexual partners, early initiation of sex before the age of 18 years and having an uncircumcised sexual partner.

**AIMS:** We present a retrospective review of the pattern of cervical cancer among women in Calabar.

**RESULTS:** A total of 370 women were screened within the study period. Majority of the women were aged 40 to 49 years, 32.2%. Seventeen (4.6%) of women screened positive for cervical cancer. High grade squamous intraepithelial lesion was the predominant (70.6%) histologic finding.

**CONCLUSION:** The incidence of cervical cancer is on the rise. Early detection may improve the quality of life in those affected. Increased awareness and effective screening programme are urgently needed to reduce the high mortality rate attributed from the disease.

### **Keywords:**

**cervical cancer, women, Calabar.**

## INTRODUCTION

Cervical cancer is a malignant neoplasm arising from the cervix. This is the narrow portion of the uterus where it joins the top of the vagina.

It is the 3<sup>rd</sup> most gynaecological cancer worldwide and the 2<sup>nd</sup> most common cause of cancer death in women.

More than 85% or centile of the global burden occur in the developing countries accounting for 13% of all female cancer. <sup>1,2</sup>

About 86% of new cases of cervical cancer are seen yearly in the developing countries.

Certain risk factors have been implicated to increase the risk of developing cervical cancer. Foremost is the Human Papilloma Virus (HPV) infection, co-infection of HPV with STIs, multiple sexual partners, early initiation of sex before the age of 18 years and having an uncircumcised sexual partner. <sup>4-6</sup>

About fifteen genotypes of HPV have been identified to be carcinogenic. Infection of by any confers a different carcinogenic risk. Persistent infection of any can lead to any of the major forms; squamous cell carcinoma arising from the squamous epithelial cells of adenocarcinoma arising from the glandular epithelial cells. <sup>7</sup>

Majority of sexually active women less than 25years get infected with HPV at least once. In most cases, the immune system clears the infection with little or no subclinical manifestation. Clinical sequelae can either be genital warts or intraepithelial neoplasia. <sup>5</sup> Currently, administration of HPV vaccine to females aged 9-26 years is the main mode of reducing infection. <sup>8</sup>

PAP SMEAR REMAINS THE EASIEST AND CHEAPEST MEANS FOR EARLY IDENTIFICATION OF CERVICAL NEOPLASTIC CHANGES.

Other modern tests but expensive are the liquid based cytology test and the HPV typing.

## METHODOLOGY

This was a descriptive retrospective study involving the use of the cancer register at the Medical Women's Association of Nigeria, Cross River State Branch (MWANCRS) Secretariat. This was used to obtain necessary information from the year 2008 to 2012. Information obtained included number of women screened, age, parity, result of Papa smear, mode of intervention and outcome. Data was analyzed using simple percentage, Pie charts and tables.

Screening was done by cervical cytology. Samples were obtained using Ayre's spatula and sent to the histopathology laboratory for smear interpretation by pathologists. Facilities (client's phone number and a rescheduled visit) were put in place for communication of the results to the patients. Repeats were scheduled for further examination under anaesthesia using visual inspection with acetic acid (VIA). Immediate treatment was offered to those with abnormal results thus ensuring better compliance and quality of life.

## Results

### Demographic pattern of women screened.

Age ranges (years)	No_ (%)
20-29	60 (16.2)
30-39	82 (22.1)
40-49	119 (32.2)
50-59	85 (22.9)
>60	24 (6.5)

### Distribution of parity among women screened

Parity	Number
Para-0	84
Para-1	37
Para-2	40
Para-3	63
Para-4	76
Para-5	34
Para-6	14
Para-7	12
Para-8	5
Para-9	2
Para-15	1

### Pattern of cervical lesions

Cervical lesions	Number	Frequency (%)
Cervical infection	53	14.3
Cervical cancer	17	4.6

Surgical intervention		
Yes	13	3.5
No	2	
Death	2	
Normal smear	250	67.7

**Relation of pap smear findings and parity.**

Lab diagnosis	Parity (%)	
	<3children	>3children
Benign inflammatory changes	224	146
High grade squamous intraepithelial lesion	0	12
Low grade squamous intraepithelial lesion	5	0

A total of 370 women were screened within the study period. Majority of the women were aged 40 to 49 years, 32.2% A large proportion 22.7% of women were nulliparid. Seventeen (4.6%) of women screened positive for cervical cancer. High grade squamous intraepithelial lesion was the predominant (70.6%) cytological finding. Of the seventeen women who screened positive, thirteen consented to surgery while four did not. Out these four, two died and two lost to followed up yearly screening.

**DISCUSSION**

Cervical cancer is on the increase.<sup>8</sup> It has been reported to the second most common cancer killer in women worldwide.<sup>12</sup> The prevalence of cervical cancer cases studied was 4.6%. This value is small as compared to other studies (Lagos 7.8% in 2006, Botswana 80.6% and 18.0% in Mississippi Delta region of the United States).<sup>9-11</sup> The probable explanation maybe a low sample size compared to the other studies. Futhermore, the value of abstaining from sex until after marriage by the Efik tradition may reduce the early sex initiation which is a predisposing factor to cervical neoplastic change.

High grade squamous intraepithelial lesions was the predominant 70.6% cervical neoplastic change among the women studied. This similar finding has been reported by other studies.<sup>12,13</sup>

A lot more (13 out of 17) women with abnormal results had surgery and had a better quality of life. This underscores the need for early detection because this is a **treatable condition**. However, due low awareness of cervical cancer, lack of effective screening programs and the HIV pandemic are contributing to the increasing incidence of cervical cancer in women with a consequent rising mortality.

## CONCLUSION

The incidence of cervical cancer is on the rise. Early detection may improve the **quality of life** in those affected. Increased awareness and effective screening programs are **urgently** needed to reduce the highly mortality rate attributed from the disease.

## PREVENTION

1. Vaccination against HPV (Gardasil and Cervarix) when given appropriately to non-infected females from the age of 9-26 years is protective for 4-6 years.
2. Condom use has some protection against HPV infection and other STDs.
3. The establishment of accessible screening programs and awareness campaigns should be given utmost emphasis.

## INTERVENTION

1. More policy attention is needed to strengthen established health system responses to reduce cervical cancer especially in developing countries.

## REFERENCES

1. GLOBAN 2008, International Agency for Research on Cancer, Cervical cancer Incidence, mortality and prevalence worldwide in 2008.
2. Mohammad HF, Kiple JF, Allyne MD, Rafael L, Alan DI et al. Breast and Cervical cancer in 187 countries between 1980-2010: a systematic analysis. *The Lancet*, 2011, 378; 9801; 1461-84
3. Michael F, Barbara G, Sandy J.F. Invasive cervical cancer: Epidemiology, risk factors, clinical manifestations and diagnosis. [www.uptodate.com/content/invasive-cervical-cancer-epidemiology-risk-factors-clinical-manifestation-and-diagnosis](http://www.uptodate.com/content/invasive-cervical-cancer-epidemiology-risk-factors-clinical-manifestation-and-diagnosis). (assessed on June 2013)
4. Hawes SE, Kiviat NB. Are genital infections and inflammation cofactors in the pathogenesis of invasive cervical cancer? *Natl cancer inst* 2002; **94** (21): 1592.
5. Ault K.A. Epidemiology and Natural history of HPV infection in the female genital tract infection in the female genital tract. *Inf Dis in Obst and Gynaecol*. 2006.
6. Castellsague X, Bosch FX, Mufloz N et al. Male circumcision, penile HPV infection and cervical cancer in female partner. *N.Engl J Med* 2002; **364**: 1105

7. Schiffman M, Castle PE, Jeronimo J et al. HPV and cervical cancer Lancet 2007; 370 : 890.
8. Pasrkin DM, Bray F. Chapter 2: The burden o HPV-related cancers, Vaccine 2006; 24 suppl 3: S3/11.
9. Cancer care Africa [www.cancercareafrica.org/cancer/html](http://www.cancercareafrica.org/cancer/html) (accessed July 2013).
10. Tanko MN, Kayembe M, Cainelli F, Vento S. Malignant tumours of the genital tract among Botswana women. Ghana Med J. 2012; 46 (3): 142-6.
11. Castle PE, Gage JC, Partridge EE, Rausa A et al. HPV genotypes detected in clinician-collected specimen from women living in the Mississippi Delta.
12. Pragma D, Manju R, Panna L.A. community-based cervical cancer screening program among women of Delhi using camp approach. Ind J Community Med 2010; 35(1): 86-88.
13. Desai M. An assessment of community based cancer screening program among Indian women using the Anganwadi workers. J Obstet Gynecol Ind. 2004; 54: 483-7
14. Partridge EE, Abu-Rustum NR, Campos SM, et al. Cervical cancer screening. J. Natl Compr cancer Netw 2010; 8 (12): 1358-86.