## Audit of gynaecological cancers Queen Elizabeth Central Hospital, Blantyre Frank Taulo<sup>1</sup>, Eddie Malunga<sup>2</sup>, Andrew Ngwira<sup>1</sup>

2. Obstetrics and Gynaecology Department, College of Medicine, Malawi

Corresponding author: Dr. Frank Taulo, Centre for Reproductive Health, College of Medicine, Malawi Email: ftaulo@yahoo.com

## Abstract

The aim of the audit was to assess the trend of the gynaecological cancers for the first quarter of 2008, and the prevalence of HIV and syphilis among the cases. Gynaecological cancer cases accounted for 6% of gynaecological admissions at QECH between January and April 2008. The findings show that cervical cancer still remains the leading gynaecological cancer among women in the unit. Among the cases where HIV testing was done, 50% of cases tested HIV positive and these were all cervical, vaginal and vulval cancer cases. Syphilis was prevalent in 10% of the cases. Low socioeconomic status and young age was associated with cervical cancer. A majority of the cases of advanced cervical cancer had been sub optimally managed by health workers at initial visit when the disease was at its early stage hence missing an opportunity for adequate treatment.

## Introduction

Cervical cancer is the second most common cancer among women in the world, with over half a million new cases diagnosed every year worldwide leading to over 274,000 deaths annually. The majority (80%) of cervical cancer victims are in the developing world, where most cases present at an advanced stage<sup>1</sup>. In industrialized countries where screening programs that allow early detection and treatment are available, cervical cancer accounts for only 2-4% of cancers among women<sup>1</sup>.

Cervical cancer is caused by a virus called Human Papilloma Virus (HPV) genotypes 16, 18 and several other strains<sup>2</sup>. The HPV virus enters the cells covering the cervix at the squamocolumnar junction and then slowly causes mutations that, with time, can result in cancer. Infection with HPV occurs early in life but invasive cancer may not develop for as long as 10-20 years after the initial infection<sup>3</sup>. Progression of disease is affected by several factors such as malnutrition, lack of access to screening services, combined oral contraceptive use, smoking, prolonged use of steroids and untreated sexually transmitted infections. Studies have shown that cervical cancer can be prevented by early screening<sup>3</sup>.

Recently two types of vaccines have been developed that prevent HPV infection. Two candidate HPV vaccines, both protecting against the most common cancer causing HPV types (HPV 16 and 18), and one also protecting against genital warts (including types 6 and 11) are currently licensed and immunization programs are ongoing among women aged 9 to 25 in industrialized countries. In Africa few countries have registered these vaccines. The major barrier is the cost which is at \$400 a dose<sup>4</sup>.

Published data from Africa, to date does not support an increased risk of cervical cancer in women with HIV infection and other sexually transmitted infections (STIs). The only

available evidence is an increase in pre-malignant changes at the cervix. However, data from America and Europe does suggest an association<sup>5-7</sup>. It is therefore important to study the interaction of these viruses as this can assist in strengthening the prevention and control of cervical cancer.

According to the Malawi Cancer Registry, cervical cancer is the second most common cancer in Malawi after Kaposi's sarcoma<sup>8</sup>. Cervical cancer is the most common cancer among females in Malawi.

The objective of this audit at Queen Elizabeth Central Hospital (QECH), a large government referral centre, is to determine the trends of gynaecological cancers, assess the relationships between cervical cancer, HIV and syphilis, and to assess the association of cervical cancer with social and demographic factors such as parity, education, age and loc ation.

## Methodology

All cases of cancer seen at the gynecology outpatient department and cases admitted in the gynecology ward at the main referral hospital, QECH, between the months of January to April 2008 were audited. All patients suffering from gynaecological cancers are admitted to the gynaecological ward. Patients who were seen or admitted were either referred from health centers in Blantyre or district hospitals. All gynaecological cancer patients admitted to the hospital between January and April were included in the study. Patient case notes were reviewed. Diagnosis and/or staging of cancer was done by a gynaecologist(s).

Patient data was entered into a specially designed data collection form by a research assistant. Data that was collected included the following: social demographic characteristics, condition of patient at admission and discharge, and laboratory investigations conducted.

Patients that required further management were referred for appropriate specialist care.

## Data Analysis

The completed data collection forms were entered into Microsoft Access. The data set was exported to SPSS version 15 for analysis. Descriptive data analysis was performed for frequencies and cross tabulation tables.

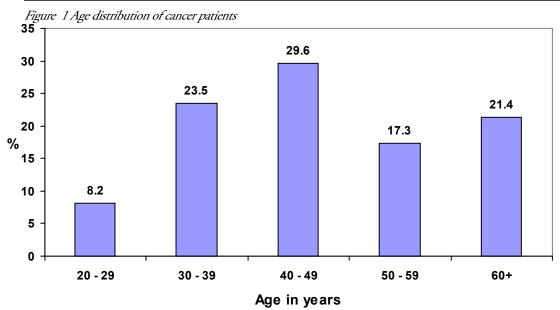
## Results

During the four month study period there were 1,600 gynaecological admissions and 98 were gynaecological cancers representing 6% of cases admitted.

## Age distribution

Age ranged from 24 years to 95 years with a mean (sd) of 46.8 (13,3) and standard deviation of 13.314 years. About 8.2 % of all the cases were young women aged below 30. The majority of gynaecological cancers were among women

<sup>1.</sup> Centre for Reproductive Health, College of Medicine, Malawi



aged between 30 and 49 years (53.1%) with 38.8% above 50 years of age.

#### Parity

Parity of the patients ranged from 1 to 13 with a mean of 5.82 and standard deviation of 2.923. 67.8% (67 cases) of the patients had their parity recorded while 31 (31.6%) had missing information on parity. Only 23 patients had parity of 4 and below. The majority of women had delivered more than five times representing 65.7% of all known parity.

#### Marital status and education levels

Majority of the patients were either married or widowed though 27 patients had missing data on marital status. Similarly on education, 42 (42.9%) patients had missing information on education. Of those who went to school only 6.1% had gone past primary education.

#### Admission diagnosis

98% (96 cases) of all the cancers were diagnosed at or during admission. Only 2 cases had no definitive diagnosis. Of those diagnosed at admission, 89.8% (88) were cervical cancer cases. The rest were distributed equally with one case each of vulva and vagina and three cases of ovarian and uterine cancer respectively.

#### Gynaecological cancer by age

Uterine cancer was common amongst those above 40 years of age. Cervical cancer most common amongst age group 40 -49 (table 1).

#### Cervical cancer staging and age

Cervical cancer cases were staged according to the International Federation of Gynecology and Obstetrics staging system9. Most cases of cervical cancer cases presented late. These were referrals from other facilities to QECH for further management. The majority of these women presented with profuse bleeding, abdominal pains and profuse discharge. Some had severe wasting and very anaemic. Staging varied considerably across the age group

Table 1Distribution of gynaecological cancer by age

|                     | Age group |         |         |         |     | Total |
|---------------------|-----------|---------|---------|---------|-----|-------|
| Cancer              | 20 - 29   | 30 - 39 | 40 - 49 | 50 - 59 | 60+ |       |
| Cervical cancer     | 3         | 13      | 21      | 10      | 12  | 59    |
| HSIL*               | 2         | 6       | 1       | 2       | 1   | 12    |
| Endometrical cancer | 0         | 0       | 0       | 0       | 1   | 1     |
| Uterine cancer      | 0         | 0       | 1       | 2       | 2   | 5     |
| Vaginal cancer      | 0         | 0       | 0       | 0       | 1   | 1     |
| Vulva cancer        | 1         | 0       | 0       | 0       | 0   | 1     |
| Ovarian cancer      | 1         | 0       | 1       | 0       | 0   | 2     |
| Total               | 7         | 19      | 24      | 14      | 17  | 81**  |

\*HSIL = high-grade squamous intraepithelial lesions

\*\* 17 not staged

though stage IIB was evenly distributed across all the age groups (table 2). Stage IIB occurred most in the ages below 50 years.

| Table 2 | Cervical | <i>cancer staging l</i> | by age |
|---------|----------|-------------------------|--------|
|         |          | 00                      | 1.0    |

| Stage      |         | Total   |         |         |     |    |  |  |
|------------|---------|---------|---------|---------|-----|----|--|--|
|            | 20 - 29 | 30 - 39 | 40 - 49 | 50 - 59 | 60+ |    |  |  |
| Stage lb2  | 0       | 0       | 3       | 1       | 0   | 4  |  |  |
| Stage IIa  | 1       | 5       | 3       | 0       | 0   | 9  |  |  |
| Stage IIB  | 0       | 2       | 3       | 1       | 1   | 7  |  |  |
| Stage Illa | 0       | 2       | 4       | 2       | 1   | 9  |  |  |
| Stage IIIB | 2       | 3       | 5       | 6       | 8   | 24 |  |  |
| Stage IVa  | 0       | 1       | 3       | 0       | 2   | 6  |  |  |
| Total      | 3       | 13      | 21      | 10      | 12  | 59 |  |  |

#### Cancer management

The majority of cases had access to palliative care whereby some opted for other traditional remedies. Few had surgery due to the late stage of disease at admission. Surgery for cervical cancer is recommended for stages up to IIa. Vulvectomy was done for vulval cancer and all cases of uterine endometrial cancer had a total abdominal hysterectomy and bilateral salpingo-oophorectomy. Palliative care was offered to all cases of advanced disease.

### Laboratory investigation and results

Out of 98 cases of cancer seen only 44.9% (44 cases) had undergone HIV testing. Of these 50% tested positive for HIV1/2. The age distribution ranged from 24-50. Syphilis was prevalent in 10% of the cases.

## Discussion

These are preliminary results of the 2008 gynaecological audit. The data indicates that cervical cancer is still the number one cancer among women in this country. Though screening has been introduced in some health facilities in the country, the impact is going to take years to be felt. Those with minimal level of education, with increased number of children, rural woman, and married or ever been married are at a greater risk of developing cancer mainly cervical cancer. All women audited had never ever been screened for cervical cancer though all of them had accessed a health facility at least once in the past 5-10 years. A majority of women with cervical cancer had presented early to a health facility but thorough management was not offered. Therefore by the time they were referred to QECH, the cancer had spread beyond surgery.

The most affected women are those in the reproductive age group. These are young women with children and families to look after. Advanced stage cancer in Malawi is equal to death due to a lack of chemo-radiation therapy. Women who cannot afford treatment elsewhere, can only be offered palliative care.

The impact of HIV on cervical cancer is slowly becoming apparent however in this audit it is difficult to draw any conclusions because of missing data. The complete analysis of data of 2008 may shed more light on the impact of HIV and the development of cervical cancer.

# Think Pink! by Patricia Sangaya

On the 25 October, 2008, the Girls Development Association in partnership with Abstrak Beatz Entertainment launched the Breast Cancer Awareness Event called "Think Pink" at Zion Youth Centre in Lilongwe. October is the month that is set aside every year to remember those that have died form the disease and those that are fighting against it.

The National Breast Cancer Awareness Month was founded in 1985 by Astra Zeneca, a pharmaceutical company which manufactures breast cancer drugs. The aim was to promote mammography as the most effective weapon in the fight against breast cancer. In 1993, Evelyn Lauder, senior corporate vice president of the Estee Lauder founded the Breast Cancer Research Foundation and established the Pink Ribbon as its symbol. Today different countries around the world fundraise for the cause.

Malawi has not done much in the fight against breast cancer. The idea of this event came about because of an increased number of cases of young women and teenagers diagnosed with breast cancer. The Girls Development Association promotes the welfare of girls and young women and encourages health education of young women and

## Conclusion

Cervical cancer is a preventable disease<sup>10,11</sup> unfortunately many women in Malawi are dying from this disease. There is need to increase awareness, mainly among health providers regarding the importance of screening. All women between the ages of 30 and 50 should be screened at least once. Cancer screening services should be easily accessible. Low socioeconomic status is a risk factor for cervical cancer therefore programs such as girl education should be a priority in order to improve the socioeconomic status of women.

#### References

- 1. Shepard J.S ,Uterus-conserving surgery for invasive cervical cancer. International journal of Gynecology and Obstetrics, Volume 19 , No 4, pp 577-590, 2005.
- Walboomers JMM, Jacobs MV, Manos MM, et al, Human Papilloma is a necessary cause of invasive cervical Cancer worldwide. J Pathology 1999;189:12-19
- 3. Gaffin L, et al, safety, Acceptability and feasibility of a single visit Approach to Cervical Cancer Prevention: results from a Demostration project in Thailand. Oct 2003.
- 4. Banda L.T et al Cancer incidence in Blantyre, Malawi 1994-1998 Volume 6 No 296-304.
- Lorinc AT, Reid R, Jenson AB, et al. Human papillomavirus infection of the cervix :Relative risk association of 15 common anogenital types. Obstetric gynecology 1992;79:328-37.
- Newton R, Grulich A, Beral V, et al. Cancer and HIV infection in Rwanda. Lancets 1995;345:1378-9.
- 7. Goedert JJ, Cote TR, Virgo P, et al. Spectrum of AIDS- associated malignant disorder. Lancets 1998;351:1833-9.
- 8. Serriano D, Carrieri P, Carrieri P, Pradier C, et al. Risk of invasive cervical cancer among women with, or at risk for HIV infection. Int J Cancer 1999;82334-7.
- 9. http://screening.iarc.fr/viaviliappendix1.php
- 10. Ter Meulen J, Eberhardt HC, Luande J, et al Human papillomavirus infection, HIV infection and cervical cancer in Tanzania, east Africa. Int J Cancer 1992;51:515-21.
- 11. La Ruche G, You B, Mensah-Ado I, et al, Human papillomavirus and Human immunodeficiency Virus infection: relation with cervical dysplasia-neoplasia in africa women. Int J Cancer 1998;76:480-6

girls. Recent medical reports have shown that women under the age of 35, have been diagnosed with advanced breast cancer.

The theme for the event was "tigwirizane", as breast cancer is not just a woman's issue; men should also play a

supportive role as breast cancer affects their mothers, sisters, and partners. Therefore we need to unite and fight it together.

There were live musical performances form Lilongwe based artists and a special testimony from a breast cancer survivor. Other activities were a presentation on breast cancer and a breast self examination demonstration both by Mars International Clinic. To rap it up in style, the performers did an all star performance of a theme song that they had worked on towards the event called "Tigwirizane".

The theme colour pink could also be seen throughout the day, in the decorations of the venue, pink drinks and cake that were on sale, pink ribbons and pink oufits that people wore for the event. All in all it was a success and we hope to do it again next year provided we have the support.