

## Descriptive epidemiology of cervical cancer in Ghana

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**Background:** Globally, cervical cancer remains the fourth most common cancer. Despite the fact that cervical cancer is potentially preventable through screening and recently through vaccination, an estimated 266,000 women died worldwide of the disease in 2012. Incidence and mortality have reduced in most high-income countries mainly due to the introduction of cervical cancer screening. However, this is not the case in most low-income countries where approximately 85% of the disease occurs. In Ghana, cervical cancer is the most common cancer among women. The true incidence and outcomes of the disease in Ghana are not known.

**Aims:** To estimate the incidence and mortality rates of cervical cancer in Ghana.

**Methods:** Information on invasive cervical cancer cases diagnosed between 2010 to 2013 were collected from KomfoAnokye and Korle Bu Teaching hospitals through review of medical, pathology and computer records at the oncology unit and the obstetrics and gynecology department. These hospitals are the main referral centers in Ghana where patients with suspected malignancy are diagnosed and treated. Patients with cervical cancer receive diagnosis and treatment at these hospitals. Telephone interviews were also conducted with patients and relatives to gather further data. Data were recorded to a standardized study questionnaire and analyzed using summary statistics.

**Results:** A total of 1,725 women with cervical cancer were included in the study. Their ages ranged from 11-100 years with a mean of 56.9 years. Histology of primary tumor was the basis of diagnosis in 77.5% with clinical diagnosis accounting for 22.5%. For the 1,336 women with tumor grade available, moderately differentiated tumors accounted for 34.5%. Late stage at presentation was common. The highest number of cases was reported for women aged 50-54 years. As expected, the incidence of cervical cancer increased with age. However, the incidence rate was highest for the 75 to 79 year age group and began to decrease at older ages. The estimated crude incidence rate for the two regions combined (Greater Accra and Ashanti region) was 11.6 (95% CI: 11.0-12.2) per 100,000 person-years, and the ASR rate (World standard population) for incidence was 18.7(95% CI: 17.8-19.6). Highest rates of mortality were observed for women 75-79 of age. The crude mortality rate for the two regions combined was 5.5 (95% CI: 5.0-6.0) per 100,000 person-years, with an ASR of 7.8(95% CI: 7.1-8.5).

**Conclusions:** Late stage at diagnosis is common. The incidence and mortality rate of cervical cancer in Ghana increased with age. Our study suggests that considerable improvement in patient outcomes in low-income countries is needed through raising awareness and knowledge of the disease.

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### Biography:

Yvonne Narthey is currently a PhD candidate at the University of Otago where she is specializing in cancer epidemiology. She completed her Masters at the University of Oxford, majoring in Global Health Science. She received a BSc in Nursing from the University of Ghana. During Yvonne's tenure as Masters student at the University of Oxford, she undertook a research with the Cancer Epidemiology Unit to study the incidence of cancer in Black African women as part of the Million Women Studies. Yvonne has since developed keen interest to work with the Ministry of Health in Ghana and other health institutions to address the various public health issues confronting the West African sub-region, especially cancer.