

# Knowledge and Practice Regarding Cervical Cancer among Female Medical Students: A Descriptive Study at Kampala International University Western Campus

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## ABSTRACT

Cervical cancer remains a significant health challenge, particularly in sub-Saharan Africa, with Uganda experiencing a high burden of cervical cancer-related mortality. Human papillomavirus (HPV) infection stands as the primary cause of cervical cancer, highlighting the importance of understanding associated risk factors and promoting screening practices. This study aimed to assess the knowledge and practices regarding cervical cancer among female medical students at Kampala International University Western Campus (KIU-WC). A descriptive, questionnaire-based study was conducted, involving 180 respondents. Results showed a commendable level of awareness about cervical cancer among participants, with all respondents reporting awareness of the disease. However, the screening practice was notably low, with only 44.4% of participants having been screened. Factors such as lack of symptoms, time constraints, and financial limitations were cited as barriers to screening uptake. The study underscores the urgency for targeted interventions to bridge the gap between knowledge and practice, emphasizing the importance of regular screening and vaccination against HPV.

Keywords: Cervical Cancer, human papilloma virus, Screening, Mortality

## INTRODUCTION

Cancer is one of the non-communicable diseases burdening the global health infrastructure. Despite the numerous breakthroughs in the combat against cancer, its incidence is still high especially in developing nations. Types of cancer include brain, breast, blood, stomach, skin, and so on [1-3]. Cervical cancer is the fourth most common cancer in women and the seventh overall, with an estimated 528,000 new cases in 2012. Rates are lowest in developed countries [4]. Cervical cancer remains the most common cancer in women in Eastern and Middle Africa. There were an estimated 266,000 deaths from cervical cancer worldwide in 2012, accounting for 7.5% of all female cancer deaths [5]. Almost nine out of ten cervical cancer deaths occur in less developed regions. Mortality varies 18-fold between the different regions of the world, with rates ranging from less than two per 100,000 in Western Asia, Western Europe, and Australia/New Zealand to more than 20 per 100,000 in Melanesia (20.6), Middle (22.2), and Eastern (27.6) Africa [6]. The human papilloma virus (HPV) is a common sexually transmitted infection and the primary underlying cause of cervical cancer. The risk factors for cervical

cancer include multiple sexual partners, early age of onset of sexual activity, increasing parity, use of hormonal contraceptives for 5 years or longer, current or previous sexually transmitted infection, and smoking [7, 8]. In Uganda, the common cancers include cervical cancer, prostate cancer, breast cancer, Kaposi sarcoma, Burkitt lymphoma, lung cancer, skin cancer, cancer of the bone, cancer of the eye, cancer of the colon, and cancer of the blood. Cervical cancer is the leading cause of cancer death among women in Uganda, and these deaths are bound to keep on increasing [9]. The increase in mortality from cervical cancer can be attributed to the high prevalence of genital human papillomavirus infection, the current unavailability of radiotherapy, and the absence of national cervical cancer prevention and control programs [10]. The evolution of cervical cancer is very slow. It takes very long for precancerous lesions to progress to cervical cancer. This allows for the opportunity to detect and treat it completely. If regular screening becomes a part of the routine check-up for all women, cancer onset can be detected at an early stage and combated effectively [7]. However, implementing effective screening

programs for detecting carcinoma of the cervix has been difficult in developing countries, particularly in Uganda. Despite ongoing sensitization and awareness building by the WHO through the Ministry of Health (MoH), uptake of cervical cancer screening among susceptible females is still unsatisfactory [11]. There are so many determinants of this unsatisfactory uptake, among them being the

awareness and attitudes of women concerning cervical cancer and cervical cancer screening. No such study has been conducted within the study population, as far as the researcher is aware. The study, therefore, aimed at assessing the knowledge and practice of KIU-WC first-year female medical students regarding cervical cancer.

## METHODOLOGY

### Study Design

A descriptive, cross-sectional study design was used.

### Area of Study

The study was conducted at Kampala International University, Western Campus, in Ishaka Bushenyi district, Uganda.

### Study Population

All female medical students at KIU-WC

### Inclusion Criteria

All female medical students of KIU-WC who were available on the material day and who consented to participate.

### Exclusion Criteria

All female medical students at KIU-WC who were available during the material day refused to consent.

### Sample Size Determination

Krejcie and Morgan tables were used to obtain the sample size. A sample size of 180 respondents was selected.

### Sampling Technique

Simple random sampling technique was employed in carrying out the study. Participants were recruited

as they met the inclusion criteria until the sample size required for the study was obtained.

### Data Collection Method

Data was collected using a self-administered questionnaire. The questionnaire was locally generated.

### Data Analysis

Data was entered in the Microsoft Excel application and presented in the form of statements, tables, pie charts, and graphs.

### Ethical Considerations

Clearance was obtained from the Kampala International University-Western Campus Faculty of Clinical Medicine and Dentistry. Informed consent from the respondents was sought both verbally and in writing. Participants were assured of confidentiality and the use of the information obtained only for the purpose of the research. Participation was fully out of the respondents' choice, with the right to pull out at any time whenever they no longer felt comfortable continuing.

## RESULTS

respondents and received for analysis. All of the questionnaires were analyzed, resulting in a response rate of 100%.

### Socio-Demographic Characteristics

The total number of female medical students at KIU-WC was 380. Using the Krejcie and Morgan tables, a sample size of 180 respondents was selected. A total of 180 questionnaires were distributed to the

**Table 1: Showing Age Distribution, Marital Status and Nationality of Respondents**

Variable	Frequency (n)	Percentage (%)
<b>Age</b>		
20-24 years	80	44.4
25-29 years	80	44.4
30-34 years	20	11.1
<b>Marital status</b>		
Single	170	94.4
Married	10	5.6
Separated	0	0
Divorced	0	0
<b>Nationality</b>		
Ugandan	140	77.8
Non Ugandan	40	22.2

As shown in Table 1 above, the majority of the medical students, 160 (88.8%), were aged 20 to 29 years. Only 20 (11.1%) were aged between 30 and 34 years. The majority of the students were single, 170 (94.4%), and 10 (5.6%) were married. As for nationality, 140 (77.8%) of the majority were Ugandan, and 40 (22.2%) were non-Ugandan.

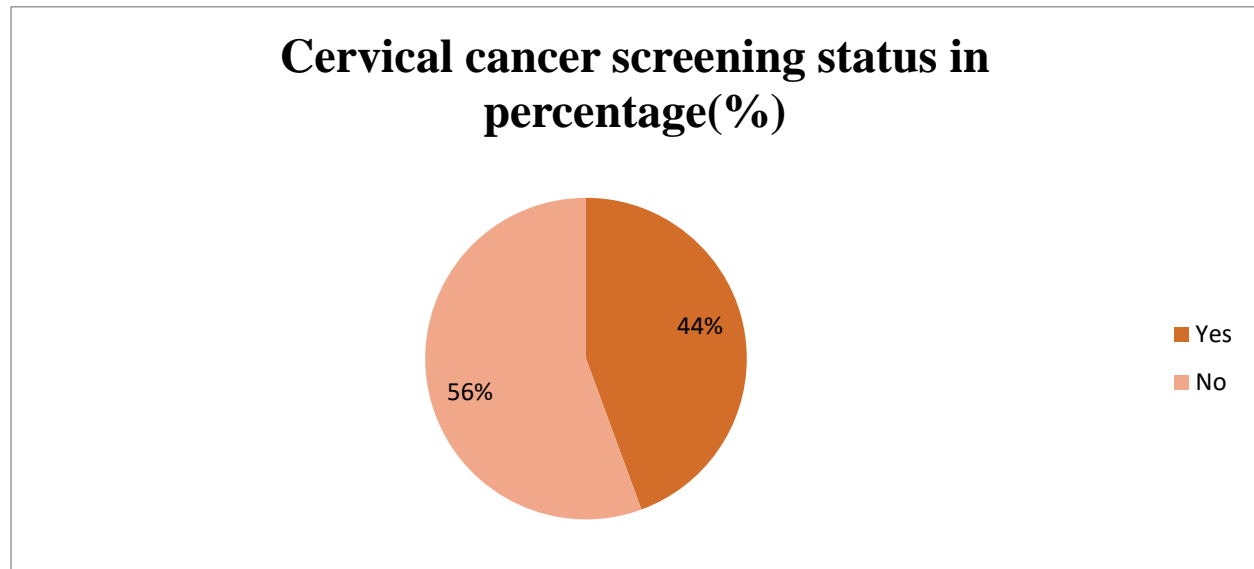
#### Awareness Concerning Cancer Cervix

All (100%) of the students were aware of cervical cancer. 55.6% heard about cervical cancer from

school, 38.9% from health facilities, and 5.6% from the news and media.

#### Cancer Cervix Screening Status of Female Medical Students

As shown in figure 1 below, 80 (44.4%) of the female medical students had been screened for Ca. cervix, while 100 (55.6%) had never been screened. Of those who had never been screened, 62 (62%) said it was because they had no symptoms, 20 (20%) had no time, 10 (10%) were embarrassed, 5 (5%) said they did not need it, and 3 (3%) had no money.



**Figure 1: Cervical Cancer Screening Status of Respondents**

#### DISCUSSION

The overall knowledge of the students concerning cancer was above average, more so on cancers most common among women. All of the students were aware of cervical cancer. According to the American Cancer Society (2016) all women should begin screening at the age of 21 [12]. On the risk factors, preventability, and treatability of cervical cancer, more than 50% of the students gave the appropriate answers, thus qualifying their knowledge level to be more than adequate. This impressive knowledge level among the students in this study was higher than that found in a study by Waiswa et al. [13] in health centre IIIs in Oyam District, Uganda, where only 62.7% of the respondents had ever heard of cervical cancer screening. The differences may be attributable to a larger sample size. Impressive attitudes towards cervical cancer and screening have been reproduced in other previous studies that include, but are not limited to, those among medical students in the

University of Los Andes [14], among Mangalore women [15], women in Hadiya, Southern Ethiopia [16]. The adequate knowledge of the respondents did not translate into good practice. Only 44.4% of them had been screened for cervical cervix. Several other studies in the past have recorded dismal results in as far as practice concerning cervical cervix. Most actually reported poor practice among the study participants. As examples, in Kathmandu, Nepal, only 10.5% of the respondents had taken up Pap smears [17]; only 57.7% of female students at the University of Lagos in Nigeria expressed willingness to receive the vaccine [18] and only 6.8% of Indian medical, nursing, and dental students had received HPV vaccination [19], among many others. What comes out clearly is that, despite variable levels of knowledge, practice is universally poor when it comes to cervical cervix.

## CONCLUSION

The knowledge of female medical students at KIU-WC concerning cervical cancer was above average. The practice of female medical students at KIU-WC was very poor, necessitating timely and appropriate interventions.

### Recommendations

After the study, the researcher made the following recommendations to help bring the knowledge and practice of cervical cancer to female students:

- i. Female students should regularly screen against Ca. cervix and receive the HPV vaccine in three doses at 0, 1, and 6 months instead of two doses.
- ii. They should abstain from sexual activity and ensure a faithful relationship with a single, circumcised partner.

- iii. Male friends and younger siblings should be advised to circumcise and quit smoking.
- iv. Management should offer education on HPV, cervical cancer, and screening to students, organize vaccination drives, and provide more health information.
- v. The Ministry can use CHWs to raise awareness about the HPV vaccine, counter misinformation, and ensure informed consent.
- vi. Vaccination should be done in various settings, including schools and community settings.

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