

**KNOWLEDGE, ATTITUDE AND PRACTICE ON CERVICAL CANCER
AND SCREENING AMONG FIRST YEAR FEMALE NURSING
STUDENTS OF KAMPALA INTERNATIONAL UNIVERSITY**

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**A RESEARCH DISSERTATION SUBMITTED TO THE FACULTY OF
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DECLARATION

I do hereby declare that this research dissertation is the product of my own efforts and to the best of my knowledge and conviction, has never been presented to any institution for any award or qualification whatsoever. Wherever the works of other people have been included, due acknowledgement to this has been made in accordance with the appropriate referencing and citations. The findings and the analysis that will result from this research project will be my original information.

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Signature

Date

APPROVAL

This is to certify that this research dissertation has been prepared under my supervision and is now ready for submission to the Faculty of Clinical Medicine and Dentistry of Kampala International University for further consideration.

Supervisor: **MR. TUTAMWEBWA K. THOMAS**

Signed.....

Date.....

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LIST OF ABBREVIATIONS AND ACRONYMS

Ca.	:	Cancer
CHWs	:	Community Health Workers
DRC	:	Democratic Republic of Congo
HCPs	:	Health Care Providers
HCWs	:	Health Care Workers
HPV	:	Human Papilloma Virus
IREC	:	Institutional Research and Ethics Committee
KAP	:	Knowledge Attitude and Practice
KIU-TH	:	Kampala International University Teaching Hospital
KIU-WC	:	Kampala International University Western Campus
SDGs	:	Sustainable Development Goals
WHO	:	World Health Organization
ASRs	:	Age Specific Rates

OPERATIONAL DEFINITIONS

Pap smear : A test carried out on a sample of cells from the cervix to check for abnormalities that may be indicative of cervical cancer.

Cervical Cancer : Cancer of the cervix.

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ABSTRACT

Cancer cases have increased over the years especially in sub-Saharan Africa, maybe because of a rise in incidence or improvement in diagnosis. Cervical cancer is the leading cause of cancer death among women in Uganda and these deaths have been projected to keep on increasing. Human papilloma virus (HPV) is a common sexually-transmitted infection and the primary underlying cause of cervical cancer. There are risk factors associated to HPV transmission and Ca. cancer of which, good knowledge about them will go a long way in the Ca. cervix fight. This descriptive, questionnaire-based, involving 196 participants, was assessing the Knowledge, attitudes and practices among first year female nursing students of KIU-WC about cervical cancer and screening. Despite impressive knowledge and attitudes with 100% being aware of Ca. cervix screening and what it entailed (77.55%), 88.78% stating Ca. cervix as to be among the most common female cancer next to breast (55.10%), and 72.45% acknowledging they were at risk, the practice was very low since only 51% of them had screened and only 31% had been vaccinated. This necessitates timely and appropriate interventions.

CHAPTER ONE: INTRODUCTION

1.0 BACKGROUND

Cervical cancer is the fourth most common cancer in women, and the seventh overall, with an estimated 528,000 new cases in 2012. As with liver cancer, a large majority (around 85%) of the global burden occurs in the less developed regions, where it accounts for almost 12% of all female cancers. High-risk regions, with estimated ASRs over 30 per 100,000, include Eastern Africa (42.7), Melanesia (33.3), Southern (31.5) and Middle (30.6) Africa. Rates are lowest in Australia/New Zealand (5.5) and Western Asia (4.4). Cervical cancer remains the most common cancer in women in Eastern and Middle Africa(WHO, 2015).

There were an estimated 266,000 deaths from cervical cancer worldwide in 2012, accounting for 7.5% of all female cancer deaths. Almost nine out of ten (87%) cervical cancer deaths occur in the 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 (Stewart & Wild, 2014)

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,(Gierisch et al., 2013) current or previous sexually-transmitted infection(Beral, 2015)and Smoking(Fonseca-Moutinho, 2011)(Roura et al., 2014).

In Uganda, the common cancers include cervical cancer, prostate cancer, breast cancer, Kaposi sarcoma, Burkitt lymphoma, lung cancer, and skin cancer, cancer of the bone, cancer of the eye, cancer of the colon, and cancer of the blood(WHO, 2011).Cervical cancer is the leading cause of cancer death among women in Uganda an these deaths are bound to keep on increasing (Nakisige, Schwartz, & Ndira, 2017). 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 a national cervical cancer prevention and control programs (Nakisige et al., 2017).

The evolution of cervical cancer is very slow. It takes very long from 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. However, implementing effective screening programs for detecting carcinoma of cervix has been difficult in developing countries, particularly in our country. 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(Ndejjo, Mukama, Musabyimana, & Musoke, 2016). There are so many determinants of this unsatisfactory uptake, among them being awareness and attitudes of women concerning cervical cancer and cervical cancer screening. No such study has been conducted within the study population in as far as the researcher is aware. The study, therefore, aimed at assessing the knowledge, attitude and practice of KIU-WC first year female nursing students towards cervical cancer and screening.

1.1. PROBLEM STATEMENT

Despite the fact that cervical cancer is a preventable and treatable condition, it still is the fourth cause of morbidity and mortality globally and the leading cause of the same in Uganda(WHO, 2011)(Stewart & Wild, 2014).

Roll up of awareness campaigns towards cervical cancer has been ongoing for a while now globally. Despite this, the Knowledge, Attitude and Practice of women is still wanting. Sustainable Development Goal number 3 (SDG₃) is all about ensuring “healthy lives and promoting well-being for all at all ages.”(The United Nations, 2015)For this to be achievable, lowering cervical-cancer-associated morbidity and mortality is among the key strategies.

Studies are few that have been done and little data exists on the KAP of cervical cancer among the vulnerable population in our society. For this reason, this study aimed to fill the information gap that exists on the amount of knowledge, prevailing attitudes, and current practices concerning cervical cancer. No such study had been conducted among first year female nursing students at KIU - WC school and thus the researcher proposed to conduct one.

1.2.STUDY OBJECTIVES

1.2.1. BROAD OBJECTIVE

To assess the Knowledge, Attitude and Practice among first year female nursing students of KIU-WC towards cervical cancer and screening.

1.2.2. SPECIFIC OBJECTIVES

1. To determine the knowledge of KIU-WC first year female nursing students towards cervical cancer and screening.

2. To determine the attitude of KIU-WC first year female nursing students in KIU-WC towards cervical cancer and screening.
3. To establish the practice of KIU-WC first year female nursing students by assessing their uptake of cervical cancer screening and receipt of vaccine against HPV.

1.3.RESEARCH QUESTIONS

1. What is the knowledge of KIU-WC first year female nursing students towards cervical cancer and screening?
2. What is the attitude of KIU-WC first year female nursing students towards cervical cancer and screening?
3. What proportion of KIU-WC first year female nursing students have been screened and/or vaccinated against cervical cancer?

1.4.JUSTIFICATION OF THE STUDY

Cervical cancer is among the leading causes of morbidity and mortality globally despite being a preventable and treatable condition. The purpose of this study was to assess the degree of knowledge, the attitudes and consequently uptake of ca. cervix screening. Necessary interventions can be planned from the findings of this research. Interventions such as health talks and education, cervical cancer screening drives etc. that would benefit the study population.

The findings also aimed to provide statistics that could be used by KIU-TH, MOH and global health organizations in the cervical cancer database that could be called upon in planning and implementation of any interventions.

Lastly the findings were aimed to be used by other researchers in their own studies either in the same study population, on the same study topic or in another cohort and other topic.

1.5.STUDY SCOPE

1.5.1. GEOGRAPHICAL SCOPE

The study was conducted at Kampala International University Western Campus, which is located in the town of Ishaka, in Bushenyi District, Western Uganda, approximately 330 kilometers (210 mi), by road, southwest of Kampala, Uganda's largest city and capital. It is a privately-owned institution of higher learning offering a number of courses but chiefly those to do with health. KIU-WC School of Nursing and Midwifery is among the 76 approved nursing/midwifery institutions recognized by Uganda Nurses and Midwives Council. It offers certificates in midwifery and nursing courses lasting two and half years, diploma in nursing sciences course

lasting three years with an option for those on extension to do it for one and a half years, Bachelors of Nursing Sciences that runs for four and a half years and the extension running for three years.

1.6.2. CONTENT SCOPE

The study was about assessment of knowledge, attitude and practice towards cervical cancer and screening. This was conducted among first year female nursing students of KIU-WC.

1.6.3. TIME SCOPE

The study was conducted in the month of February 2019.

1.6.CONCEPTUAL FRAMEWORK

The modifiable variables are knowledge and attitude, which will affect uptake of cervical cancer screening (dependent variable). Sources of information will be the intervening variables. This is represented diagrammatically in figure 1 below which also shows the inter-relationship between the various variables.

INDEPENDENT VARIABLES

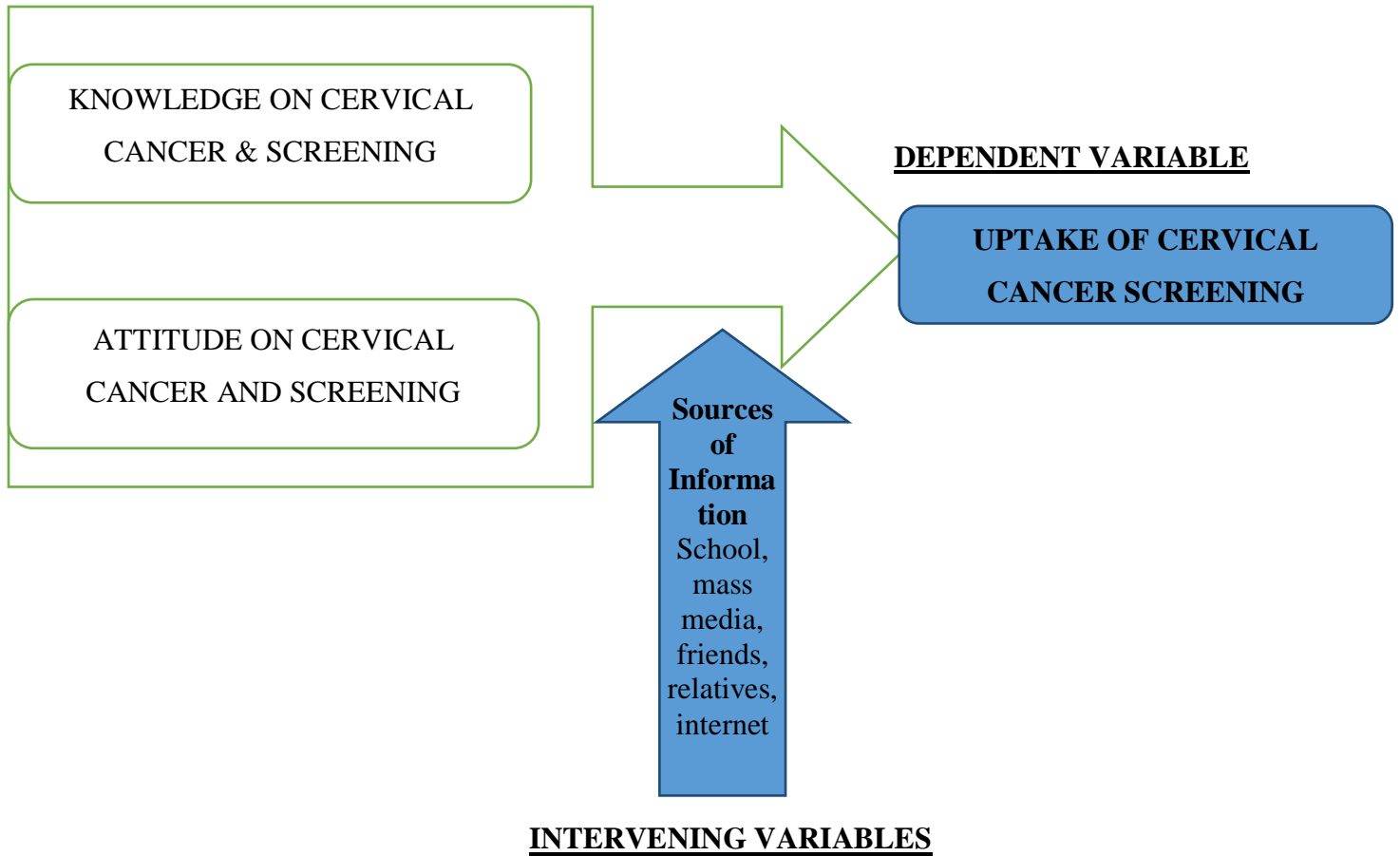


Figure 1: Conceptual framework on the knowledge, attitude and practice concerning cervical cancer and screening (Researcher's own opinion)

Description of conceptual framework

Students were offered health education to improve on their knowledge concerning cervical cancer and the importance of cervical cancer screening. Those who accepted were administered the questionnaire and the information collected.

CHAPTER TWO: LITERATURE REVIEW

2.0. INTRODUCTION

This chapter looked into the literature reviewed on the Knowledge, Attitude and Practice concerning cervical cancer and cervical cancer screening.

2.1. KNOWLEDGE CONCERNING CERVICAL CANCER AND SCREENING

Knowledge on cervical cancer and screening is important in influencing attitudes and consequently practice. In Chennai, Tamil Nadu, India, a study was carried out on the knowledge, attitude, and practice on cervical cancer and screening among female health care providers in 2013. Even though the knowledge was impressive (100% of the health care workers [HCWs]), their attitude was not that good (because only 57.9% felt that they were at risk of cervical cancer) and their practice was even worse (only 18.4 % had ever screened for cervical cancer)(Sudharshini, Anantharaman, & Chitra, 2012). This was not far from results in an International University in Japan that was conducted in 2012 by A. Anai and N. Ghotbi. They found that the students' knowledge on the risk factors of cervical cancer were very low and did not screen for the cancer (Ghotbi & Anai, 2012).

Arda Borlu et al., conducted a KAP study among students in a Turkish University in 2012 that involved medical and non-medical students. Despite higher scores among the medical students as far as knowledge and attitude was concerned. There was no significant difference in practice. The researchers concluded that both the non-medical and medical students needed more sensitization concerning cervical cancer and screening (Borlu, Gunay, Balci, & Sagiroglu, 2016). Results from Malaysia in 2014 were uplifting though. Maharajan and colleagues went on to conduct a study on the knowledge of Human Papillomavirus Infection, Cervical Cancer and Willingness to pay for Cervical Cancer Vaccination among Ethnically Diverse Medical Students in Malaysia. The results were as follows; the knowledge concerning the above was generally good. A majority (90%) of the pupils demonstrated a high degree of knowledge about cervical cancer and its vaccination, pap smear and cervical cancer vaccination (Maharajan, Rajiah, Num, & Yong, 2015).

In a tertiary health care facility in New Delhi, a study carried out in 2014 showed that knowledge, regarding Pap test were adequate in 32.7%, of women and the major impediment to adequate practice was lack of request by physician (Singh, Ranjan, Das, & Gupta, 2014). These

results were very different from those obtained in 2013 by Junu et al. in another tertiary hospital in Kathmandu, Nepal. Out of the 105 respondents, 65.7% had heard about cervical cancer. However, only 42.9% and 18.1% had knowledge about screening for cervical cancer and Pap smear test respectively. More than 85% of women had positive attitude towards screening but the uptake of Pap smear test in the respondents was only 10.5% (Junu Shrestha, R Saha, 2013).

Statistics from the African continent are not encouraging. The general picture is that of low knowledge, poor attitudes and consequently wrong practice. In Ibadan, Nigeria for instance, most of the respondents reported not being aware of cervical cancer and were not utilizing the services. Though they did not know what cervical cancer screening entailed or the screening methods, they still believed that it was important since like for other diseases, screening would help in early detection and treatment (Ndikom & Ofi, 2012).

The trend improved a bit in Zaria, Nigeria just one year later after the study by Ndikom and colleagues. Market women, exhibited a fair knowledge of cervical cancer and cervical cancer screening (43.5%); however, their knowledge of risk factors was poor. There was generally good attitude to cervical cancer screening (80.4%), but their level of practice was low (15.4%) (S. A. Ahmed, Sabitu, Idris, & Ahmed, 2013).

In East Africa, a study which was conducted among female nursing students at Hawassa University College of Medicine and Health sciences in Hawassa, Ethiopia in 2015 showed that; out of the total 422 students in the study, 76.8% had heard about ca. cervix, 202 (53.3%) had heard about ca. cervix screening, 44.7% had negative attitudes towards screening and this resulted in poor practice as far as ca. cervix and ca. cervix screening were concerned (Tsegaye, 2015).

In 2016 in Uganda, a study was done among rural women of Bugiri and Mayuge Districts. Of the 900 women that took part in the study, only 43 (4.8%) had ever been screened for cervical cancer. Among those who had been screened, 21 (48.8%) did so because they had been requested by a health worker, 17 (39.5%) had certain signs and symptoms they associated with cervical cancer while 16 (37.2%) did it voluntarily to know their status (Ndejjo et al., 2016).

This year, 2017, Waiswa and colleagues conducted a KAP study on cervical cancer and screening in Health Center IIIs in Oyam District, Uganda. They found that, of the 445 respondents, only 62.7% (n = 279) had heard of cervical cancer amongst which only 35.1% (n = 85) had been screened; 13.7% (n = 34) did not know what screening was; 3.7% (n = 9) were not

sure and 5.8% (n = 14) knew it as removal of the cervix. Only 39.1% (n = 174) believed that cervical cancer can be prevented(Waiswa et al., 2017).

2.2. ATTITUDES TOWARDS CEVICAL CANCER AND SCREENING

Medical students at The University of Los Andes had an impressive attitude towards cervical cancer. They were of the opinion that the most effective tests to reduce mortality in women aged ≥ 50 years were the Papanicolaou test according to 90.6% (58/64) of students and mammography according to 82.8% (53/64) of students(Rodriguez Feria, Hernández-Florez, & Rodriguez-Feria, 2016).

In Qatar, women had an averagely positive attitude towards cervical cancer and screening. About half of them had had a Pap smear test at least once while 85.5% of the rest would have a test if they were told that the procedure was painless and simple. Over half wanted the test to be done in the well-woman clinic at the primary health care centre (Goyal, Vaishnav, Shrivastava, Verma, & Modi, 2013a).

Female health care providers of the Chennai corporation back in 2013 were found to have an above average attitude towards cervical cancer and screening. About 57.9% felt that they were at risk of cervical cancer while about 80.4% felt that they should undergo cervical cancer screening for themselves (Sudharshini et al., 2012).

Medical and paramedical students of India have been found to have a poor attitude towards cervical cancer prevention and Human Papilloma Virus (Swarnapriya, Kavitha, & Mohan Reddy, 2016).

The attitude of women visiting a tertiary centre in Kathmandu, Nepal was found to be more satisfactory. More than 85% of women had positive attitude towards screening but the uptake of Pap smear test in the respondents was only 10.5%(Junu Shrestha, R Saha, 2017).

Ibadan women in Nigeria, despite lacking adequate knowledge, had a positive attitude towards cervical cancer and screening. Though they did not know what cervical cancer screening entailed or the screening methods, they still believed that it is important since like for other diseases will help in early detection and treatment. The participants were eager to get more information from nurses on cervical cancer about cervical cancer screening(Ndikom & Ofi, 2012).

Among women of childbearing age in Hossana Town, Hadiya zone, Southern Ethiopia, more than half had a positive attitude towards cervical cancer and screening. Only about (34.8%) of

participants had a negative attitude towards the selected proxy variables(Aweke, Ayanto, & Ersado, 2017).

Women attending childhood immunization clinics have been found to generally have a positive attitude towards cervical cancer and screening (Nuwasiiima, Navvuga, Nuwamanya, Lubinga, & Babigumira, 2016).

2.3. PRACTICE CONCERNING CERVICAL CANCER AND SCREENING

Despite practice being a factor of knowledge and attitude, it would be foolhardy to always expect that adequate knowledge and a good attitude would always translate into appropriate practice. In most instances, appropriate practice results from enough knowledge and good attitude but this is not always the rule of thumb.

For instance, amongst the women visiting a tertiary centre in Kathmandu, Nepal, despite more than 85% of them having had a positive attitude towards screening, the uptake of Pap smear test in the respondents was only 10.5% (Junu Shrestha, R Saha, 2017). The same story was evident among the Ibadan women where it was evident that despite them having favorable attitudes towards cervical cancer and screening, none were utilizing the services (Ndikom & Ofi, 2012).

The same story is replicated among female students at the University of Lagos, Lagos, Nigeria whereby despite having adequate knowledge and a favourable attitude, only 57.7% expressed their willingness to receive the vaccine (Makwe, Anorlu, & Odeyemi, 2012).

Where inadequate knowledge and poor attitudes adversely affected practice was apparent among medical, nursing and dental students in India whereby due to lack of knowledge and poor practice only (6.8%) had received HPV vaccination (Swarnapriya et al., 2016). So is the case among female health care providers of Chennai corporation China. Only 18.4% of the female HCPs have ever undergone cervical cancer screening despite a good attitude and more than enough knowledge (Sudharshini et al., 2012). Lest we forget, only 40% of Qatari nursing staff (Goyal et al., 2013a) and only 10% of female health workers in Sokoto (Oche M O, Kaoje A U, 2013), Nigeria have ever had a pap smear.

Columbian medical students don't show impressive practices either! Only 55.0% of the students had received training in the guidelines and protocols for breast neoplasm and uterine cervical neoplasm screening(Rodriguez Feria et al., 2016).

Very few (3.6%) of Malaysian medical students had taken up vaccination against Human Papilloma Virus (HPV) (Rashwan, Saat, & Abd Manan, 2012).

Despite health education among adult women of rural Nigeria, there was no significant change in practices concerning cervical cancer. The proportion of women who had undertaken cervical screening after education changed from 4.3% to a mere 8.3% ($p = 0.038$) (Abiodun, Olu-Abiodun, Sotunsa, & Oluwole, 2014). The nurses in Lagos University Teaching Hospital were quite aware of Pap smear (91%) as one of the screening techniques of cervical cancer and had good attitudes (89%) towards Pap smear, but most of them had never done it before (Awodele et al., 2011).

The practice of women of childbearing age in Hossana Town, Hadiya zone, Southern Ethiopia was about averagely adequate. Only 58 (9.9%) of participants had been screened for the cervical cancer before the survey (Aweke et al., 2017). The same was the case for women in Zaria, Nigeria (15.4%) (S. Ahmed, Ahmed, Idris, & Sabitu, 2013), Nepal (15.7%) (Ranabhat, Tiwari, Dhungana, & Shrestha, 2014), Niger Delta (Owoeye & Ibrahim, 2013), rural India (Shekhar, Sharma, Thakur, & Raina, 2013), and Kinshasa DRC (9%) (Ali-Risasi, Mulumba, Verdonck, Vanden Broeck, & Praet, 2014)

CHAPTER THREE: METHODOLOGY

3.0.INTRODUCTION

This chapter dealt with the study methodology and looked into the study design, study population, inclusion and exclusion criteria, sample size determination, sampling technique, data collection methods and procedures, quality control, data analysis and ethical considerations.

3.1. STUDY DESIGN

A descriptive cross-sectional study design was used.

3.2. STUDY AREA

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

3.3. STUDY POPULATION

All first-year female nursing students of KIU-WC (408)

3.3.1. INCLUSION CRITERIA

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

3.3.2. EXCLUSION CRITERIA

All first-year female nursing students of KIU-WC who though available during the material day refused to consent.

3.4. SAMPLE SIZE DETERMINATION

Krejcie and Morgan tables were used to obtain the samples size.

3.5. SAMPLING TECHNIQUE

Convenience 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.

3.6. DATA COLLECTION METHOD

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

3.7. QUALITY CONTROL

A research assistant was recruited and trained on the gist of the research. Before the primary study, the research tool was pre-tested and improved appropriately. Each questionnaire was

checked for completeness, missing values and unlikely responses and then manually cleaned up on such indications.

3.8. DATA ANALYSIS

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

3.9. ETHICAL CONSIDERATIONS

Clearance was obtained from Kampala International University-Western Campus faculty of clinical medicine & dentistry through IREC. Informed consent from the respondents was sought both verbally and in writing. Participants were assured of confidentiality and 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 to continue.

3.10. LIMITATIONS AND DELIMITATIONS

In anticipation of financial constraints, the researcher diligently budgeted and solicited for financial assistance from well-wishers, friends and relatives. Through a properly prepared time-plan, the researcher did not anticipate any problems with meeting the deadline within the time allocated.

CHAPTER FOUR: STUDY FINDINGS

4.0.INTRODUCTION

This chapter presents the findings of the study as pertains to socio-demographics, knowledge, attitudes and practices of the study population in as far as cervical cancer screening is concerned. The results are presented in the form of statements, graphs, tables, and pie-charts.

4.1. SOCIO-DEMOGRAPHIC CHARACTERISTICS OF THE RESPONDENTS

The total number of first-year female nursing students at KIU-WC was 408. Using Krejcie and Morgan tables a sample size of 196 respondents was selected. A total of 196 questionnaires were distributed to the respondents and 196 received for analysis. All of the 196 questionnaires were analyzed hence giving a response rate of 100%.

4.1.1. AGE, RELIGION AND MARITAL STATUS OF RESPONDENTS (N=196)

AGE CLUSTER (Years)	FREQUENCY (n)	PERCENTAGE (%)
18 – 20	82	41.84
21 – 23	80	40.82
24 – 26	20	10.20
27 – 29	14	7.14
RELIGION	FREQUENCY (N)	PERCENTAGE (%)
CATHOLIC	66	33.67
PROTESTANT	108	55.10
MOSLEM	12	6.12
ADVENTIST	10	5.12
MARITAL STATUS	FREQUENCY (N)	PERCENTAGE (%)
SINGLE	180	91.84
MARRIED	16	8.16
TOTAL	196	100

Table 1: Age Distribution, Marital Status and Religion of Respondents (N=196)

As from table 1 above, majority of the nursing students 82 (41.84%) were aged 18 to 20 years, followed by 80 (40.82%) who were aged between 21 to 23 years, 20 (10.20%) were aged between 24 to 26 years. Only 14 (7.14%) were aged between 27 - 29 years. The mean age was 21.48 years. The majority of the students were Christians and single. Moslems were only 12 (6.12%) and those that said that they were married were only 16 (8.16%). Some students had

already started a family with 8 stating that they had one child, 4 saying they had two while 2 had borne three children.

4.2. KNOWLEDGE OF FIRST-YEAR NURSING STUDENTS ABOUT CERVICAL CANCER AND SCREENING

4.2.1. CANCERS EVER HEARD OF& MOST COMMON IN WOMEN (N=196)

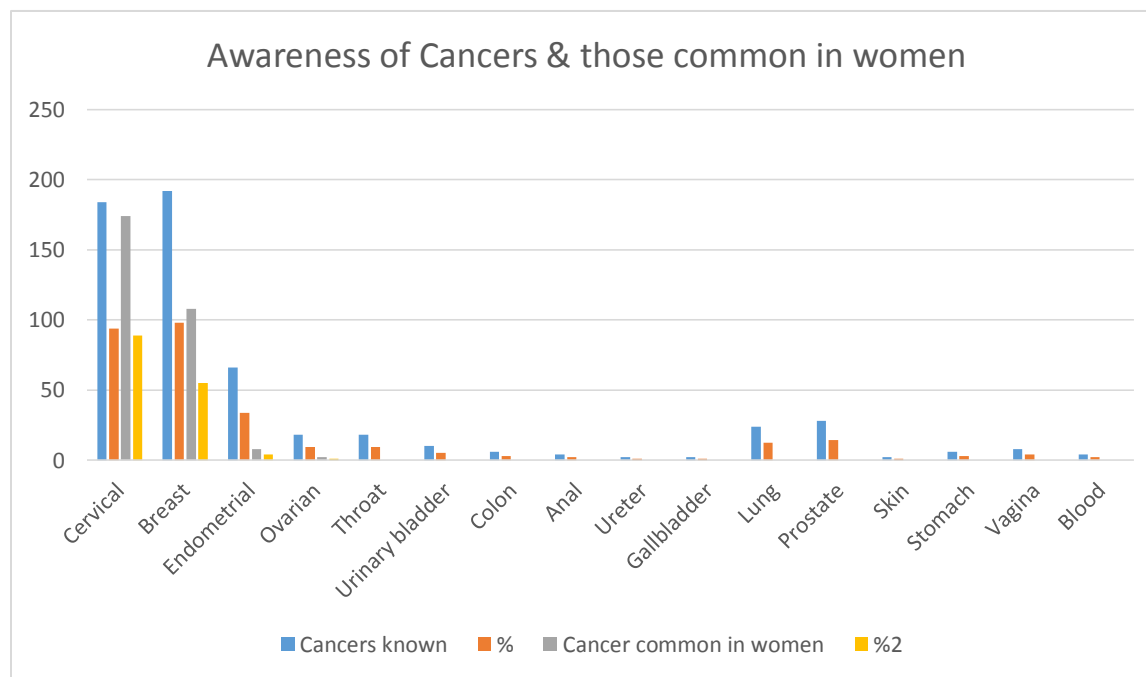


Figure 2: Cancer Awareness Among Students (N=196)

The most heard cancers among the respondents were Ca. breast (194), Ca.cervix (184) and Endometrial (66). Others that were commonly heard of were Ca. prostate (28), lung (24), ovarian (18), throat (18) and urinary bladder (10).

On the knowledge of the cancers most common in women, Ca. cervix was top with 87 (88.78%) mentions, followed by Ca. breast (54, 55.10%), endometrial (4, 4.08%) and lastly ovarian with one mention.

4.2.2. AWARENESS CONCERNING CA. CERVIX SCREENING (N=196)

All (100%) of the students were aware of cervical cancer screening. 66.32% heard about it from health workers, 13.26% from radio, 11.22% from friends and 9.18% from television. On what cervical cancer screening entailed, 152 (77.55%) correctly mentioned the use of Papanicolaou smear, while 44 were not sure or did not know. On the question of who was eligible for Ca. cervix screening, the responses were as shown in the figure 4 below.

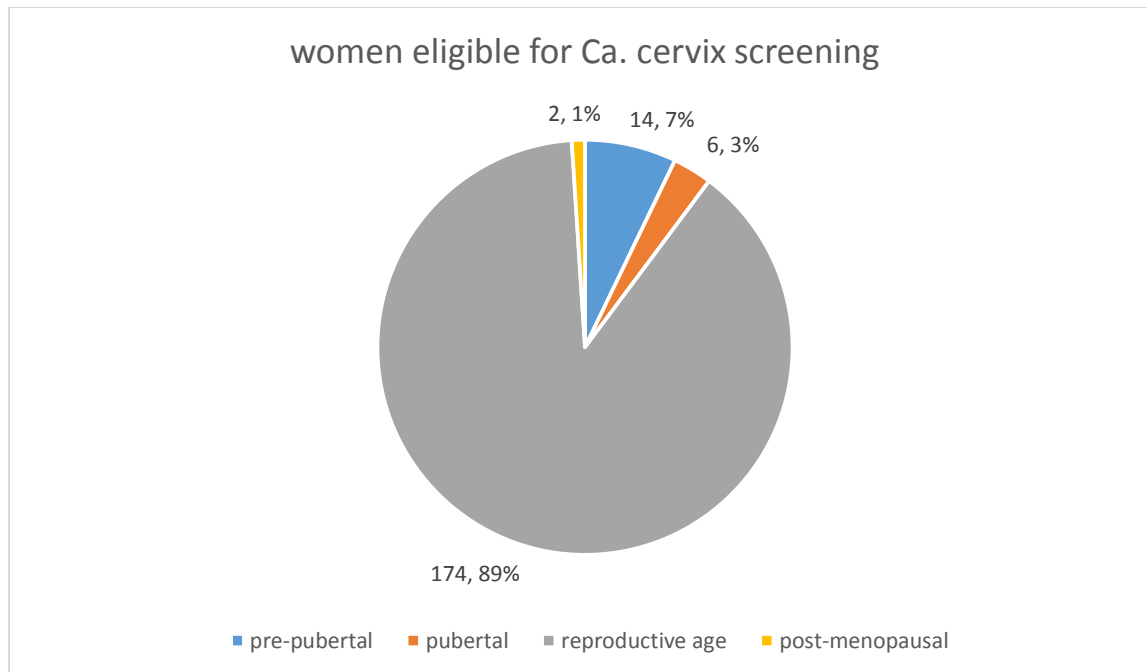


Figure 3: Which Woman Needs to be Screened for Cervical Cancer? (N=196)

Majority of the students (89%) were of the opinion that women within reproductive age were the ones who should be screened for Ca. cervix. 7% said that pre-pubertal girls were eligible, 3% thought it were pubertal girls while only 1% rightfully thought that even post-menopausal women needed to be screened against cervical cancer.

4.2.3. KNOWLEDGE ON RISK FACTORS FOR CA. CERVIX(N=196)

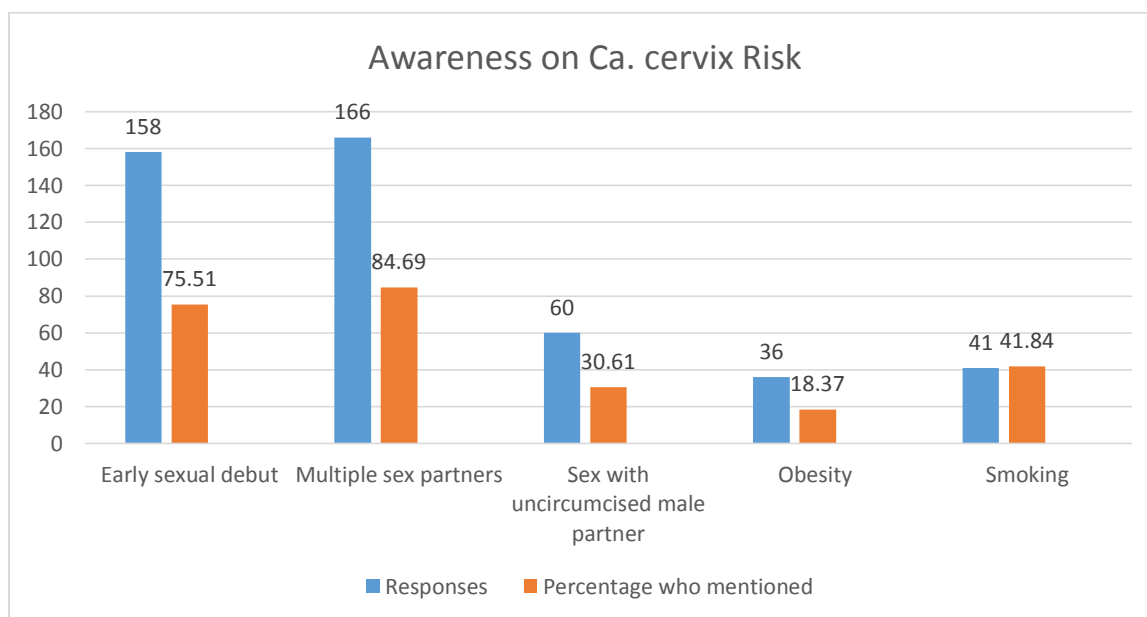


Figure 4: Knowledge of Students on Ca. Cervix Risk (N=196)

From figure 5 above, having multiple sexual partners was thought by the student as to have the highest risk for Ca. cervix. 84.69% of the students mentioned multiple sexual partners as a factor increasing the chances of contracting Ca. cervix, followed by early sexual debut (75.51%), smoking (41.84%), sexual contact with uncircumcised male (20.61%) and lastly obesity (18.37%). Despite the fact 166 (84.69%) of the students had mentioned having multiple sexual partners as a risk factor, 162 (82.65%) are the ones who thought it was transmissible through sex, 190 (96.94%) said that there was an organism responsible but only 182 correctly mentioned HPV, whereas 4 held *Trichomonas vaginalis* responsible and 4 of the 190 did not know the organism responsible.

4.2.4. PREVENTABILITY & TREATABILITY OF Ca. CERVIX (N=196)

192 (97.96%) of the nursing students said that Ca. cervix was preventable through avoidance of the various risk factors and vaccination while 2 said Ca. cervix was not preventable and 2 did not know. 192 (92.86%) further went ahead to state that it was treatable through chemotherapy, radiotherapy, surgery or a combination of the three & 4 said that Ca. cervix was not treatable.

4.3. ATTITUDES OF FIRST-YEAR NURSING STUDENTS TOWARDS CERVICAL CANCER & SCREENING

All 196 (100%) of the nursing students were of the opinion that cervical cancer screening should be continued since it was of importance however only 152 (72.45%) thought it was possible for them to get it, 28 (14.29%) did not think that it was possible for them to, while 26(13.27%) chose to remain non-committal.

4.4. PRACTICE OF FIRST-YEAR NURSING STUDENTS CONCERNING CERVICAL CANCER AND SCREENING

4.4.1. Ca. CERVIX SCREENING STATUS OF FIRST-YEAR NURSING STUDENTS (N=196)

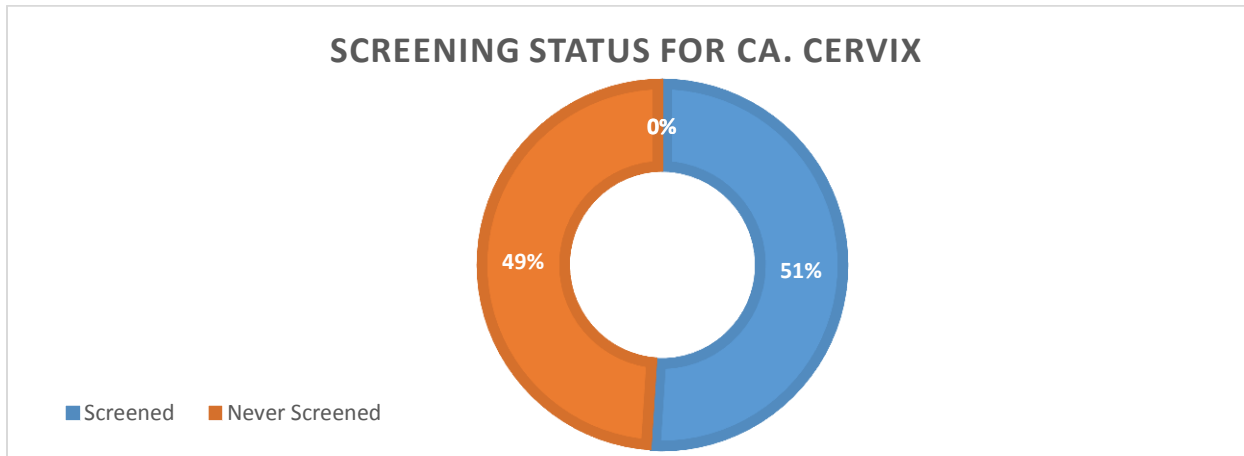


Figure 5: Uptake of cervical cancer screening among nursing students (N=196)

As shown in figure 6 above, 100 (51%) of the nursing students had been screened for Ca. cervix while 96 (49%) had never screened. Of those who had been screened 78 (78%) got screened for diagnostic purposes while 22 (22%) did it as part of a routine, in 76 (76%) it was self-requested while in 24 (14%) it was somewhat coerced or forced.

4.4.2. HPV-VACCINATION STATUS OF FIRST-YEAR NURSING STUDENTS (N=196)

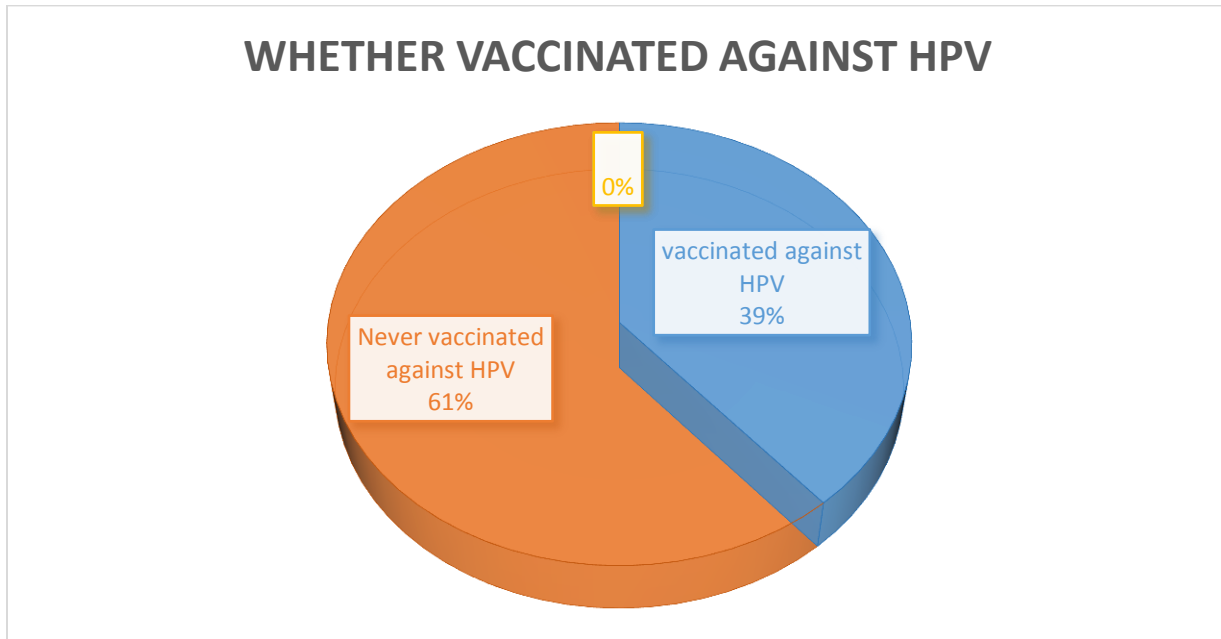


Figure 6: Nursing students' vaccination status v/s HPV, the organism implicated in Ca. Cervix (N=196)

The nursing students' vaccination status was low. Only 76 (39%) had been vaccinated against HPV while 120 (61%) had not. Most of those had ever been vaccinated had either been vaccinated in school (while at KIU-WC school of nursing), or they were vaccinated when very young.

CHAPTER FIVE: DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

5.0.INTRODUCTION

This chapter presents the discussions of the study results, the conclusions derived from the findings and the recommendations made to the various parties that hold some stake on the study subjects.

5.1. DISCUSSION OF THE STUDY FINDINGS

5.1.1. KNOWLEDGE ON Ca. CERVIX AND CERVICAL CANCER SCREENING

The overall knowledge of the students concerning cancer was above average more so on cancers most common among women. The cancers mentioned by the students were breast cancer (108), cervical cancer (174), endometrial (8) and ovarian (2). All these cancers they mentioned were ranked among the top eight most common cancers in women in 2018 by (Bray et al., 2018). According to (Bray et al., 2018), breast cancer was ranked first, Ca. cervix fourth, uterine sixth and ovarian eight common cancers in women.

All of the 196 students were aware of cervical cancer screening and all correctly mentioned Pap smear as the screening test. Furthermore, most of them stated that women within the reproductive age qualified for the screen though they included pre-pubertal and pubertal girls and thought that postmenopausal women did not need to be screened. According to the (American Cancer Society, 2016) all women should begin screening at the age of 21 years.

On the risk factors, preventability and treatability of cervical cancer more than 50% of the students gave the appropriate answers and 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., 2017) in health center IIIs in Oyam District, Uganda where only 62.7% of the respondents had ever heard of cervical cancer screening. The differences maybe 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, that among medical students in the University of Los Andes (Rodríguez-Feria, Hernández-Flórez, & Rodríguez-Feria, 2016), among Qatari women (Goyal, Vaishnav, Shrivastava, Verma, & Modi, 2013), women in Hadiya, Southern Ethiopia (Yitagesu, Samuel, & Tariku, 2017) and women attending childhood immunization clinics (Nuwasiima et al., 2016).

5.1.2. ATTITUDE TOWARDS Ca. CERVIX AND CERVICAL CANCER SCREENING

The respondents in this study had a positive attitude towards cervical cancer and cervical cancer screening, holding true the school of thought that acquisition of knowledge changes one's perspective and ultimately attitudes. All of our respondents were of the opinion that cervical cancer screening was important and should be continued, although about 27.55% of them either did not think themselves at risk of Ca. cervix or chose to be non-committal on the issue. This connection between impressive knowledge and positive attitude seen in this study is just a replica of results from other studies such as that among Turkish medical and non-medical students by (Borlu et al., 2016), that among medical students in Malaysia by (Maharajan et al., 2015), that in Nepal by (Junu Shrestha, R Saha, 2017) and the one in Zaria, Nigeria by (S. Ahmed et al., 2013) where most respondents exhibited a fair knowledge of cervical cancer and cervical cancer screening .

It is not always, though, that impressive or adequate knowledge always translates into positive attitudes. Though it appears so in this study, the truthfulness of the above statement has been proven quite a number of times in previous studies. Negative attitudes despite impressive knowledge were evident among first-year female nursing students of Hawassa University College where despite a good number of them (76.88%) being knowledgeable, 44.7% of them had a negative attitude (Tsegaye, 2015). This was also the case among HCWs in (Sudharshini et al., 2012) study where despite a good number of them being very knowledgeable concerning Ca. cervix and screening, 57.9% thought themselves not at risk of cervical cancer and also was it among Indian medical and paramedical students (Swarnapriya et al., 2016).

On the other hand, the fact that inadequate or poor knowledge negatively influences attitudes towards Ca. cervix and screening cannot be overemphasized. Two particular studies stand out in as far as this fact is concerned; one in New Delhi by (Singh et al., 2014) and the other by (Ndikom & Ofi, 2012).

5.1.3. PRACTICES AS PERTAINS Ca. CERVIX AND SCREENING

The adequate knowledge and positive attitudes of the respondents did not translate into good practice! Only 51% of them had been screened for Ca. cervix while 39% had ever been vaccinated against HPV – the organism implicated in Ca. cervix causation. This could be attributable to inaccessibility/unavailability of the vaccine as seen by the fact that most of those

who got vaccinated did so under the directive and arrangement by KIU-WC school of nursing, or in their respective schools they attended while young. The question common to most of those who had not been vaccinated was if one wanted to receive the vaccine, how they would go about it.

Several other studies in the past have recorded dismal results in as far as practice concerning Ca. cervix and cervical cancer screening was concerned. Most actually reported poor practice among the study participants. As examples, in Kathmandu, Nepal only 10.5% of the respondents had taken up Pap smear (Junu Shrestha, R Saha, 2017), only 57.7% of female students at University of Lagos in Nigeria expressed willingness to receive the vaccine (Makwe et al., 2012), only 6.8% of Indian medical, nursing and dental students had received HPV vaccination (Swarnapriya et al., 2016) among so many others. What comes out clearly is that despite variable levels of knowledge and variable attitudes, practice is universally poor when it comes to Ca. cervix and cervical cancer screening.

5.2. CONCLUSIONS

The knowledge of first year female nursing students of KIU-WC concerning cervical cancer and cervical cancer screening was above average.

Their attitudes towards Ca. Cervix and cervical cancer screening was generally good.

The practice of first year female nursing students of KIU-WC was very poor necessitating timely and appropriate interventions.

5.3. RECOMMENDATIONS

5.3.1. TO THE FIRST YEAR FEMALE NURSING STUDENTS OF KIU-WC

- 1) Make efforts to have themselves periodically screened against Ca. cervix.
- 2) For those who were never vaccinated against HPV during the recommended age of 9 – 13 years and not yet sexually active, they can still get the vaccine but now three doses at 0, 1 and 6 months instead of the two doses six months apart recommended for those between 9 and 13 years.
- 3) They should abstain, if they cannot abstain, they should ensure to be in a faithful relationship with a single, circumcised partner and preferably with the use of a condom at every sexual encounter.
- 4) Those with male friends and younger siblings who are not yet sexually active, should advise them to get circumcised.

- 5) They or their male friends should refrain from smoking tobacco and should quit if they were already smoking.

5.3.2. TO THE MANAGEMENT AND STAFF OF KIU-WC AND KIUTH

- 1) Offer/scale-up education on HPV, cervical cancer, and cervical cancer screening to the students.
- 2) Organize for vaccination drives for its female nursing students against HPV for those eligible.
- 3) Offer to its nursing students (both male and female) more health information and warnings about tobacco use, sexuality education tailored to age and culture, condom promotion/provision for those engaged in sexual activity, and male circumcision.

5.3.3. TO THE MINISTRY OF HEALTH THROUGH COMMUNITY HEALTH WORKERS (CHWs)

Since the CHWs are in constant contact and communication with families in their communities and they are the bridge between the community and the facility-based health-care providers the Ministry may utilize them by allocating them several important roles in terms of comprehensive cervical cancer prevention and these roles may include:

- 1) Raising awareness about the availability of the HPV vaccine and its importance for preventing cervical cancer, targeting the community at large, local health and community managers, local authorities, religious leaders and civil society representatives.
- 2) Educating girls and their parents and other community members about the benefits of the HPV vaccine and other available cervical cancer prevention strategies.
- 3) Countering misinformation, rumours and innuendos that undermine acceptance of vaccination, by providing accurate information.
- 4) Obtaining informed consent from parents.
- 5) Facilitating girls' attendance at vaccine sites.
- 6) Reminding girls and their families to get the subsequent dose(s) needed for full protection.
- 7) Vaccinating girls, either in the community, at schools or other selected venues, and/or documenting vaccination-related activities.

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APPENDICES

APPENDIX ONE: CONSENT FORM

CONSENT FORM

STUDY TITLE: *Cervical cancer and screening: a knowledge, attitude and practice study among Kampala International University first-year female nursing students.*

I have read and understood the research topic above on the planned study and the explanations given to me. I understand what I have been requested to do in respect to this study. I have asked questions and gotten clarifications about the study and I am satisfied. I have, after due consideration, willingly consented to take part in this study as explained.

Participant's signature Date

Investigators name Signature

Investigator's contacts 0782263838/0704741831 Date

APPENDIX TWO: DATA COLLECTION TOOL

STUDY QUESTIONNAIRE

SERIAL NO:

INTRODUCTION

STUDY TITLE: *Cervical cancer and screening: a knowledge, attitude and practice study among Kampala International University first-year female nursing students.*

CONFIDENTIALITY: I am **Nowomuhangi Bonny**, a final year medical student at Kampala International University – Western Campus carrying out the above research. I would hereby wish to assure you that the information you will provide will be accorded the confidentiality it deserves and will not be used for purposes other than those meant for this research. You have the right not to answer any questions you feel uncomfortable to and you are free to pull out of the study at any time you wish.

PART ONE: SOCIO-DEMOGRAPHIC CHARACTERISTICS

AGE.....RELIGION.....HOME DISTRICT

COURSE PURSUED

MARITAL STATUS

- ☐ SINGLE
☐ DIVORCED
☐ MARRIED
☐ WIDOWED
☐ SEPARATED

NUMBER OF CHILDREN (IF ANY)

PART TWO: KNOWLEDGE CONCERNING CERVICAL CANCER & SCREENING

1. What cancers have you heard about?

.....
.....

2. Of the ones you listed above, which ones are more common in women?

.....
.....

3. Have you ever heard about cervical cancer? YES ☐ NO ☐

If yes, from who/where?

Friends ☐ Health worker ☐ TV ☐ Radio ☐

4. Have you heard about cervical cancer screening? Yes ☐ No ☐
5. Who are normally screened for cervical cancer?
- Pre-pubertal girls ☐
- Pubertal girls ☐
- Women or reproductive age ☐
- Postmenopausal women ☐
6. What are the risk factors for getting cervical cancer?
- Early age of sexual intercourse ☐
- Multiple sexual partners ☐
- Having an uncircumcised male partner ☐
- Obesity ☐
- Smoking ☐
- Others
7. Can cervical cancer be transmitted to the woman sexually? Yes ☐ No ☐
8. Is there an organism associated with cervical cancer in women? Yes ☐ No ☐
9. If yes to (6) above, what is the name of the organism?
- Trichomonas vaginalis ☐
- Human Papilloma Virus (HPV) ☐
- Do not know ☐
10. Does cervical cancer have treatment? Yes ☐ No ☐
- If yes, what treatment is given?
11. Can cervical cancer be prevented?
-
12. If yes to (9) above, How?
13. What does cervical cancer screening involve?
-
-
-

PART THREE: ATTITUDE CONCERNING CERVICAL CANCER AND SCREENING

1. What are your comments about cervical cancer screening?
.....
.....
2. Do you think screening for cervical cancer in women should be continued?
.....
3. Do you think it is necessary to screen for cervical cancer? (tick applicable)
YES ☐ NO ☐
4. Do you think you can get cervical cancer?

PART FOUR: PRACTICE CONCERNING CERVICAL CANCER AND SCREENING

1. Have you been screened for cervical cancer? Yes ☐ No ☐
2. If yes to (1) above,
 - a) When was it done?
 - b) Where was it done from? Health facility ☐ School ☐
 - c) What were your reasons for screening?
Routine procedure at school ☐
Diagnostic procedure ☐
 - d) Was it self-requested or was it imposed/forced on you?
Self-requested ☐
Forced ☐
3. Have you ever been vaccinated against cervical cancer? Yes ☐ No ☐
If yes, when and where was it done?
.....
4. How old were you when it was done?

Do you have anything else you want to add, any question, clarification, concern etc.?

Otherwise, THANK YOU.

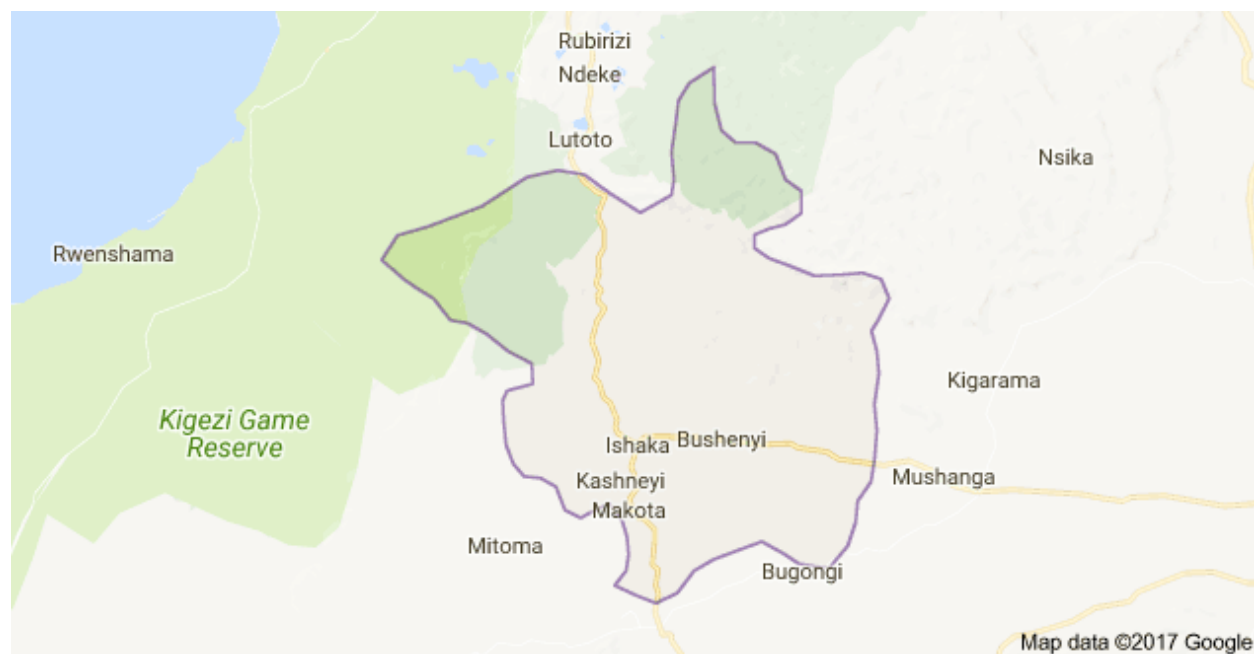
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APPENDIX FOUR (b): TOPOGRAPHICAL MAP OF BUSHENYI (RED STAR) WITH ITS NEIGHBOURS



APPENDIX FIVE: MAP OF ISHAKA IN BUSHENYI DISTRICT



APPENDIX SIX: KREJCIE AND MORGAN TABLE

Table 3.1									
<i>Table for Determining Sample Size of a Known Population</i>									
N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	346
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	354
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	191	1200	291	6000	361
45	40	170	118	400	196	1300	297	7000	364
50	44	180	123	420	201	1400	302	8000	367
55	48	190	127	440	205	1500	306	9000	368
60	52	200	132	460	210	1600	310	10000	370
65	56	210	136	480	214	1700	313	15000	375
70	59	220	140	500	217	1800	317	20000	377
75	63	230	144	550	226	1900	320	30000	379
80	66	240	148	600	234	2000	322	40000	380
85	70	250	152	650	242	2200	327	50000	381
90	73	260	155	700	248	2400	331	75000	382
95	76	270	159	750	254	2600	335	1000000	384
<i>Note: N is Population Size; S is Sample Size</i>					<i>Source: Krejcie & Morgan, 1970</i>				

APPENDIX SEVEN: APPROVAL LETTER TO CONDUCT THE STUDY



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OFFICE OF THE DEAN
FACULTY OF CLINICAL MEDICINE & DENTISTRY

04/02/2019

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

RE: NOWOMUHANGI BONNY (BMS/0069/132/DU)

The above named person is a fifth year student at Kampala International University pursuing a Bachelor of Medicine, Bachelor of Surgery (MBChB) Programme.

She wishes to conduct his student research in your hospital.

Topic: Knowledge, attitude and practice on cervical cancer among female nurses students at Kampala International University-Western Campus

Supervisor: Mr.Tutamwebwa K. Thomas

Any assistance given will be appreciated.

Yours Sincerely,

S-0-05 FEB 2019

Dr. Akib Surat

Deputy Executive Director/Assoc Dean FCM&D

"Exploring the Heights"
Assoc. Prof Ssebuufu Robinson, Dean (FCM & D) 0772 507248 email: sssebuufu@gmail.com
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