

Evaluating Cervical Cancer Screening Awareness and Practices among Reproductive-Age Women at Kapchorwa General Hospital's Antenatal Clinic

Cherop Benjamin

**Faculty of Clinical Medicine and Dentistry Kampala International University
Western Campus Uganda.**

ABSTRACT

Cervical cancer is a malignant tumor that typically affects young women under the age of 40 and develops in the fifth and sixth decades of life. In this study, reproductive-age women receiving antenatal care at Kapchorwa Hospital had their knowledge, attitudes, and practices about cervical cancer screening evaluated. The study evaluated the knowledge, practices, and attitudes of cervical cancer screening using both quantitative and qualitative methodologies. The majority of participants were not screened, had several sexual partners as a risk factor, and had never heard of cervical cancer. They were not aware of the Pap smear test, thought early diagnosis improved treatment outcomes, and thought they were susceptible to cervical cancer. The majority of participants thought that cervical cancer was bad and that getting it would make them feel unhappy. They also said regular exams and awareness about cervical cancer were important. According to the report, many women lack basic awareness and screening habits for cervical cancer.

Keywords: Cervical cancer, Cervical cancer screening, Pap smear test, Malignant neoplasm.

INTRODUCTION

Cervical cancer is a malignant neoplasm arising from cells originating in the cervix of the uterus [1–3]. Occurring in the 5th and 6th decades of life and at a mean age of 54 years [4]. The disease has a pre-malignant stage, which usually occurs in young women under the age of 40 years [2, 5, 6]. Cervical cancer has had a devastating effect on women's lives worldwide [7]. According to recent data [7], an estimated 466,000 new cases of cervical cancer can occur among women worldwide each year, and the vast majority of them are in developing countries. Of the 231,000 women of reproductive age who die of cervical cancer annually, approximately 80% are from developing countries where cervical cancer is the most common cause of death among women [2, 8]. Globally, in every two minutes, at least one woman dies of cervical cancer, mostly in developing nations [9]. In 2008, it was estimated that 529,409 new cases occurred globally, with 274,883 women (52% of cases) dying, according to the World Health Organization (WHO). It is the 3rd most common cancer among women worldwide, with approximately 83,195 new cases annually, and 35,673 deaths in 2012 [10–12].

Cervical cancer is the second most common cause of death among women with various cancers, and there were an estimated 266,000 deaths from cervical cancer worldwide in 2012, accounting for 7.5% of all female cancer deaths [13]. Almost nine out of ten (87%) cervical cancer deaths occurred in the least developed regions, and the mortality varies 16-fold between the different regions of the world, with rates ranging from less than 2 per 100,000 in West Asia, Western Europe, and Australia/New Zealand to more than 20 per 100,000 in Melanesia (20.6), Middle Africa (22.2), and East Africa (27.6) [14]. In Kenya, around 2,425 new cases occurred in 2010, according to the World Health Organization [15, 16]. In Uganda, cervical cancer has a prevalence rate of 16.7% [17]. It's the second most common cause of death in women around West Nile and Kyadondo in Kampala District, according to recent data on cervical cancer screening, accounting for 80% of deaths among those with cancer [9]. Uganda's policy for cervical cancer screening is based on the 'see and treat' algorithm, where women of age 25 to 49 are screened, and those found positive are treated with cryotherapy [18].

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Cancer of the cervix is the second most common cancer among women worldwide after breast cancer, with an estimated 494,000 new cases annually, out of which about 80% (376,000) occur in developing countries. About 49.5% (233,000) die every year. CC is the most frequent cancer among women, with 4,000 newly diagnosed cases annually [14]. Cervical Cancer kills 270,000 women in developing countries, and Uganda is a middle-income country, making it more prone to many deaths [2, 4]. There is a significant drop in the incidence of cervical cancer in developed countries because of intensive cervical screening programs [19]. Uganda ranks 14th among countries with the highest incidence of cervical cancer, and 65% of those diagnosed with the disease die from it [20]. It is estimated that about 33.6% of women in the general population of Uganda harbor cervical HPV infection [20]. Despite the Uganda Ministry of Health strategy for 2010 to 2014, aimed at preventing CC by increasing cervical cancer screening rates in Uganda, it is clear that these targets weren't met, and consequently, CC screening levels in Uganda haven't reached the initially anticipated level by 2017. It was observed that 35% (484/1400) of patients seen in the gynecology outpatients in Mulago Hospital in Uganda had suspected cervical cancer, and Gynecological wards in Mulago were occupied by cervical cancer patients, of whom 80% were diagnosed with late-stage disease [21]. Cancer is a fatal disease and some rural dwellers opine that it is bewitchment and thus seek treatment from traditional healers who use herbs and charms in their claim of treating cancer. The use of herbs in the treatment of diseases is an ancient traditional practice recognized globally [22, 23]. Documented reports of plants with anti-cancer properties abound [24-26]. Early detection of all cancers is crucial for achieving a good treatment outcome [27, 28]. This calls for a study to assess the knowledge, practices, and attitudes of women of reproductive age on cervical cancer screening. In Kachori Hospital, despite the presence of pap tests in ANC, with an approximate number of women of around 500 a year who visit the antenatal clinic, there has not been any practice of assessing women as it regards cervical cancer. This, therefore, makes it a significant problem because in the course of time, the rate of those infected with cervical cancer will increase, and hence the death rate among women of reproductive age.

Methodology

Area of Study

Kapchorwa General Hospital, commonly known as Kapchorwa Hospital, is a hospital in Kapchorwa in the Eastern Region of Uganda. It's bordered by the Kween district to the north and east, the Sironko district to the south, and the Bulambuli district to the west and northeast. It is located approximately 65 kilometres (40 mi) by road northeast of Mbale Regional Referral Hospital, the nearest large city hospital in the Eastern region. The district hospital is approximately 295 kilometres (183 mi) by road northeast of Kampala, the capital city of Uganda. The coordinates of the hospital are 01°23'55.0"N, 34°26'50.0"E (Latitude: 1.389625; Longitude: 34.447207). Kapchorwa Hospital is located along. It is the catchment hospital for the districts of Kween, Bukwo, Bulambuli, Kapchorwa, Sironko, Kumi, and Karamoja. It serves over 5,000 people from Kapchorwa itself and neighboring districts. The August 2014 national population census of Uganda indicated that Kapchorwa had a population of 104,580, inclusive of females of reproductive age, children, and men.

Study Population

All women of reproductive age, aged 15-49 years, attended the Antenatal clinic at Kapchorwa General Hospital from January 2022 to April 2022 and are residents of Kapchorwa and have been residing in the area for more than three months.

Inclusion Criteria

Only women of reproductive age between 15-49 years visiting the Antenatal Clinic at Kapchorwa General Hospital from December to January who consented to participate in the study were included.

Exclusion Criteria

- i. Visiting women attending Kapchorwa General Hospital less than 15 years of age.
- ii. Qualified women who declined to participate in the study.
- iii. Qualified women who were in critical condition.
- iv. Women who were mentally ill.

Sample Size Determination

The sample size is the number of observations in a sample. The sample size was calculated using the formula below:

$$n = N / (1 + N(e)^2)$$

Where:

n = desired sample size

N is the target population; N=80

e is the expected error at a standard interval of 95% and e=5%

$$n = 80 / (1 + 80(0.05)^2)$$

$$n = 67 \text{ people}$$

Therefore, a minimum of 67 participants will be sampled.

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Study Design

A descriptive cross-sectional study was carried out with both quantitative and qualitative methods to assess the knowledge, practices, and attitudes on cervical cancer screening among women of reproductive age between 15-49 years attending antenatal clinic at Kapchorwa General Hospital.

Sampling Technique

A simple random technique was employed in this study. The study sample was conducted in the antenatal clinic where women of reproductive age between 15-49 years were selected randomly and requested to participate in the study after signing the consent form.

Data Collection Methods

Data was collected using a questionnaire where both open-ended and closed-ended questions were used, and translation was done for those respondents who did not understand the English language since not every woman attending Antenatal Clinic at Kapchorwa Hospital was able to speak English.

Data Collection Tools

A self-administered questionnaire that would have been specifically tailored and structured was used for the study. After the respondents had been selected, the researcher and the research assistants asked them questions about their demographics, knowledge, attitude, and practices pertaining to cervical cancer screening.

Data Collection Procedure

The participants were selected randomly from among women of reproductive age attending the antenatal clinic. The purpose of the study was explained to the participants, and they were informed that their participation should be voluntary without any coercion or monetary rewards. The participants were assured of confidentiality in regard to their identity during and after the research had been conducted. They then signed the consent form before filling in the questionnaires. Participants who did not understand English were helped by the research assistants to fill in the questionnaires based on their responses to the questions after being translated.

Quality Control

The researcher ensured quality control by conducting induction and training of research assistants. The questionnaire was pre-tested before conducting the primary study, and where modifications were warranted, they were done.

Data Analysis

Each questionnaire was checked for completeness, missed values, and unlikely responses and then manually cleaned up on such indications. Data was analyzed with SPSS software version 17, by use of double entry, the data was checked for consistency and accuracy. Then later the responses and observations given were tallied then recorded and presented in graphs, charts, and tables.

RESULTS

Socio-demographic factors of the respondents

Table 1: The mean age of the participants in the study was 32.30 as shown below.

Mean	32.30
Median	32.00

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Table 2: The majority (25.7%) of the study participants had one child

Number of children	Frequency	Per cent
0	3	4.3
1	18	25.7
2	10	14.3
3	9	12.9
4	5	7.1
5	8	11.4
6	11	15.7
7	3	4.3
8	3	4.3
Total	70	100.0

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Table 3: In the study majority (37.1%) of the study participants were employed by others, 32.9% were self-employed and 30.0% were not employed as shown below.

Employment status	Frequency	Per cent
None	21	30.0
self-employed	23	32.9
employed by others	26	37.1
Total	70	100.0

Table 4: 40.0% of the study participants attained Post-secondary education, 30.0% attained secondary, 22.9% primary while 7.1% did not have any formal education as shown below

Level of Education	Frequency	Per cent
None	5	7.1
Primary	16	22.9
Secondary	21	30.0
Post-secondary	28	40.0
Total	70	100.0

Table 5: Majority (50.0%) of the study participants were other religions other than protestant, Muslim or Catholic, 27.1% were protestants, 18.6% were Catholics and 4.3% were Muslims as shown below.

Religion	Frequency	Percent
Protestant	19	27.1
Muslim	3	4.3
Catholic	13	18.6
others	35	50.0
Total	70	100.0

Table 6: 68.6% of the participants were married, 18.6% were single and 12.9% were divorced as shown below.

Maritalstatus	Frequency	Per cent
Married	48	68.6
Single	13	18.6
Divorced	9	12.9
Total	70	100.0

Knowledge about Pap smear tests

According to the study, the majority of the study participants had ever heard about cervical cancer(90.0%), were not screened(62.9%), mentioned not having multiple sexual partners as a way to prevent cervical cancer(34.3%), gave multiple sexual partners as a risk factor(65.7%), had never heard about Pap smear test(54.3%), didn't know whether it is possible to detect cervical cancer before symptoms appear(70.0%), said early detection of cervical cancer was good for treatment outcome(81.4%) and thought they were at risk of getting cervical cancer(58.6%) as shown in the table below.

Table 7
Knowledge about Pap smear tests

Variable	Category	Frequency(N)	Percentage (%)
Have you ever heard about cervical cancer?	Yes	63	90.0
	No	07	10.0
What were the results after the screening?	Not screened	44	62.9
	Positive	1	1.4
	Negative	25	35.7
How can you prevent cervical cancer?	Not having multiple sexual partners	24	34.3
	Vaccination	17	24.3
	Avoid smoking	6	8.6
	Eating balanced diet	6	8.6
	Frequent screening	4	5.7
	Avoid contraceptives	2	2.9
	Don't know	9	12.9
Knowledge of the risk factors which can lead to cervicalcancer	Multiple partners	46	65.7
	Smoking	17	24.3
	Sexually transmitted	6	8.6
	Early age of marriage	1	1.4

Have you ever heard about Pap smear test?	Yes	32	45.7
	No	38	54.3
Where did you hear about Pap smear test for the first time?	Hospital	24	75.0
	ANC clinic	08	25.0
Is it possible to detect cervical cancer with a Pap smear test before symptoms appear?	Yes	20	28.6
	No	01	1.4
	Don't know	49	70.0
Is early detection of cervical cancer good for treatment outcome?	Yes	57	81.4
	No	09	12.9
	Not sure	04	5.7
Do you think you was at risk for cervical cancer?	Yes	41	58.6
	No	29	41.4

The attitude of women towards cervical cancer screening

According to the study, the majority held the opinion that cervical cancer is bad(55.7%), mentioned that people say women with cervical cancer are unlucky(21.4%), would feel bad if they get cervical cancer(47.1%),had never had a Pap smear done on them(71.4%),would like to have aPap smear if they were told a Pap smear is simple, painless and good for early detection of cervical cancer(98.6%),would like to have the test done from ANC clinic(51.4%),thought awareness of cervical cancer is needed(100.0%) and thought they need regular checkup for cervical cancer(80.0%) as shown below.

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Table 8 Attitude of women towards cervical cancer screening

Variable	Category	Frequency(N)	Percentage (%)
What is your opinion about cervical cancer?	Bad disease	39	55.7
	Killer disease	19	27.1
	Disease with no cure	05	7.1
	Doctors should look for the exact cause of the disease	03	4.3
	Government to treat	02	2.9
	Treatable when detected early	02	2.9
If one gets cervical cancer what do people say about her?	Unlucky	15	21.4
	Bewitched	13	18.6
	Dying soon	12	17.1
	Prostitute	07	10.0
	Had more partners	06	8.6
	Had sex at an early age	04	5.7
	Unfortunate	03	4.3
	Has HIV	04	5.7
	No Idea	05	7.1
	Cursed	01	1.4
How would you feel if you get cervical cancer?	Bad	33	47.1
	Unfortunate	10	14.3
	Unlucky	09	12.9
	Rejected	07	10.0
	Isolated	05	7.1
	Stressed	04	5.7
	God has abandoned me	02	2.9

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Have you ever had a	Yes	20	28.6
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Pap smear test done on you?	No	50	71.4
If you were told a Pap smear is simple,painless and good for early detection ofcervical cancer, would you like to have one?	Yes	69	98.6
	No	01	1.4
Where would you prefer to have this test done?	ANC clinic	36	51.4
	Gynaecology clinic	15	21.4
	Private clinic	06	8.6
	No preference	13	18.6
Do you think awareness of cervical cancer is needed?	Yes	70	100.0
	No	00	00
Do you think you need regular checkups for cervical cancer?	Yes	56	80.0
	No	14	20.0

Practices of women regarding Pap smear tests and prevention of cervical cancer

In the current study, majority of the study participants would recognize cervical when there is bleeding after sexual intercourse, douching or pelvic examination(35.7%), do not usually examine their cervix(82.9%), had never done Pap smear test(78.6%), would like to do Pap smear test(82.9%), have been recommended to do Pap smear test by a nurse(44.3%), reported that one should have Pap test after Every two or three years(34.3%) and didn't know what age Pap test is done(32.9%) as shown in the table below.

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Table 9 Practices of women regarding Pap smear tests and prevention of cervical cancer

Variable	Category	Frequency(N)	Percentage (%)
How would you know that you havecervical cancer?	Bleeding after sexual intercourse, douching or pelvic examination	25	35.7
	Blood spots or light bleeding between or following periods	14	20.0
	Pain during the examination of your cervix	11	15.7
	Menstrual bleeding that is longer and heavier than periods	07	10.0
	Bleeding after Menopause	05	7.1
	All the above	08	11.4
Do you usually examine your cervix?	Yes	12	17.1
	No	58	82.9
Have you ever done Pap smear test?	Yes	15	21.4
	No	55	78.6
Would you like to do Pap smear test?	Yes	58	82.9
	No	12	17.1
Has anyone recommended for you to do Pap smeartest?	A nurse	31	44.3
	Doctor	16	22.9
	Others	11	15.7
	No one	16	22.9
After how long	Every two or three	24	34.3

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should one have a Paptest?	Years		
	After a year	16	22.9
	Every year	11	15.7
	Don't know	19	27.1
At what age is a Paptest done?	21-39years	20	28.6
	15-20years	10	14.3
	15-25years	09	12.9
	Above 45 years	08	11.4
	Don't know	23	32.9

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DISCUSSION

Knowledge of Women of Reproductive Age about Pap Smear Tests

According to the study, the majority of the study participants had never heard about cervical cancer (90.0%) and were not screened (62.9%). Shrestha et al. [29] in their study found that even though 90.0% of the participants had heard about cervical cancer, only 53.0% were screened. In the present study, the majority of the participants mentioned not having multiple sexual partners as a way to prevent cervical cancer (34.3%) and gave multiple sexual partners as a risk factor (65.7%). Additionally, 54.3% had never heard about the Pap smear test. This is in line with the findings of a study in India where 32.6% of the study participants mentioned multiple sexual partners as a risk factor for cervical cancer [30]. The study also found that the majority didn't know whether it is possible to detect cervical cancer before symptoms appear (70.0%) but said that early detection of cervical cancer was good for treatment outcomes (81.4%). This is lower compared to the findings of a study which found that 86.6% believed that early detection of cervical cancer is important [31]. Furthermore, the majority thought they were at risk of getting cervical cancer (58.6%). Mengesh and colleagues study revealed that only 21.4% had ever heard about cervical screening, which is quite lower compared to the findings of this study. Additionally, the majority of participants in this study reported multiple sexual partners as a risk factor for cervical cancer, which contrasts with the findings of Mengesh and colleagues where the majority did not know that cervical cancer is caused by HPV [32]. Multiple sexual partners is a risk factor for sexually transmitted diseases including HIV which aggravates cervical cancer incidence [33, 34].

The Attitude of Women of Reproductive Age towards Cervical Cancer Screening

In the current study, the majority held the opinion that cervical cancer is bad (55.7%) and mentioned that people say women with cervical cancer are unlucky (21.4%) and would feel bad if they get cervical cancer (47.1%). The study also revealed that the majority (71.4%) had not undergone a Pap smear test. However, this finding is higher compared to a study which found that only 26.2% had done a Pap smear test [32]. Furthermore, the majority would like to have a Pap smear if they were told it is simple, painless, and good for early detection of cervical cancer (98.6%). They would prefer to have the test done at an ANC clinic (51.4%) and believe that awareness of cervical cancer is needed (100.0%). Additionally, they think they need regular check-ups for cervical cancer (80.0%).

Practices of Women Regarding Pap Smear Tests and Prevention of Cervical Cancer

As per the findings, the majority of the study participants would recognize cervical cancer when there is bleeding after sexual intercourse, douching, or pelvic examination (35.7%). This is inconsistent with the findings of a study in India where intermenstrual bleeding and foul-smelling discharge were reported to be the most commonly mentioned symptoms among women [30]. Also, the majority reported that they do not usually examine their cervix (82.9%) and had never done a Pap smear test (78.6%). When asked about their willingness to do a Pap smear test, the majority (82.9%) responded positively. This is incongruent with the findings of Shreshtha et al. [29] where 68.8% strongly agreed to undergo cervical cancer screening. Additionally, the majority of the study participants were recommended to do a Pap smear test by a nurse

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(44.3%) and reported that one should have a Pap test every two or three years (34.3%). In the study, the majority didn't know at what age a Pap test is typically done (32.9%).

CONCLUSION

A considerable proportion of women have inadequate knowledge and practice regarding cervical cancer screening.

RECOMMENDATION

Cervical cancer screening health camps and awareness programs should be conducted at the community level for women to increase their level of knowledge, attitude, and practice regarding cervical cancer screening.

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CITE AS: Cherop Benjamin (2023). Evaluating Cervical Cancer Screening Awareness and Practices among Reproductive-Age Women at Kapchowa General Hospital's Antenatal Clinic. Eurasian Experiment Journal of Scientific and Applied Research, 4(3):89-104.