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Determinants of Cervical Cancer Screening Uptake among Women Aged 21-65 at Hoima Regional Referral Hospital, Uganda

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ABSTRACT

Uganda has the highest incidence of cervical cancer, with over 65% of those diagnosed dying from it. This research report aims to educate women on cervical cancer prevention, diagnosis, and management protocols to improve their health status at HRRH. A descriptive cross-sectional study was conducted on 210 women aged 26-30 years, with the majority having good attitudes, knowledge, and earning ≥ 200000 . Health education was received by 30.0% of participants, and the attitude of healthcare providers was good. The distance to the health center was short 1-2km, and the majority had partner support (16.3%). Peer influence was also significant, with 30.2% of participants having peer influence to do cervical cancer screening. The study found that knowledge, attitude, and partner support significantly contribute to the uptake of cervical cancer screening.

Keywords: determinants; cervical cancer; screening uptake; women

INTRODUCTION

Worldwide, cervical cancer is the fourth most frequent cancer in women with an estimated 604000 new cases in 2020. Of the estimated 342000 deaths from cervical cancer in 2020, about 90% of these occur in low and middle-income countries. Africa represents 20% of the world's new cervical cancer diagnoses each year, with approximately 120000 new cases. A large fraction of women in Africa do not have access to care for cervix cancer treatment, Uganda ranks the 14th among countries with highest incidence of cervical cancer and over 65% of those diagnosed with the disease die from it, [1, 2, 3] 33.6% of women in the general population of Uganda have cervical human papilloma virus infection - which is the main cause of cervical cancer.

Cervical cancer is potentially preventable and effective screening programs can lead to decreased morbidity and mortality. The success of screening depends on the determinants of cervical cancer screening uptake among women, e.g. access and uptake, quality of screening tests, adequacy of follow up diagnosis and treatment of lesions detected. Cervical cancer mortality fall on underserved population e.g. poor, elderly and rural women who have higher risks of developing cervical cancer when not screened early [4, 5].

Government of Uganda launched its strategic plan for cervical cancer prevention and control in April 2010 with a vision of keeping its women free from cervical cancer and its main aim being to reduce human papilloma virus incidence and prevalence, cervical cancer incidence and or prevalence and mortality, improve quality of life and survival rates through education and advocacy(through IEC materials about cervical cancer and diagnostic services), human papilloma screening and vaccinating 80% of eligible persons by 2015 and treatment of cervical pre-cancerous lesions, treatment with surgery, radio-chemotherapy and palliative care services [6, 7].

Government of Uganda has put some policies in place and services provided in some hospitals e.g. Masaka, Mbarara, Mbale, and Kisoro regional referral hospitals, Ntugamo, Ibanda, Soroti, Nakasero, Gulu, Mildmay UWHI district hospitals and Mulago national referral hospital are now providing screening and treatment of cervical pre-cancerous lesions using single visit approach [6].

METHODOLOGY

Study design

A descriptive cross sectional study design [8] was used to identify the factors influencing uptake of cervical cancer screening among women aged 18-65 attending HRRH.

Study area

The study was conducted at HRRH in Hoima municipality, Hoima district- western Uganda about 200km northwest of Kampala.

Target population

All women who attended gynecology OPD and ward, medical ward.

Study population

All women aged 18-65 attending HRRH from gynecology ward and outpatient, medical ward and cervical cancer clinic who met the inclusion criteria of the study.

Inclusion criteria

All women aged 18-65 who consented to participation in the study

Exclusion criteria

1. Those below 18 and above 65 attending gynecology outpatient and ward, medical ward.
2. Those aged 18-65 who did not consent
3. Those aged 18-65 in other wards other than gynecology outpatient and ward, medical ward and cervical cancer clinic.

Sample size determination

Using Kish Leslie (1965) formula

$$n = Z^2 P(1-p) / E^2$$

Where n- estimated minimum sample size

Z- Confidence interval (1.96)

P- Proportion of a characteristic in a sample (0.5)

E- Marginal error set at (5%)

$$n = (1.96)^2 * 0.5(1-0.5) / (0.05)^2$$

$$n = 160$$

Sampling procedures

The research assistant conducted a nondirective depth interview among all women attending gynecology OPD and ward, medical ward, and cervical cancer clinic, after which he conducted a focused group discussion, of these, those aged 18-65 were set aside and were then randomly selected, among the participants who consented to participate in the study by signing the consent form provided by either the PI or the research assistant and were issued study questionnaires to fill. A total of 210 women were sampled.

Ethical consideration

A letter of introduction was collected from KIU-WC allowing me to officially carry out my research after approval by IREC. A letter of introduction was collected from the hospital director's office of HRRH allowing me to conduct my research in the hospital. Voluntary participation was ensured among participants in the study. Each participant filled an informed consent form after introduction of the study by the PI and research assistants. Names of participants were withheld to ensure anonymity and confidentiality [9].

RESULTS

According to the study, majority of the participants were aged 26-30 years (54.8%), attained primary education (51.4%), peasants (43.3%), married (77.6%) and catholic (46.7%) as shown in table 1 below.

Table 1: Socio-demographic factors

Variable	Category	Frequency(n)	Percentage (%)
Age(years)	18-25	27	12.9
	26-30	115	54.8
	>31	68	32.4
Level of education	No formal education	17	8.1
	Primary	108	51.4
	At least secondary	85	40.5
Occupation	House wife	87	41.4
	Formal employment	11	5.2
	Peasant	91	43.3
	Others	21	10
Marital status	Married	163	77.6
	Single	47	22.4
Religion	Anglican	82	39.1
	Catholic	98	46.7
	Muslim	21	10
	Others	9	4.3

According to the study, majority of the participants were aged 26-30 years (13.0%), had good attitude (11.5%), had good knowledge (14.5%), and earned ≥ 200000 (66.7%) as shown in table 2 below.

Table 2: Personal factors

Variable	Category	Frequency(n)	Percentage (%)
Age (years)	18-25	27	12.9
	26-30	115	54.8
	>31	68	32.4
Attitude	Good	148	70.5
	Bad	52	24.8
Knowledge	Good	110	52.4
	Poor	100	47.6
Income earning	<100,000	68	32.4
	100,000-200,000	127	60.5
	$\geq 200,000$	15	7.1

Variable	Category	Frequency(n)	Uptake of cervical cancer screening	
			Frequency(n)	Percentage (%)
Age (years)	21-25	27	3	11.1
	26-30	115	15	13.0
	>31	68	4	5.9
Attitude	Good	148	17	11.5
	Bad	52	4	7.7
Knowledge	Good	110	16	14.5
	Poor	100	5	5.0
Income earning	<100,000	68	2	2.9
	100,000-200,000	127	9	7.1
	≥200,000	15	10	66.7

Relationship between personal factors and uptake of cervical cancer screening

According to the study majority of the participants received health education (30.0%), attitude of the health care providers was good (13.3%) and distance to the health center was short 1-2km (29.0%) as shown in table 3 below.

Table 3: Institutional factors

Variable	Category	Frequency(n)	Percentage (%)
Health education	Yes	50	23.8
	No	160	76.2
Attitude of health care providers	Good	135	64.3
	Bad	75	35.7
Distance to the health center(km)	1-2	31	14.8
	3-4	103	49.0
	≥5	66	31.4

association between institutional factors and uptake of cervical cancer screening

Variable	Category	Frequency(N)	Uptake of cervical cancer screening	
			Frequency	Percentage (%)
Health education	Yes	50	15	30.0
	No	160	6	3.8
Attitude of health care providers	Good	135	18	13.3
	Bad	75	3	4.0
Distance to the health center	1-2km	31	09	29.0
	3-4km	103	10	9.7
	≥5km	66	03	4.5

According to the study, majority of the participants had partner support (16.3%), had peer influence to do cervical cancer screening (30.2%), and their culture did not discourage cervical cancer screening (10.3) as shown in table 4 below.

Table 4: Community factors

Variable	Category	Frequency(N)	Percentage (%)
Partners support	Yes	86	40.9
	No	124	59.0
Peer influence to do cervical cancer screening	Yes	43	20.5
	No	167	79.5
Do your culture discourage cervical cancer screening	Yes	15	7.1
	No	195	92.9

Table 5: Association between community factors and uptake of cervical cancer screening

Variable	Category	Frequency(N)	Uptake of cervical cancer screening	
			Frequency	Percentage (%)
Partners support	Yes	86	14	16.3
	No	124	07	5.6
Peer influence to do cervical cancer screening	Yes	43	13	30.2
	No	167	08	4.8
Do your culture discourage cervical cancer screening	Yes	15	01	6.7
	No	195	20	10.3

DISCUSSION

Majority of the correspondents (54.8%) were in the age range between 26-30 years of age while only (12.9%) were in the age 18-25 years and (32.4%) were >31 years. Cervical cancer is mainly prevalent in the reproductive age. This may be due to infections that are encountered in this period. These findings agree with the study done by [10], which revealed that Cervical cancer ranks as the first cause of female cancer in Uganda in women aged 15 to 44 years. Majority of the respondents (51.4%) had primary education and (40.5%) had at least secondary education while (8.1%) comprised no formal education. The result reveals that some level of education influences screening uptake which is not the case when there is no formal education. Most of the respondents (46.7%) were catholic while only (10%) were Muslims. Religion prohibits certain modern practices for example in the Catholic Church, tampering with the female reproductive part is forbidden. This may impart

attitude that may prevent women to seek for screening services. This report is in agreement with [11], On Knowledge and barriers towards cervical cancer screening among young women in Malaysia. *Asian Pacific Journal of Cancer Prevention*. Most of the respondents (77.6%) were married while only (22.4%) were single. Cervical cancer is majorly caused by human papillomavirus found in the glans penis of men. Married women are at high risk compared to single women. These findings are in line with [12], report on Human Papillomavirus (HPV) and Cervical Cancer Fact Sheet Fast Facts. Which stated that married women are at higher chances of cervical cancer as opposed to unmarried ladies. Evidence is insufficient to affirm a relationship between occupation and uptake of cervical cancer screening. Most participants (14.5%) said that cervical cancer screening is done in clinics while only (5.0%) did not know anything at all. Many women did not know whereabouts to get cervical cancer services. These findings are in agreement with report put down by Anon, “report of a who consultation cervical cancer screening in developing countries WHO” Women with poor knowledge reported that people suffering from cancer are the only ones eligible for cancer screening plus any lady between 20-49 years. Many women did not know who was eligible for cervical cancer screening. These findings are in line with [13]. Majority of participants had good attitude (11.5%) compared to few (7.7%) with poor attitude who said that cervical cancer screening is time wasting and is expensive. The study saw women that had poor attitude towards cervical cancer screening claim that no one has ever told them about the services. These findings are in agreement with [13]. Women’s unwillingness for screening was attributed to cultural and religious norms. This was expressed in several forms such as better to go to holy water and pray, the lack of desire to disrobe for the pelvic examination and concerns at being examined by male healthcare providers. This is consistent with [14]. Uptake of cervical cancer screening was significantly associated with women that received partner’s support (16.3%) compared to those that did not receive support from their partners (5.6%). This is in line with [15] study on individual and intimate partner factors associated with cervical cancer screening

CONCLUSION

Therefore, from the findings of the study it was concluded that: knowledge, attitude and partner support have a significant association with uptake of cervical cancer screening.

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