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Factors Affecting the Utilisation of Cervical Cancer Screening Services among Women Aged Between 25 and 49 Years in Ishaka Town, Bushenyi District in Western Uganda

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ABSTRACT

Globally, cervical cancer ranks fourth among the most frequent cancers that affect women. Currently, it is estimated that every year 527,624 women are diagnosed with cervical cancer, most of whom are in less developed countries. Meanwhile, 265,672 women die from the disease. In Africa, the disease has the highest morbidity and mortality rates among women aged 15 and above. Eighty-five percent of the 265,672 cervical cancer-related deaths in the world occur in sub-Saharan Africa. In Uganda, cervical cancer ranks as the leading cause of female cancer and is the most common cancer in women aged 15 to 44 years. This study will therefore seek to explore the factors that influence the utilization of cervical cancer screening services by women of reproductive age in Ishaka Town, Bushenyi District in Southwestern Uganda. In a cross-sectional quantitative descriptive study, 150 women aged 25-49 in Ishaka Town, Bushenyi District, were interviewed by answering questionnaires to explore the factors that influence the utilization of cervical cancer screening services. Significant associations between the factors and the utilization of cervical cancer screening were determined using P-Values. The study established that the majority (72%) of the respondents had not undergone cervical cancer screening, most of whom (78%) were in the age group of 25-33 years. The study further established that there was a significant association between the level of education, inadequate knowledge and perception about cervical cancer, and cervical cancer screening services, as well as individual awareness about cervical cancer screening in Ishaka Town, Bushenyi District. The study established that there were significant associations between education level, inadequate knowledge about cervical cancer, and perception and awareness of the need for cervical cancer screening.

Keywords: Cervical cancer screening, women of reproductive age, Human Papilloma Virus, Pap smears, Oncogenes.

INTRODUCTION

Cancer is a disease in which some of the body's cells grow uncontrollably and spread to other parts of the body. Cancer cells can grow in any part of the body [1, 2]. Cervical cancer is the uncontrolled growth of cells in the cervix[3]. It is unique because it can take 10 to 20 years for invasive cancer to develop after mild dysplasia is identified[4, 5]. This slow progression from early lesions to overt cancer provides the basis for early screening, detection, and treatment. It is mainly caused by infection with the oncogenic Human Papilloma Virus (HPV) [6, 7]. HPV is one of the most common sexually transmitted infections (STIs) [8]. Most HPV infections resolve spontaneously within one to two years, but some persist, causing chronic HPV infection [9]. This chronic HPV cervical infection is known to be a high-risk factor for the development of early precancerous lesions if early detection and treatment are not done [10]. Host factors such as early sexual debut (before age 16), closely spaced frequent births, behavioral, and environmental factors are known to facilitate cervical cancer development. Epidemic serotypes of HPV include HPV serotypes 45, 52, 16, 18, 35, and 58, respectively[11]. It has a global distribution from developing to developed countries. Although cervical cancer is almost entirely preventable through vaccination and screening, it continues to be responsible for unnecessary deaths among women worldwide[12]. The World Health Organization (WHO) has called cervical cancer one of the "gravest threats to women's lives" [13] since it is the fourth most common cancer among women globally, with an estimated 570,000 new cases in 2018 [13]. The vast majority of cancer cases occur in low- and middle-income countries (LMIC), with sub-Saharan Africa carrying the highest burden globally [14]. East Africa has the highest age-standardized incidence rates for cervical cancer at 42.7 per

100,000 women per year [15]. Uganda has one of the highest incidence rates for CC in the world with an age-standardized rate of 54.8 per 100,000 women, compared with 6.6 in North America and 5.5 in Australia/New Zealand [16]. Cervical cancer (CC) is the most frequent cancer and the leading cause of cancer-related deaths among women in Uganda [15]. Current estimates indicate that 6413 Ugandan women are diagnosed with CC annually, with 4301 deaths annually attributed to this disease [16]. The age-standardized mortality rate in Uganda is 40.5 per 100,000 women, compared with an age-standardized mortality rate of 6.8 globally [16]. The most oncogenic types of Human Papillomavirus (types 16 and 18) are responsible for nearly all cases of CC. Human Papillomavirus (HPV) 16/18 prevalence among Ugandan women has been estimated at 33.6% [8], highlighting the importance of secondary prevention in this population. CC has a long pre-invasive phase, enabling the detection of precancerous changes by screening before progression to invasive disease. While screening by cytology ("Pap smears") has prevented up to 80% of cervical cancers in high-resource settings [17], this approach is not currently feasible in Uganda due to inadequate infrastructure and a lack of trained personnel [18]. Furthermore, the low sensitivity of cytology necessitates regular (2–3 yearly) screening intervals, which is problematic in Uganda because of poor follow-up, HIV, and limited recall systems [8, 18, 19]. Screen-and-treat" approaches using either HPV testing or visual inspection with acetic acid (VIA) followed by cryotherapy for precancerous lesions are a cost-effective prevention strategy in low-resource settings [20]. Guidelines for cervical cancer screening (CCS) in Uganda advocate a "see-and-treat" approach where women aged 25 to 49 years are screened using VIA and treated with cryotherapy [21, 22]. The guidelines recommend annual screening for HIV-positive women and 3-yearly for all others, but in practice, screening is erratic and frequently determined by the availability of resources[19]. HIV infection increases the chances of cervical cancer in women [23, 24]. HPV testing has been shown in numerous studies to be extremely sensitive and, in research settings, has been shown to be acceptable among Ugandan women [6]. However, it is currently limited to research settings and not yet widely available in Uganda [25].

Globally, cervical cancer ranks fourth among the most common types of cancer, with about half a million new cases and deaths per annum, respectively [26]. About 86% of the deaths occur in developing countries, making it the leading cause of cancer death among women [27]. Uganda's cervical cancer age-standardized incidence rate is four times the global estimate. According to the CDC [28], adhering to the recommended screening guidelines and being immunized per CDC guidelines are important strategies to lower cervical cancer among women. While Uganda lacks a cervical cancer screening policy, the Ministry of Health's strategic plan for cervical cancer prevention and control aimed to reach 90% of Ugandans with information education and communication materials about cervical cancer and to screen up to 80% of eligible women aged 25–49 years [21]. These efforts led to the establishment of cervical cancer screening centers in national and regional referral hospitals, private-not-for-profit, and private-for-profit hospitals. Despite the above efforts, the evidence available so far suggests that cervical cancer services have not been optimally utilized in most regions in Uganda. For example, a recent study conducted in central Uganda found that only 7% of women had ever been screened for cervical cancer [29], while another in Eastern Uganda reported 4.8% [27]. Therefore, there is a need to explore the factors that may be associated with the utilization of cervical cancer screening services.

Methodology

Study design

A quantitative cross-sectional study approach was conducted in order to assess the factors affecting the utilization of cervical cancer screening services among women aged between 25 and 49 years in Ishaka town

Area of Study

The research was carried out in Bushenyi-Ishaka municipality, Ishaka division, Bushenyi District, Southwestern Uganda. It is located 62 kilometers from Mbarara city and has a population of 17,500 people, of which 9,000 are females. Bwegiragye village was purposively selected to represent the whole population.

Study Population

The target population consisted of women aged between 25 and 49 years in Ishaka division, Ishaka town. The accessible population included women between 25 and 49 years who consented.

Inclusion Criteria

It included all women aged between 25 to 49 years who were available at the time of data collection and willing to participate in the study.

Exclusion Criteria

Women who declined to participate in the study, women who were aged more than 49 years or less than 25 years, and women who were very sick.

Sample Size Determination

The sample size was determined using Kish Leslie's formula [30]:

$n = (Za/2)^2 * p(1-p) / e^2$

Where:

n is the required sample size,

p is the approximate prevalence rate for the utilization of cervical cancer screening services among women aged between 25 to 49 years in Ishaka town,

e is the permissible error in the estimate.

For a 95% confidence interval with a 9% prevalence rate (prevalence of utilization of cervical cancer services in Uganda as estimated

by the World Health Organization in 2012) and a marginal error of 5%, substituting into the formula gives us n=150. Hence, the sample size was 150 women.

Sampling Procedure

Bwegiragye village was purposively selected because it is centrally located in Ishaka municipality, has a high population, and due to limited time for data collection. A simple random sampling technique was used to select participants until the calculated sample size was reached.

Dependent Variables

The dependent variable was the utilization of cervical cancer screening services.

Independent Variables

These included awareness, perception, accessibility factors of cervical cancer screening, and socio-demographic factors like age, marital status, occupation, education, and religion.

Data Collection

Interviewer-administered questionnaires were used and were interpreted in both English and Runyankole languages. Two research assistants were trained to help collect data. The researcher used a structured questionnaire, and all participants were asked similar questions, selecting the best alternatives from the options. A pen and paper were used to record the necessary information. The research team obtained assistance from the chairpersons of the selected villages to identify households with women of reproductive age. Interviews were conducted in a secure place to minimize noise and maintain confidentiality.

Data Entry

The data in the questionnaires were checked for completeness, cleaned, and sorted to eliminate obvious inaccuracies and omissions. The data were then encoded and entered into the computer.

Data Analysis

The analysis started with data entry, coding, and cleaning. Data entry into the computer was done using an Excel spreadsheet. Descriptive statistics, such as frequencies, proportions, and rates, were calculated for each variable. Statistical analysis was carried out using the Chi-square test for associations between the dependent and independent variables. If $p<0.05$, the association was considered significant.

Measurement of Variables

The variable "utilization of cervical cancer screening services" was the dependent variable, measured as the proportion of women who had been screened for cervical cancer. The independent variables, including socio-demographic factors, awareness of cervical cancer screening services, perception, and accessibility, were measured in percentages. Specific statistical tests were conducted to determine the relationship between different factors and the utilization of cervical cancer screening services.

Quality Control

To ensure quality control, the researcher conducted a pre-test using 8 questionnaires in Bushenyi town, a nearby town. Data was collected before the actual study to assist in the refinement of the questionnaire where necessary.

RESULTS

The study established that 108 (72%) of the respondents had not undergone cervical cancer screening at all,and this constituted the majority of the study participants while only 42 (28%) of the respondents had undertaken cervical cancer screening.

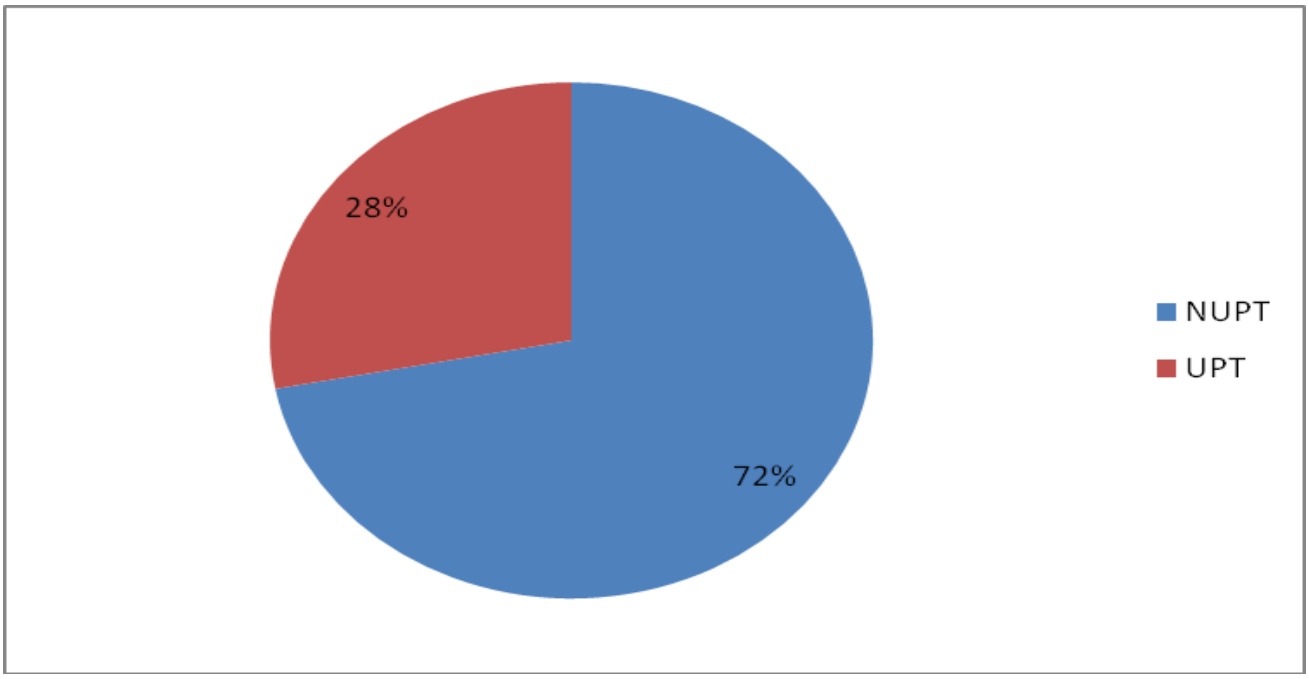

Figure 1: showing the uptake of cervical cancer screening services at Ishaka Town.

Socio-demographic characteristics regarding the utilization of cervical cancer screening servicesin Ishaka Town.
This study sought to establish the socio-demographic characteristics of the respondents; for instance, age, religion, tribe, marital status, occupation, and level of education, which were summarized in Table 1 below.

Table 1: The socio-demographic characteristic of the respondents from Ishaka Town (n=150).

Variable	Frequency	Percentage (%)
Age		
< 36	129	86
> 36	21	14
Religion		
Catholic	45	30
Protestant	63	42
Pentecostal	27	18
Others	15	10

Tribe Nkole		
Bakiga	51	34
Batoro	30	20
Bafumbira	12	8
Banyoro	30	20
Others	09	6
	18	12
Marital status		
Single	54	36
Married	96	64
Highest education level attained		
<Primary	99	66
> Secondary	51	34
Occupation		
Employed	45	30
Unemployed	105	70

Other religions included Seventh-day Adventists and Muslims. Other tribes include; Bakonzo and Baganda.

From Table 1 above, it is evident that the majority of the respondents were in the youth age group (36 and below) 129(86%) and the mean age of the respondents was 33.3 years with a 95% CI of (32.14--34.46)years. Regarding marital status, the majority of the respondents 96 (64%) were married while the singles were 54 (36%) including those who were not yet married, the divorced and the widowed. Furthermore, this study found out that for most respondents, the highest level of formal education attainedwas primary education 99 (66%), while those with secondary and tertiary as the highest level of educationwere 51 (34%). It was also found that the majority of respondents were unemployed (most of these were peasants)105(70%) while a few were employed (had small businesses and some were civil servants) (30%). From a religious perspective, however, many respondents (42%) were Protestants, and also most study participants (34%) were of Banyankole origin. Following the univariate analysis above, bivariate analysis was performed to determine which demographic factor(s) was significantly associated with the uptake of cervical cancer screening services($p<0.05$). These results were shown in Table 2 below.

Table 2: Bivariate analysis for socio-demographic characteristics of the respondents and the uptake ofcervical cancer screening services at Ishaka town (n=150).

Variable	up taken	Not taken	Up taken	Notup taken	P value
≤ 36					
> 36	34	76	38.1	71.9	
	18	22	13.9	26.1	0.177
Marital status Married					
Single	28	64	38.0	54.0	
	24	34	24.0	34.0	0.152
Education level ≤ primary					
≥ primary	22	68	31.8	58.2	
	31	29	21.2	38.8	0.007**
Occupation Employed					
Unemployed	24	30	18.7	35.3	
	28	68	33.3	62.7	0.080

From the bi-variate analysis, in Table 2 above, the variable that was found significantly associated with dependent variable was the highest education level for respondents (p=0.007**). However, Age (p= 0.177),marital status (p= 0.152), occupation (p= 0.080) and distance (p= 0.314), had no bearing on the uptake of cervical cancer screening services (P=0.05).

Individual factors regarding the utilisation of cervical cancer screening services at Ishaka town. The third objective of this study was to establish the individual factors associated with the uptake of cervical cancer screening services at Ishaka town, which included perception and awareness, as expoundedin the subsequent sections below.

Perception

The perception aspect of the individual factors was set to assess the respondents about the understanding of cervical cancer, and how it could be acquired, the age most likely affected, the preventionof cervical cancer, how often one should do screening as well as their knowledge about the signs and symptoms of cervical cancer. The perception of the respondents about cervical cancer was summarized in Figure 2 below.

The perception of the respondents on cervical cancer was ascertained and the respondents, views werepresented as shown in the figure below.

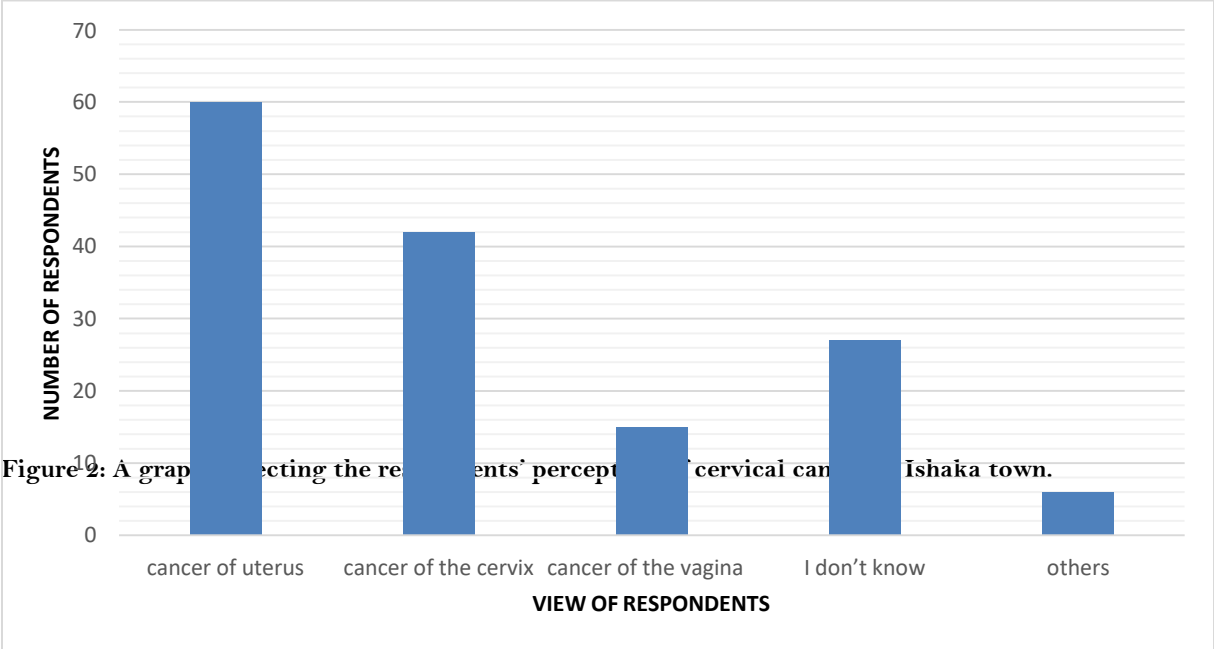

Figure 2: A grap ecting the re ents' percept cervical can Ishaka town.

The study findings established that out of the 150 respondents who participated in the study, 60 (40%) understood cervical cancer as the cancer of the uterus, only 42 of the respondents understood cervical cancer as cancer of the cervix, and 10% understood it as cancer of the vagina. Whereas 27 of the respondents had no idea of what cervical cancer is, five (6) of the respondents understood cervical cancer as cancer ofother body parts like the breast, as reflected in Figure 2 above. When the respondents were further engaged to seek more of their perception of cervical cancer, several opinions were obtained, and these were presented in Table 2 below.

Table 3: Showing respondents' perception of cervical cancer in Ishaka town (n=150).

Perception of respondents on cervical cancer	Frequency	Percentage (%)
How do you think one can acquire cervical cancer?		
Early sexual intercourse	24	16
STI infections	12	8
Smoking	12	8
HPV infection	15	10
Having multiple sexual partners	36	24
HIV/AIDS infection	3	2
Use of family planning (please specify)	9	6
Don't know	33	22
Others. Poor hygiene practices, UTI, infection exposure, fibroids, lacerations during childbirth, uncircumcised men.	6	4
At what age do you think women are most likely to get cancer of the cervix?		
10-25	18	12
25 -35	42	28
Above 60	15	10
Don't know	75	50
Is cervical cancer preventable?		
Yes	**90**	60
No	60	40
If yes, how is cervical cancer prevented?		
Having unprotected sex	22	24.4

Vaccination against Hep B	15	16.7
Cervical cancer screening	18	20
Abstinence from sex	17	18.9
Don't know	16	18
Others (please specify) -Having one man	2	2
If no, why not? (reasons why some respondents thought cervical cancer cannot be prevented)		
It is inherited	30	50.0
Partners are unfaithful	24	40
It is incurable	06	10
How often should a woman do cervical cancer screening?		
At least every 3 years from the age of 20	36	24
At least every 5 years from the age of 18	27	18
At least every 10 years from the age of 25	30	20
At least every year when they become sexually active	24	16
I do not know	33	22
Knowledge on signs and symptoms		
Do you think discomfort or pain during sex could be a sign of cervical cancer?		
Yes	48	32
No	51	34
I do not know	51	34
Do you think that if a woman gets vaginal bleeding between periods should seek cervical cancer screening services?		
Yes	54	36
No	36	24
I do not know	60	40
Do you think a female with persistent smelly vaginal discharge and does not respond to treatment should		

go for cervical cancer screening services?		
Yes	63	42
No	36	24
I do not know	51	34
Do you think vaginal bleeding during sex or after sex is a sign of cervical cancer?		
Yes	48	32
No	39	26
I do not know	63	42
Are there any cervical cancer screening centers you are aware of?		
Yes	72	48
No	45	30
Not sure	33	22

The study found that most respondents (24%) thought that one could easily acquire cervical cancer through having multiple sexual partners, and also early sexual intercourse, (16%). However, a fairly big number (22%) of the respondents did not know how one could acquire cervical cancer, the respondents were further asked to express their opinion about what age they thought women were most likely to get cancer of the cervix as expressed in table 2 above. From the 150 participants that were interviewed, a fairly big number (28%) of the respondents held the idea that women are most likely toget cervical cancer between the age of 25-35, however, the majority (50%) of the respondent did not know at what age a woman was most likely to get cervical cancer. Furthermore, the respondents were interviewed to find out their opinion about whether cervical cancer was preventable or not, as presented in Table 2 above. Regarding whether cervical cancer is preventable or not, 90 (60%) believed it is preventable while only 60(40%) believed it could not be prevented. The study additionally explored the perception of the respondents on how often a woman should docervical cancer screening, and the study findings were also highlighted in Table 2 above.

Most respondents 36 (24%) said at least every 3 years from the age of 20 years, while a fairly big number(22%) of the respondents did not have any knowledge about how often a woman should go for cervical cancer screening. The study also investigated the knowledge of respondents about the signs and symptoms of cervical cancer,such as whether pain and discomfort during sex could be a sign of cervical cancer; where most of the respondents (34 %) did not know while 32 (32%) participants asserted that feeling of abnormal pain and discomfort were signs of cervical cancer. Similarly, from table 2 above, it was shown that most of the respondents (40%) had no idea about the relationship between abnormal vaginal bleeding, and cervical cancer. However, (36%) of the respondents said that vaginal bleeding between periods was indicative of cervical cancer whereas (24%) of the respondents disagreed that this abnormal vaginal bleeding cannot be a sign that one was developing cervical cancer. From Table 2 above, it was also shown that the majority of the respondents 42% thought that vaginal discharge that has a bad smell and does not respond to treatment could be a sign of cervical cancer, however, 24% of the respondents disagreed with this concept while 34% of the respondents were not sureor did not know. Furthermore, table 2 above shows that most respondents 63 (42%) did not know whether vaginal bleeding during sexual intercourse was related to cervical cancer; 48 (32%) of the respondents suggested that it could be a sign, whereas 39 (26%) of the respondents disagreed with this concept.

Awareness of cervical cancer screening services

The awareness component of the individual factor was to assess if the respondents were aware of the cancer cervix screening services, and their responses were presented in Table 4 below.

Table 4: A table showing the level of awareness (as one of the individual factors) about cervical cancerscreening services at Ishaka Town (n=150)

Awareness of cervical cancer screening services	Frequency	Percentage
Are there any cervical cancer screening centers you are aware of in Uganda?		
Yes	71	47.3
No	79	52.7
If Yes, are you aware that cervical cancer screening services are free of charge?		
Yes	39	54.9
No	32	45.1
If Yes, how did you come to know about it?		
- from health talks by a nurse	05	12.8
- Community health talks from VHT.	10	25.6
- Radio broadcast	14	35.9
- From a friend	09	23.1
- from cancer screening medical camp	01	2.6
If No, why?		

- **Had never been oriented about cervical cancer screening.**	25	78.1
- **Because they are no free things**	04	12.5
- **Just thinking/guessing**	03	**9.4**

Majority (52.7%) of the respondents said that, they were not aware of existence of cervical cancer screening services in Uganda and only 47.3% of the respondents were aware about existence of theservices. From table 4 above, it is shown that about (54.9%) of the 71 respondents were aware of free cervical cancer screening services at Ishaka Town and these were then asked from where they got the information and the following were their responses. These 71 respondents said they had got the information from: cancer screening medical camps (2%), health talks by a nurse (12.8%), from community health talks by VHTs (25.6%), Radio broadcast (35.9%), and friends (23.1%). However, (45.1%) of the respondents did not know that cervical cancer screening services were free of charge at the health center because: (78.1%)said they had never been oriented about the availability of free cervical cancer screening services with in Ishaka town (12.5%) said there are no free things, and (9.4%) said they were just thinking.

DISCUSSIONS

Uptake of Cervical Cancer Screening Services

The study's findings revealed that the number of respondents who had undergone cervical cancer screening, despite the screening service being free of charge on a weekly basis at the health center, was too low (28%), compared to the (80%) recommendation by the WHO for effective prevention of cervical cancer [13]. This finding was found to be commensurable with a study conducted by Monteiro et al.[31] in Brazil, where the proportion of the uptake of cervical cancer screening among women attending antenatal clinics was as low as (11%). A similar finding of low (7%) cervical cancer screening uptake was also registered in a study conducted in the central part of Uganda in Masaka [29]. The observed similarity among the studies was brought about possibly by the low level of education among the women. The majority had not received primary education. Another factor observed in these studies that contributed to the low uptake of cervical cancer screening services was a lack of awareness about the existing screening service among health facilities in Ishaka Town. This implies that there is a need for relevant authorities to make policies that will empower women, right from the grassroots (including the uneducated), with the necessary awareness and knowledge about cervical cancer. There is also a need to improve the awareness strategies put in place by the health team in the study area so that the target population's level of awareness about cervical cancer screening is increased.

Socio-demographic Characteristics Regarding the Uptake of Cervical Cancer Screening Services in Ishaka Town

The study examined the effect of age, marital status, distance, occupation, and education level on the uptake of cervical cancer screening services. It was established that a woman's level of education had a significant association with the uptake of cervical cancer screening services ($P<0.05$). This finding was contrary to the study conducted by Fentire et al. [15], which asserted that a woman's marital status (being married) was positively associated with her uptake of cervical cancer screening services. This observation probably translates to the fact that individuals with higher levels of education have easier access and exposure to a sufficient body of information from various sources, which enhances their ability to make informed decisions about their health. This calls for government efforts to increase the girl-child education project, especially in rural communities, so that women are empowered to make informed health decisions. The study also found that employed women were less likely to go for cervical cancer screening compared to their counterparts who were unemployed. This finding was also reflected in a quantitative cross-sectional study conducted in Ghana by Ampofo et al. [32], where housewives were more likely to go for screening than those who were employed. A similar finding was established by another cross-sectional study where employed women found it hard to go for cervical cancer screening because of the nature of their work in relation to the long waiting hours at the healthcare unit [32]. In this study, the age of women was not significantly associated with their decision to go for cervical cancer screening services, although it was observed that women who were less than 36 years of age were less likely to go for cervical screening compared to those above the age of 36 years. This is probably because women in this age group (<36 years) see themselves as being

young and not at risk of contracting cervical cancer. This mindset could be coupled with the low level of education held by the majority of the women.

Individual Factors Regarding the Utilization of Cervical Cancer Screening Services in Ishaka Town

Among the individual factors that the study investigated was the perception that women had about cervical cancer. It was found that 40% of the 150 respondents understood cervical cancer as cancer of the uterus, and 28% understood cervical cancer as cancer of the cervix, which is below the average perception level of 50%. This study further established that inadequate perception about cervical cancer was significantly associated with individual's poor utilization of cervical cancer screening services ($P<0.05$). This was contrary to a cross-sectional study conducted in Nigeria by Hyacinth, where study participants had sufficient knowledge and perception about cervical cancer but did not have adequate utilization of the services [33]. This study indicates that a knowledge gap within the study population about cervical cancer could be a probable indicator of the low utilization of the services in the region, despite it being free of charge at most of the health facilities in Ishaka Town. Meanwhile, it is important to note that several studies, though they acknowledge the influence of perception and knowledge on an individual's decision to undergo cervical cancer screening, do not provide absolute determinants for drawing statistical conclusions on positive uptake of cervical cancer screening. This was evidenced in a study conducted in Ugandan Lira district (northern Uganda) among health workers, the majority of whom were nurses; despite having knowledge about cervical cancer, 81% of the respondents had never been screened [34]. Based on the health belief model, as far as knowledge about health issues is concerned, if an individual's perceived level of susceptibility (perception of being at risk) is low, the chances of that individual acting upon a particular health behavior will be far from actualization. This was evidenced in a study conducted by Mukama et al. [35] in Eastern Uganda, where it was affirmed that women went for cervical cancer screening because they felt at risk of contracting the disease. Therefore, from this study's findings, there is a need for public health and health promotion experts to strategically plan and develop interventions that will effectively raise women's perceived level of susceptibility within the region so that they may act according to matters concerning their health. The study also found a significant association between individuals being aware of the cervical cancer screening services in the health center and the level of uptake of cervical cancer screening ($P<0.05$). Thus, it was established that the majority of the women did not utilize the cervical cancer screening services because they were not aware of its existence at the health facilities in Ishaka Town. This phenomenon was also observed in a study carried out by Olubodun et al.[36] and in another study conducted by Uchendu et al. [37] in Eastern Nigeria, where it was found that women were unaware of cervical cancer screening services at healthcare units. Poor awareness of cancer symptoms, screening and treatment has impeded the management outcomes of cancer and even compel some rural residents to use herbal concoctions in management of cancer. The level of awareness of a health service is one of the profound contributors to an individual's positive drivers toward seeking that particular health service [38-40]. Thus, it is imperative for the health center to come up with measures to scale up community awareness strategies so that the population of that region may be aware of the health services available at the health center for easy accessibility and utilization. Another individual factor that was established to be significantly negatively associated with an individual's uptake of cervical cancer screening was the perceived embarrassment that one would feel while undergoing cervical screening. This factor was also found to be a barrier toward the uptake of cervical cancer screening among women in Kisoro district among Bafumbira, a tribe in Uganda, in a study conducted by Atuhaire [41]. Other studies asserted that the probable contributing factor to this kind of feeling among women is religious and cultural upbringing [42]. These religious and cultural beliefs draw the attention of the different stakeholders.

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