

## **Examining Prevalence and Influential Factors of Cervical Cancer Screening Among Women of Reproductive Age at Fort Portal Regional Referral Hospital in Fort Portal City**

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### **ABSTRACT**

Globally, cervical cancer stands as a pressing health issue for women, ranking as the second most common cancer type among females worldwide. A study conducted at Fort Portal Regional Referral Hospital in Fort Portal City aimed to assess the prevalence and factors impacting the participation of women of reproductive age in cervical cancer screening tests. Employing a cross-sectional descriptive design with quantitative methods, the study utilized a consecutive sampling technique, surveying 96 respondents through self-administered questionnaires. Data analysis involved coding and entry via SPSS 20.1, with findings presented through tables, graphs, and pie charts. Results indicated that only a quarter of respondents (25%) had undergone cervical cancer screening, predominantly opting for Visual Inspection with Acetic Acid (VIA) (58.3%). Notably, a significant proportion of screened individuals (66.7%) hailed from rural areas, and the majority (66.7%) had a parity of 3 or fewer children. Moreover, 58.3% of those screened reported earning more than 400,000 shs per month. Unexpectedly, reluctance accounted for 44.8% of respondents' reasons for not undergoing screening. In summary, despite free accessibility to the service, there's a notably low prevalence of cervical cancer screening. Reluctance and fear associated with the procedure emerged as significant barriers hindering the uptake of cervical cancer screening among the surveyed population.

**Keywords:** Cervical cancer, Reproductive age, Mothers, Women, Human papillomavirus.

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### **INTRODUCTION**

Cervical cancer is a cancer that arises from the cervix and it is due to the abnormal growth of cells that can invade and spread to other body parts [1]. It is caused by persistent high-risk Human papillomavirus (HPV) infection. HPV infection is spread during sexual intercourse. Infection is very common following the onset of sexual activity and up to 80% of adults show serological evidence of previous infection [2]. Cervical cancer has been affecting women since 400 BC when Hippocrates noted that the disease was incurable. In 1928,

Papanicolaou developed a technique that was used for screening. The introduction of the Pap test in the clinical setting faced major challenges both in Canada and the United States, where most Pap smear tests were introduced in Canadian centres as local trials (Patricia A S, 1999). In 1949, David Boyes and Fidler initiated cervical screening in British Columbia as a project to determine whether screening with Pap smear could reduce the incidence and mortality from invasive cervical carcinoma but in 1955, only 3% of the British Columbian women had ever been

screened [3]. Cervical-vaginal screening increased greatly in the 1950s when the cancer societies in Canada and the United States endorsed the Pap smear test as an effective cancer prevention test, and promoted it in their campaigns [4]. In 1962, only 6.3% of Canadian women over the age of 25 were screened in a 12-month period; by 1967, this had increased to 26%. With the gradual adoption of the technique across the country, a reduction in both incidence and mortality from cervical carcinoma was documented the incidence dropped from 21.6 per 100,000 women in 1969 to 10.4 per 100,000 in 1990 and mortality dropped from 7.4 per 100,000 women in 1969 to 2.4 per 100,000 in 1992 [4].

Challenges to the provision of effective care in Uganda include competing health needs, misconceptions about cervical cancer screening, and poor prevention, screening, and treatment infrastructure, particularly in rural areas [5]. This study provides a cross-section of the prevalence and the sociodemographic and socioeconomic factors that influence the uptake of cervical cancer screening tests. Cervical cancer is almost entirely preventable through vaccination and screening, yet it remains one of the gravest threats to women's lives [6]. Uganda has one of the highest cervical cancer incidence rates in the world (54.8 per 100,000) as a result of limited screening access and infrastructure [7]. Globally, cervical cancer is a health concern among women, presently ranking as the second to fourth most common cancer type among women in different parts of the world [8]. An estimated 528,000 new cases of cervical cancer were reported globally, with an estimated 266,000 women dying from this cancer [9]. The cancer grows slowly, begins in the cervix of women, and occurs mostly in women over the age of 30 years [10]. Cervical cancer is an entirely preventable disease as the different screening, diagnostic, and therapeutic procedures are effective. Pap smear has reduced the incidence of cervical cancer by nearly 80 percent and death by 70 percent. The incidence of cervical cancer is steadily

declining in the developed world. It has been estimated that cervical screening prevents around 5,000 deaths every year in the UK alone. [8, 11]. Evidence shows that early detection through cervical pap smears has had a significant impact on the incidence and mortality associated with this cancer in many developed nations including the United Kingdom, the United States, and Australia [12]. Worldwide, over 85% of cervical cancer deaths occur every year in developing countries [13]. This is attributed to inadequate access to effective screening which results in less recognition of the disease during its early stages and higher chances of it developing to advanced stages with poor prospects of treatment [14].

Globally, 570000 new cases of cervical cancer were registered in 2018 and 311000 women died from it in the same year [14]. According to a projection by WHO [15], by 2025, about six thousand four hundred new cases and four thousand three hundred deaths will occur annually if no attempt is made to reduce the scourge. Uganda ranks 14<sup>th</sup> among countries with the highest incidence of cervical cancer, and over 65% of those diagnosed with the disease die from it [16]. Cervical cancer (CC) is the most frequent cancer and the leading cause of cancer-related deaths in Ugandan women [17], and the current estimates indicate that six thousand four hundred thirteen Ugandan women are diagnosed with CC annually and four thousand three hundred one deaths attributed to this disease occur annually [18]. Despite cervical cancer screening services being provided for free at the government health facilities, the baseline lifetime screening rate in Uganda is still very low at 4.8% to 30% among women aged 25 to 49 years [4, 12]. And yet screening by cytology ('pap smears') has prevented up to 80% of cervical cancers in high resource settings [18]. A key goal of Uganda's national strategy for CC prevention and control is to have 80% of eligible women aged 25-49 years screened and treated for cervical precancerous lesions [19]. The prevalence of CC

screening at Fort Portal RR Hospital is not known and the factors influencing the

uptake of cervical cancer screening are not determined.

## METHODOLOGY

### Study design

The study was a cross-sectional descriptive study employing quantitative data collection methods. The researcher selected the above method because it allowed easy collection of data at a single point in time.

### Area of Study

The place of study was at Fort Portal Regional Referral Hospital specifically at the Department of Obstetrics and Gynaecology. It is a government Hospital, located approximately one hundred forty-eight kilometres, west of Mulago National Referral Hospital. The Hospital is along Mugurusi Road in Fort Portal City, Kabarole District in western Uganda.

### Study population

The study targeted women coming for antenatal services and sexually active women aged 25-49, seeking gynaecology health care services at FPRRH.

### Inclusion criteria

All women between the age of 25-49 years seeking gynaecology health care services and mothers attending antenatal care at FPRRH who freely consented and assented to the study, were eligible to participate in the study.

### Exclusion criteria

All nulliparous non-pregnant women below 25 years of age and women above 49 years of age were not eligible for the study. Women aged 25-49 who were unwilling to participate in the study or were mentally ill did not participate in the study.

### Sample size determination

The sample size was calculated using the Kish and Leslie formula [20] for a single proportion as follows;

$$n = \frac{Z^2 PQ}{d^2}$$

Where;

n =sample size.

Z = the value that corresponds to the 95% confidence interval which is 1.96.

P = proportion of women attending antenatal clinic at FPRRH. There was is no

literature on P, so P was conventionally taken to as 0.5.

$$Q = 1-0.5 = 0.5$$

d = Precision of the study. A precision of 10% (0.1) was used which was the standard

$$n = \frac{(1.96)^2 \times 0.5 \times 0.5}{(0.1)^2} = 96.4$$

Therefore, the sample size was 96.

### Dependent variable

To determine the factors influencing the uptake of cervical cancer screening tests among women of reproductive age at FPRRH, Fort Portal City

### Independent variables

i) To assess the socio-demographic factors influencing the uptake of cervical cancer screening tests among women of reproductive age.

ii) To assess the socioeconomic factors influencing the uptake of cervical cancer screening tests among women of reproductive age.

iii) To assess the individual factors influencing the uptake of cervical cancer screening tests among women of reproductive age.

### Sampling procedure

Consecutive sampling technique was used, where every participant meeting the inclusion criteria was selected until the required sample size was achieved which is a form of non-probability sampling method. This was because there was no sampling framework availability for this type of study design especially for the first-time respondents. The researcher interviewed all women aged 25 to 49 years and also women below 25 years who had come for antenatal.

### Data Collection Procedures.

The data was collected by administering a questionnaire to a single participant. Depending on the situation, the researcher conducted a one-on-one interview for respondents who did not know how to read or write, which made it an interaction between the interviewer and the informant. The researcher explained to the respondent the research project, the purpose, and the kind of questions that were asked. Confidentiality

was assured, consent was sought and a consent form was signed. Filling the questionnaire took 10 to 15 minutes. At the end of filling out the questionnaire by the respondent, the researcher thanked the respondent for their cooperation.

#### **Data management**

This involved manual checking for errors and omissions in the filled tools to ensure consistency, completeness, validity, relevancy and accuracy of the data that was collected this was done every day after data collection and every respondent was counted once.

#### **Data analysis**

Data was analyzed using SPSS version 20.1. Data analysis started by allocating codes for each question, tallying, counting frequencies and computing percentages. Tabulation was done and data was put in their respective figures. This was done to facilitate the process for easy analysis and interpretation of the findings. The percentages were further analyzed by establishing the relationship between the independent and the dependent variables where the information obtained was presented using the cross-tabulation method (cross-tabulation analysis) and hence appropriate figures, graphs, and pie charts among others.

#### **The prevalence of cervical cancer screening**

This was determined by the respondents' awareness about cervical cancer screening, participation in cervical cancer

#### **Quality control**

The researcher trained the research assistants prior to data collection. The research questionnaires were first administered to 30 respondents prior to the date of data collection for the purpose of pretesting and ensuring validity.

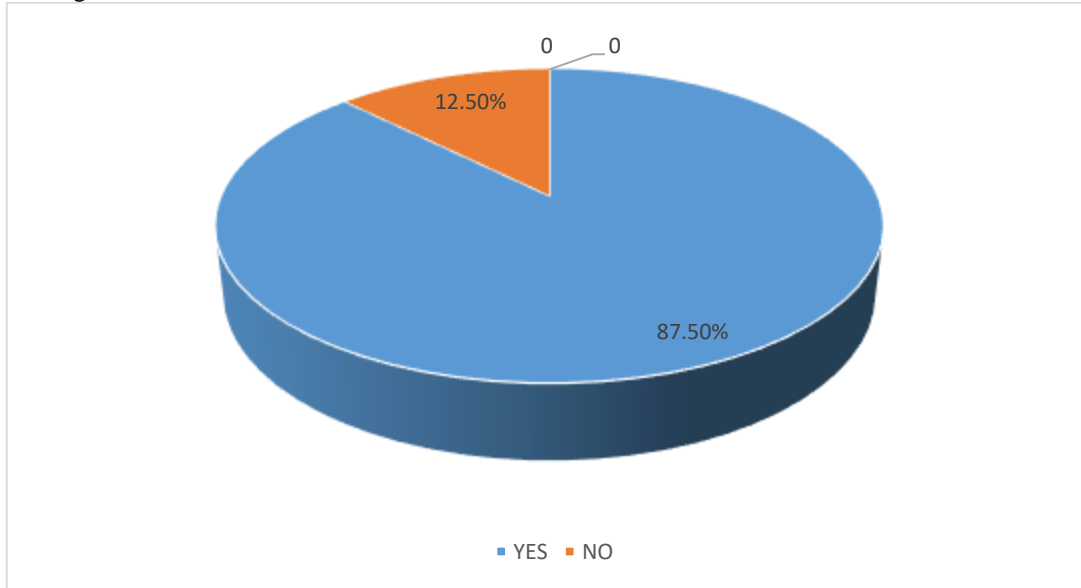
#### **Ethical considerations**

An introductory letter was obtained from KIU-WC and presented to the Executive Director of Fort Portal Regional Referral Hospital to seek permission to carry out my research. All information obtained from the women was not used for any other purpose apart from this research. Women's names were not included anywhere on the questionnaire; serial numbers were used. The research assistants and all the research team members were fully aware of the fact that research ethics are part and parcel of the research and anything that compromises the adherence to the ethical standards equally compromises the validity of the findings. An informed consent was first requested from the respondents prior to the interviews. Confidentiality was assured to the participants concerning the information they offered. The respondents were assured that they could withdraw from participating in the study at any time without consequences.

### **RESULTS**

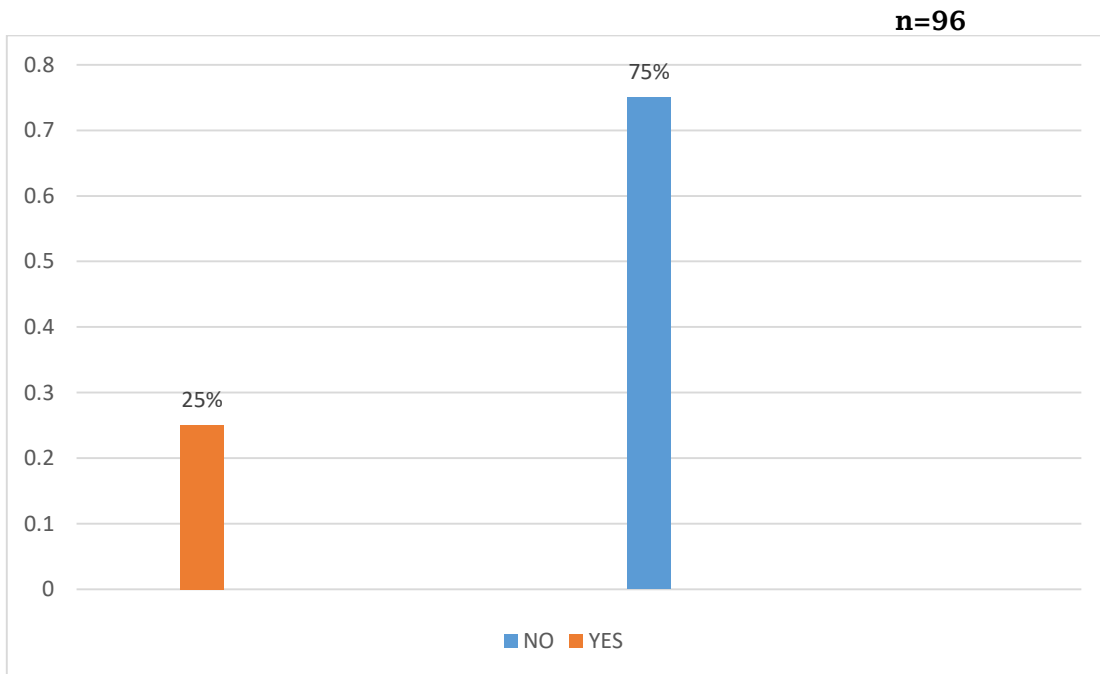
screening and number of times, the screening methods employed by health workers and the number of other women the respondents knew who had performed cervical cancer screening as follows;

n=96



**Figure 1: A pie chart showing respondents' awareness of cervical cancer screening**

The figure above shows that the majority of cervical cancer screening and the minority were not. 84(87.5%) of the respondents were aware and the minority 12(12.5%) were not.



**Figure 2: A bar chart showing respondents who ever had cervical cancer screening**

The figure above shows that the majority of cervical cancer screening and the minority had done cervical screening tests. 72(75%) had not performed cervical screening and the minority 24(25%) had done cervical screening tests.

**Table 1: Showing how often respondents screened for cervical cancer and methods of CC screening used**

n=96

Variable	Frequency(n)	Percentage (%)
<b>Number of times respondents were screened</b>		
Once	16	16.6
Twice	04	4.2
Thrice	02	2.1
4 times and above	02	2.1
Zero times	72	75
<b>Total</b>	<b>96</b>	<b>100</b>
<b>Methods of CC screening used</b>		
Pap smear	04	16.7
Visual inspection of acetic acid	14	58.3
Don't remember	06	25
<b>Total</b>	<b>24</b>	<b>100</b>

The table above shows that the majority 72 (75%) of respondents had not screened for cervical cancer. 16(16.6%) respondents had screened once and 04 respondents had screened twice. An equal number and the minority 02 of respondents had screened thrice and 4 times. The table

also shows that in most 14(58.7%) of the respondents, the visual inspection acetic acid method was used, 06(%) of respondents could not remember the method used and in the minority 04(%) of the respondents, Pap smear was used as in cervical screening test.

**Table 2: Showing women knew had ever screened for cervical cancer**

Variable	Frequency (n)	Percentage (%)
<b>n=96</b>		
<b>Number of women reported</b>		
None	57	59.4
1-4	25	26.0
5 and above	14	14.6
<b>Total</b>	<b>96</b>	<b>100</b>

The table above shows that the majority 57(59.4%) did not know any other women who had screened for cervical cancer, 25(26%) reported a number ranging between 1 and 4, and the minority 14(14.6%) of respondents reported 5 plus women who have ever screened for cervical cancer.

#### **Socio-demographic factors influencing the uptake of cervical cancer screening tests among women of reproductive age.**

Respondents were identified by age, place of residence, parity, level of education, religion, occupation and marital status owing to the nature of the study and interpreting data from the field regarding the prevalence and factors influencing the uptake of cervical screening tests.

**Table 3: Showing the parity and the age range of respondents in comparison with cervical cancer screening**

n=96		
Variable	Frequency (n)	Percentage (%)
<b>Age range</b>		
15-24	27	28.1
25-35	56	58.3
36-49	13	13.6
<b>Total</b>	<b>96</b>	<b>100</b>
<b>Ever screened</b>		
25years and above, ever screened	20	83.3
Below 25 years, ever screened	04	16.7
<b>Total</b>	<b>24</b>	<b>100</b>
<b>Parity</b>		
0-3	78	81.3
4 and above	18	18.7
<b>Total</b>	<b>96</b>	<b>100</b>
<b>Ever screened</b>		
Parity below 4, ever screened	16	66.7
Parity 4 and above, ever screened	08	33.3
<b>Total</b>	<b>24</b>	<b>100</b>

The table above shows that most 56(58.3%) of the respondents were between the ages of 25 and 35, 27(28.1%) were in the age range of 15-24 and the minority 13(13.6%) were aged between 36 and 49. It also shows that of the 24 respondents who had ever screened for cervical cancer, the majority 20(83.7%) were aged 25 and above while the minority 04(16.7%) were aged below 25

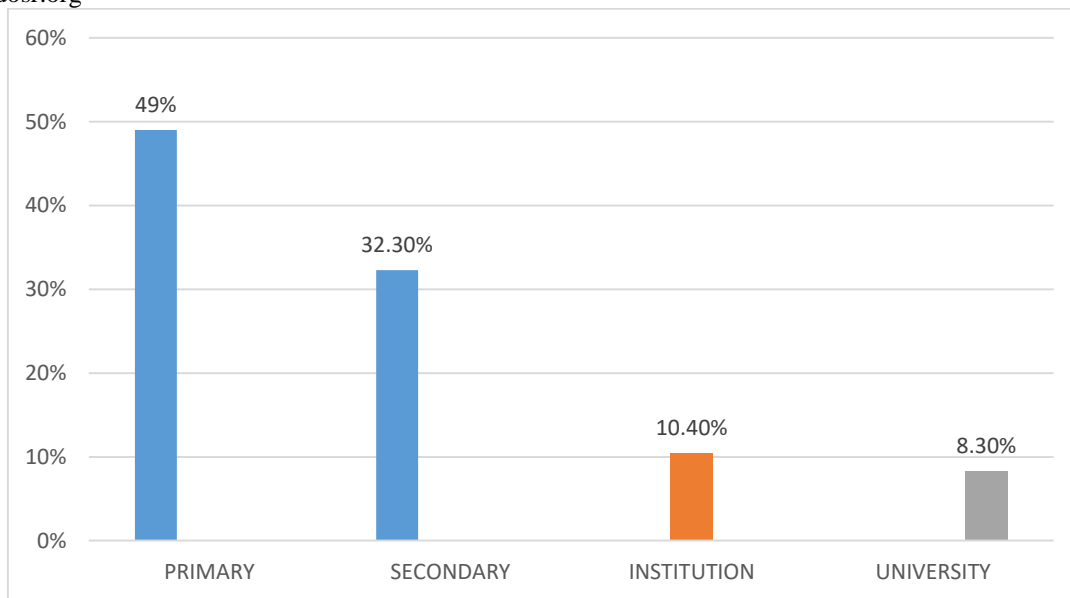
years. The table further shows that the parity of the majority 78(%) of the respondents was 0-3 and the minority 18(18.7%) of the respondents had a parity of 4 and above. And of the 24 respondents who had ever screened for cervical cancer, the majority had a parity of below 4 while the minority had a parity of 4 and above.

**Table 4: Showing the place of residence of respondents in comparison with cervical cancer screening**

n=96			
Variable	Frequency(n)	Screened (n=24)	Percentage (%)
<b>Place of residence</b>			
Rural	57	16	28.1
Urban	39	08	20.5
<b>Total</b>	<b>96</b>	<b>24</b>	<b>48.2</b>

The table above shows that the majority 57(59.4%) of the respondents resided in rural areas while a significant number 39(40.6%) of respondents resided in urban areas. It also shows that the majority 16(28.1%) of the respondents who had ever screened for cervical cancer resided in rural areas while the minority 08 were from urban.

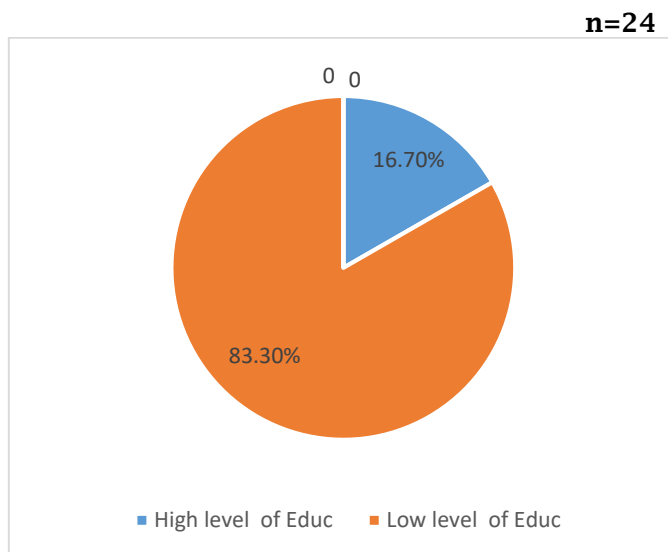
n=96



**Figure 3: A bar chart showing the Education status of the respondents**

The figure above indicates that majority 47(49%) of the respondents studied up to primary level, 31(32.3%) studied up to secondary level, 10(10.4%) studied up to

institution (certificate/diploma) and minority 08(%) studied up to bachelor level.



**Figure 4: Showing the level of education of the respondents in comparison with cervical cancer screening**

The figure above shows that the majority 20(83.3%) of the respondents who had ever screened had a low level of

education while the minority 04(16.7%) of the respondents were of high education status.

**Table 5: Showing the Occupation and Religion of the respondents**

Variable	Frequency (n)	Percentage (%)
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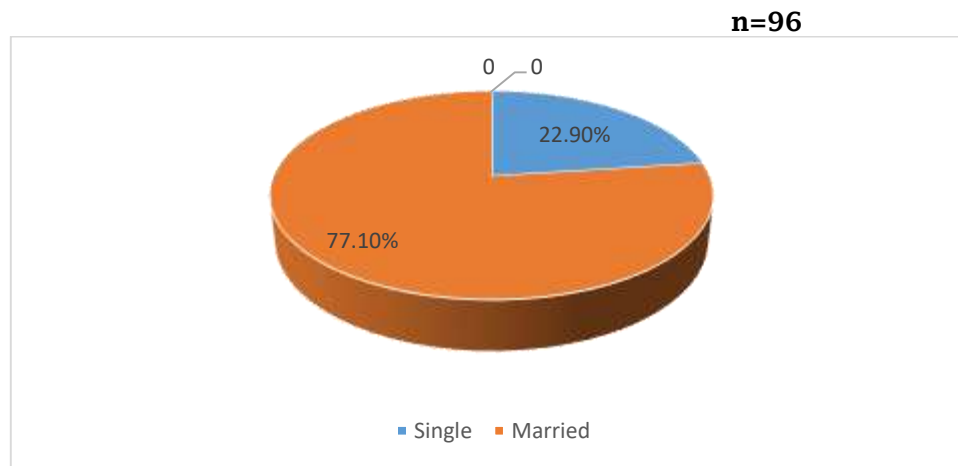
n=96



<b>Religion</b>		
Catholics	45	46.9
Muslims	12	12.5
Protestants	25	26.0
Pentecostal	07	7.3
SDA	07	7.3
<b>Total</b>	<b>96</b>	<b>100</b>
<b>Occupation</b>		
Civil servant	06	06.3
Business	51	53.1
Peasant	39	40.6
<b>Total</b>	<b>96</b>	<b>100</b>

The table above indicates majority 45(%) of the respondents were Catholics, 12(%) were Muslims, 25(%) were protestants while the minority 07(7.3%) were SDAs and Pentecostals. It also shows that the

majority of the respondents were doing Business, 39(40.6%) were peasant farmers and the minority 06(6.3%) of the respondents were civil servants.



**Figure 5: A pie chart showing the marital status of respondents**

The figure above shows that the majority 74(77.1%) of the respondents were

married while the minority 22(22.9%) were single.

**Table 6: Showing marital status versus cervical cancer screening status**

Variable	Frequency (n)	Percentage (%)
<b>Married</b>		
Ever screened	18	32.1
Never screened	56	67.9
<b>Total</b>	<b>74</b>	<b>100</b>
<b>Single</b>		
Ever screened	06	27.3

**n=24**

Never screened	16	72.7
<b>Total</b>	<b>22</b>	<b>100</b>

The table above shows that most 18(32.1%) of the women who had ever screened for cervical cancer were married while the minority 06(27.3%) of the women who had screened for cervical cancer were single.

**The socioeconomic factors influencing the uptake of cervical cancer screening tests among women of reproductive age.**

This covers the respondents' monthly income, their monthly household income,

finance control, health insurance, transport and cervical cancer screening costs, nearest opportunities for screening and respondents' opinions on why some women do come for cervical cancer screening.

**Table 7: Showing monthly income of respondents**

Variable	Frequency(n)	n=96
		Percentage (%)
<b>Personal monthly income</b>		
<200,000ug shs	46	47.9
200,000-400,000ug shs	30	31.3
400,000-600,000ug shs	13	13.5
>600,000ug shs	07	7.3
<b>Total</b>	<b>96</b>	<b>100</b>
<b>Household monthly income</b>		
<400,000ug shs	42	43.8
400,000-1,000,000ug shs	33	34.4
>1,000,000ug shs	21	21.8
<b>Total</b>	<b>96</b>	<b>100</b>
Monthly income >40,000ugx, screened	14	58.3
Monthly income <400,000ugx,screened	10	41.7
<b>Total</b>	<b>24</b>	<b>100</b>

The table above shows that 46(47.9%) of the participants earned less than 200,000ug shillings in a month, 30(31.3%) earned between 200,000 and 400,000ug shillings, 13(13.5%) earned between 400,000 and 600,000ug shillings while the minority 07(7.3%) earned more than 600,000ug shilling per month. It also shows that the household of the majority 42(43.8%) of the respondents was less

than 400,000ug shillings, a significant number of 33(%) of participants' monthly income was 400,000ug and 1,000,000ug shillings and the minority 21(21.8%) of the participants earned more than 1,000,000ug shillings. It further shows that the majority 14(58.3%) of the participants who had ever screened for cervical cancer earned a monthly income of more than 400,000ug shillings while

the minority 10(41.7%) of respondents

earned less than 400,000ug shillings.

**Table 8: Showing finance control in a home**

**n=96**

Variable	Frequency (n)	Percentage (%)
Husband	28	29.2
Personal control	31	32.3
Couple	37	38.5
<b>Total</b>	<b>96</b>	<b>100</b>
Personal control, screened	08	33.3
Husband/couple control, ever screened	16	66.7
<b>Total</b>	<b>24</b>	<b>100</b>

The table above shows that most 37(38.5%) respondents planned for finance as a couple, a significant number 31(32.3%) of respondents controlled their finances and in the minority 28(29.2%) of the respondents, the finances were controlled by their husbands. It also shows that most 16(66.7%) of the

respondents who had screened for cervical cancer were those who planned for their income with their spouses or control was by their husbands while a minority 08(33.3%) of the respondents who had screened had personal control over their finances.

**Table 9: Showing respondents having Health insurance**

**n=96**

Variable	Frequency (n)	Percentage (%)
<b>Have health insurance</b>		
Yes	12	12.5
No	84	87.5
<b>Total</b>	<b>96</b>	<b>100</b>
<b>Insurance covers cervical cancer screening</b>		
Yes	10	83.3
No	02	16.7
<b>Total</b>	<b>12</b>	<b>100</b>

The table above shows that the majority 84(87.5%) of the respondents had no health insurance while the minority 12(12.5%) of the respondents had health

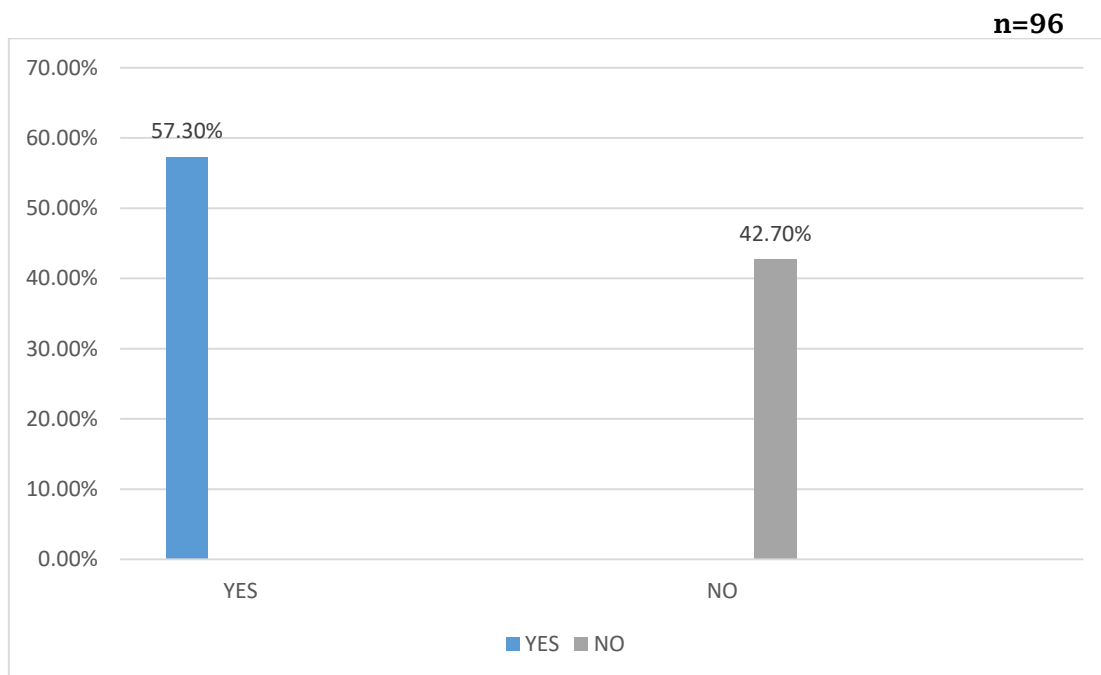
insurance. It also shows that majority 10(83.3%) of the health insurance cover cervical cancer screening while minority 02(16.7%) did not.

**Table 10: Showing the costs of cervical cancer screening and transport**

Variable	Frequency (n)	Percentage (%)
<b>Screening costs</b>		
Expensive	12	12.5
Screening is free	68	72.9
Not sure	14	14.6
<b>Total</b>	<b>96</b>	<b>100</b>
<b>Transport costs</b>		
Affordable	49	51
High	47	49
<b>Total</b>	<b>96</b>	<b>100</b>

The table above shows that the majority 70(72.9%) of respondents indicated that cervical cancer screening is for free, 14(14.6%) were not sure and the minority 12(12.5%) indicated that cervical cancer

screening was expensive. It also shows that 49(51%) of the respondents indicated that transport costs were affordable while the minority 47(49%) indicated that transport costs were high.



**Figure 6: Showing respondents' awareness and utilization of cervical screening services in lower centres**

The figure above shows that the majority 55(57.3%) of the respondents indicated that they had ever attended, witnessed or

heard about screening at their nearby health centres while a significant number 41(42.7%) did not.

**Table 11: Showing limitations to uptake of cervical cancer screening tests  
n=96**

Variable	Frequency (n)	Percentage (%)
Long waiting and long line	10	10.4
Absence of equipment	05	5.2
Absence of health workers	00	00
Reluctance	43	44.8
Limited knowledge/information	23	24
Fear of equipment, presumed to cause pain/trauma	15	15.6
<b>Total</b>	<b>96</b>	<b>100</b>

The table above shows that the majority 43(44.8%) of the respondents were reluctant to do cervical cancer screening, 23(24%) indicated limited knowledge and information about the cervical cancer screening tests, 15(15.6%) indicated fear

of the equipment used and that the test is painful, 10(10.4%) indicated long waiting time on long queues and the minority 5(5.2%) indicated the absence of equipment to use.

## DISCUSSION

### The prevalence of cervical cancer screening

The research study found that the majority 84(87.5%) of the respondents were aware of cervical cancer screening. This finding agrees with a community-based survey conducted in central Uganda, Masaka district on understanding the low levels of CCS, where it was found that 85.8% of the respondents had heard about cervical cancer screening. This study also found out that a minority 24(25%) of mothers had done cervical screening and the majority 16 (16.6%) of respondents had screened for cervical cancer once, even when the knowledge about cervical cancer screening seemed high. The majority 57(59.4%) did not know any other women who had screened for cervical cancer, which shows a low prevalence of CCS. These research findings agree with the study by Twinomujuni et al [21] in central Uganda which found that 7.0% of mothers interviewed had ever screened for CC; most of these (79.3%) had screened once. This low cervical cancer screening rate also agrees with a study done in Brazil

which showed that the proportion of women who had CCS during antenatal was as low as 11%, far below the WHO recommended prevalence of 80% of the female population aged 25-49 years [22]. In Europe, however, the screening rates differ between European Union member states with the highest screening achieved in the United Kingdom, Norway and Sweden where rates reach as high as 80% [23]. The research also showed that in most 14(58.7%) of the respondents, the visual inspection acetic acid method was commonly used in the screening exercise. This was central to the standard that cervical cancer screening should begin at 21 years of age and be done every 3 years with conventional or liquid-based Pap tests [24].

### The sociodemographic factors influencing the uptake of cervical cancer screening tests among women of reproductive age.

This research showed that 56(58.3%) of respondents were aged 25-35. It also found out that the majority of 20(83.7%) of the respondents who had ever screened for cervical cancer were aged 25 and

above. This research finding, to some extent agrees with a study in Jordan by Tekle, et al [25], which indicated that age was a predictor for women's screening practices and the highest incidence of cervical cancer screening existed among women aged 35-44 years. It also agrees with a study by Lymo and Beran,[24] which found that socio-demographic factors such as age, in sub-Saharan Africa, influence cervical cancer screening. This study also showed that the majority of mothers who had ever screened for cervical cancer had a parity of below 4. This contradicts the findings of Quido et al. [26], which found that the utilization of CCS services was directly proportional to the parity of women. The research revealed that the majority 57(59.4%) of the respondents resided in rural areas and that the majority 16(28.1%) of the respondents who had ever screened for cervical cancer resided in rural areas. This contradicted a study by McKinnon B, et al (2011) which found that rural residence is a determinant of non-participation in screening for cervical cancer. The research showed a majority 47(49%) of the respondents studied up to the primary level and that most 20(83.3%) of the respondents who had ever screened had a low level of education. This agrees to some extent with the study findings in Ghana, where women with low education were 2.67 times more likely to have the intention to screen than those with no formal education, and those with high levels of education were 3.16 times more likely to have the intention to screen than those with no formal education [6, 27]. This research also indicated that 45(%) of the respondents were Catholics. This disagrees with the study conducted in Harare-Zimbabwe which showed that cervical cancer screening was less likely in women affiliated with major religions and these religions were Roman Catholic, Protestant, Pentecostal and Apostle [28]. This research however did not assess the relationship between intentions to screen and the religious beliefs of respondents about CCS. The study also found out that the majority 51(53.1%) of the respondents were doing Business. This agrees with

studies conducted by Ebu [28] where employment status and ability to afford the cost of cervical cancer screening were not determinants of intention to screen. This is because CCS services were done for free. However, this research study did not relate employment status and cervical cancer screening. The study also showed that the majority 74(77.1%) of the respondents were married and 18(75%) of the women who had ever screened for cervical cancer were married. This result was consistent with studies done in Malaysia [29] and Portland Jamaica [30] where married women were 2 times more likely to take up a Pap smear compared to unmarried ones. Also, studies in Tanzania [31] found that women who received social support from their husbands were more likely to attend cervical cancer screening.

#### **The socioeconomic factors influencing the uptake of cervical cancer screening tests among women of reproductive age**

The research revealed that most 46(47.9%) of the participants earned less than 200,000ug shillings per month. This result disagrees with the findings of Suzanne Q.A, et al (2020), where the incidence of CCS was found to be higher among women with high-income levels in a study conducted in Jordan.

It also showed that the household income of the majority 42(43.8%) of the respondents was less than 400,000shs. This result contradicts a study in India, that women from lower socioeconomic classes have a higher chance of receiving a Pap smear [31]. It further revealed that the majority 14(58.3%) of the participants who had ever screened for cervical cancer earned a monthly income of more than 400,000ug shillings. This agrees with Black et al. [1] who stated that those whose households earned more than 40 dollars per month had a significantly higher intention to screen for cervical cancer. The research also found out that most 37(38.5%) respondents planned for the finances as a couple, and most 16(66.7%) of the respondents who had screened for cervical cancer were those who planned for their income with their spouses. This is contrary to the finding of

Nyamambi et al. [32] in Zimbabwe, where it was stated that financial independence among women was associated with the uptake of cervical cancer screening. The research also revealed that the majority 84(87.5%) of the respondents had no health insurance and most 10(83.3%) of the health insurance covered cervical cancer screening. This in part agrees with a study on barriers to the uptake of CCS and treatment among rural women of Ghana where the costs of screening coupled with low levels of income and lack of funding constrained screening and treatment of cervical cancer [33]. The research showed that the majority 70(72.9%) of respondents indicated that cervical cancer screening is free. This is consistent with different studies conducted in developing settings which showed that the ability to afford cervical cancer screening costs did not result in CCS intention [33]. The study also showed that 49(51%) of the respondents indicated that transport costs were affordable. This

finding was contrary to the findings by Black et al. [1] that financial costs related to CCS were a barrier for women in four included studies, and related either to associated transport/food costs. The research also revealed that the majority 55(57.3%) of the respondents indicated that they had ever attended, witnessed or heard about screening at their nearby health centres. This disagrees with the study findings by Nwabichie et al. [30] where distant health facilities were a limitation to the uptake of cervical screening tests. The study revealed that the majority 43(44.8%) of the respondents were reluctant to do cervical cancer screening. This disagrees with the findings by Binka et al. [34] in a study on barriers to the uptake of CCS and treatment among rural women of Ghana, the costs of screening coupled with low levels of income, lack of funding, and access to screening facilities constrained screening and treatment of cervical cancer.

## CONCLUSIONS

There is adequate awareness of cervical cancer screening among women of reproductive age. However, there is inadequate knowledge of the purpose of CCS for improving morbidity and mortality. Sociodemographic factors such as age, level of education, marital status, parity, place of residence, and religion

influence the intention to perform CCS. The provision of CCS services for free as well as personal control of finances (earnings) does not increase the intention to screen for cervical cancer. Reluctance, transport costs, and fear of the procedure declined the uptake of cervical cancer screening.

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