PRACTICE OF WOMEN AGED 25-49 YEARS IN RELATION TO CERVICAL CANCER SCREENING IN ENTEBBE MUNICIPALITY, WAKISO DISTRICT, UGANDA. A CROSS-SECTIONAL STUDY .

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Abstract

Background:

Cervical cancer is the most common cancer among Ugandan women of reproductive age. Unfortunately, despite the evidence of methods for prevention, most of the women remain unscreened. In addition, current estimates indicate that 6,413 Ugandan women are diagnosed annually with 4301 deaths. The main purpose of this study was to investigate practice in relation to Cervical Cancer Screening among women aged between 25-49 years in Entebbe Municipality, Wakiso district.

Method:

This descriptive cross-sectional study assessed practices in relation to Cervical Cancer screening among women aged between 25-49 years in Entebbe Municipality, Wakiso District; Proportionate sampling was used to select 246 participants from each division for interviews. Interviewer administered questionnaire was used to collect data from the study participants. Collected data was cleaned, coded, and entered in MS Excel spreadsheet 2013 and it was then exported to EPI- INFO Version 7 statistical software for Windows for analysis. The study findings were then presented using tables, graphs, and charts

Results:

Only 17.07% of Women in Entebbe Municipality had screened for Cervical Cancer. 76.7% screened only once, 38.88% screened because of awareness that is created, and 30% screened during outreaches.

Conclusion:

Cervical cancer screening is still low among women in Entebbe Municipality thus leading to poor actual practice.

Recommendation:

There is a need to further educate women and the general public on the availability and need for Cervical Cancer screening.

Keywords: Cervical cancer, Screening, Human papillomavirus, Uganda, Submitted: 2023-02-18
Accepted: 2023-03-10

1. Background

Cervical cancer is still the fourth most common cancer among women and a major cause of death globally and the burden of the disease is high-

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est in low-income regions, especially sub-Saharan Africa(Bray, Parkin, et al. 2022)

The incidence of cervical cancer in SSA, especially in Eastern and Western Africa, is the highest in the world. Countries with SSA generally have a high prevalence of human papillomavirus (HPV), the virus responsible for most cases of cervical cancer, and other risk factors including high human immunodeficiency virus (HIV) prevalence(Ngcobo, Jaca, et al. 2021)

According to the GLOBOCAN data of 2018, the incidence of cervical cancer is 563,847 new cases worldwide, of which 52, 633 occur in Eastern Africa (Ruddies, Gizaw, et al. 2020). In addition, cervical cancer incidence has dramatically decreased in resource-rich regions due to the implementation of universal screening programs but it remains one of the most common cancers affecting women worldwide.

The vast majority of cervical cancer-related deaths are among women that have never been screened. Cervical cancer screening remains very low across several countries in SSA because of low levels of awareness, challenges with health-seeking behavior, and health system barriers(Shastri, Temin, et al. 2022)

Uganda ranks 14th among countries with the highest incidence of cervical cancer, and over 65% of those diagnosed with the disease die from it(Auma 2021)

Cervical cancer screening rates in Uganda are very low and the baseline lifetime screening rate for cervical cancer in Uganda is reported to be between 4.8% and 30% and the majority of women are identified at an advanced stage(Teixeira, Vale, et al. 2022). In addition, a study in two districts in Eastern Uganda found that only 4.8% of women aged between 25 and 49 years had ever been screened for cervical cancer, and most had been screened owing to symptoms associated with cervical cancer and symptom-based screening contributes to delays in diagnosis. Further still, a study in Northern Uganda found that most women with cervical cancer were diagnosed at stages III (45%) and IV (21%)(Obol, Lin, et al. 2021)

There are insufficient data concerning cervical cancer screening for Entebbe Municipality in Wakiso district and according to the HMIS-Cancer screening register, Entebbe General Hospital only 20% of women have screened in the last 3 years. Further, still according to the Rotary outreach register in collaboration with Entebbe Hospital, only 165 women screened in 2017 against women of reproductive age making a population of 16150 (Entebbe Municipal Council Statistical report 2019)

The low turn-up according to the figures above reflects the dare need to undertake this study to ascertain the practices of women in relation to Cervical Cancer Screening in Entebbe Municipality considering that the screening services are available but underutilized.

2. Methodology

2.1. ***Study design***

The study was cross-sectional and descriptive in nature. The analysis was quantitative. The cross-sectional design is defined as a research design where data is obtained from a range of a particular group of subjects at one point in time (Bryman & Bell, 2007). This approach was chosen because it is considered appropriate for generalizing the findings over the study population within a cost-effective time.

2.2. ***Study Area***

The study was conducted in Entebbe Municipality situated in Wakiso District, approximately 44 kilometers (27 miles) south of Kampala. The municipality is located on a peninsula into Lake Victoria, covering a total area of 56.2 square kilometers (21.7 square miles), out of which 20 km2 (7.7 square miles) is water and consists of two divisions (A and B).

2.3. ***Target Population***

The target population comprised women (25-49 years).

2.4. ***Inclusion Criteria***

Having consented voluntarily Participants aged 25 to 49years

2.5. *Exclusion Criteria*

Very sick participants
Non-Study Population

2.6. *Study Population*

All women aged 25 to 49 years who are residents of Entebbe Municipality Wakiso District

2.7. *Sampling method and Sample Size*

2.7.1. *Sampling procedures*

Women of reproductive age have a population of about 16150 which is 23% of the total population of Entebbe Municipality in divisions A and B (Entebbe Municipal Council Statistical Annual Report 2018-2019).

Proportionate sampling was used to select participants from each division for interviews. Proportionate sampling is a sampling strategy (a method for gathering participants for a study) used when the population is composed of several subgroups that are vastly different in number. The number of participants from each subgroup is determined by their number relative to the entire population. A list of households with females in the required age bracket for each division was obtained from the division leaders (Local Council 1 chairperson and VHTs). Using this list, computer-generated random numbers were assigned to households and picked until the division reached its proportion on the sample size. Where a household had more than one eligible female, simple random sampling was to be done at that level by lottery method whereby pieces of paper were mixed with only one of them having a yes and the rest no, and the women were required to pick at random. The one who picked yes was the one to participate in the study.

2.7.2. *Sample Size*

The sample size for the survey was estimated using Leslie Kish (1965) formula with precisions of +/- 5% at a 95% confidence interval.

$$n = \left(\frac{Z^2_{\alpha/2} * P * Q}{e^2} \right)$$

Z 2 = Standard value (1.96)

P = Proportion of success (20% screening rate for Entebbe Municipality according to HMIS-Cancer screening register Entebbe general Hospital)

Q = Proportion of failure (1-P)

e2 = Marginal error (0.05)

Therefore

n= 1.962 8*0.2*0.8/0.052

n = 246 participants

The total population of Entebbe Municipality was 70219 and women 25 to 49 years makeup 23% of that total population (Entebbe Municipal council statistical report 2019).

Therefore:

23/100*70219 = 16150 total women between 25 to 49years in Entebbe Municipality

Division (A) proportion of the population is 56.2% (Entebbe municipal council Statistical report 2019)

Division (B) Proportion of the population is 43.8% (Entebbe municipal council Statistical report 2019

Proportion of Division A = 56.2/100* 246 = 138 participants Proportion of Diversion B = 43.8/100*246 =108 participants

Total participants = 138+108 = 246paticipants in both divisions.

2.8. *Method of data collection (techniques and tools)*

Interviewer administered questionnaire was used to collect data from the study participants. The interviewer-administered questionnaire mainly had close-ended questions. The questionnaire was administered at the respondent's home.

2.9. Validity and reliability of the tools proposed.

Content validity was established by extensive literature review, consulting with the research advisor, subject experts, and peer review. The tool was in but was also translated into the local language Luganda for use with participants that preferred the local language. The reliability was maintained by pretesting the Interviewer administered questionnaire in Katabi town council on 10 respondents to ensure clarity and consistency, and that all questions and instructions are very clear.

2.10. Data processing and analysis

Collected data was cleaned, coded, and entered in MS Excel spreadsheet 2013 and it was then exported to EPI- INFO Version 7 statistical software for Windows for analysis. The study findings were then presented using tables, charts, graphs, and percentages and frequencies were used to analyze data in this section.

2.11. Ethical considerations in the proposed research

Ethical clearance was obtained from REC-HAUREC under the Uganda National Council of Science Technology (UNCST). A research introduction letter was also obtained from the FHS Uganda Martyrs University.

The participants were given a full explanation of the purpose of the study, assurance about the confidentiality of the information given, and assurance that participation would be optional. Persons selected to participate in the research were informed about the purpose of the study and their written informed consent was obtained.

Research assistants ensured privacy and confidentiality while administering the questionnaire. The names of respondents were not recorded and the information collected was kept confidential.

3. Results

Overall regarding the practices in relation to Cervical cancer screening, out of the 246 participants (17.07% n=42) had screened for Cervical Cancer, and (82.93%, n=204) had never screened as presented in the pie-chart below

4. Discussion:

4.1. Practice of women in relation to Cervical Cancer Screening.

In this study, 17.07% of women had undergone screening. These results are comparable with the study conducted in Nigeria by (Nwankwo, Aniebue, et al. 2011) about cervical cancer screening among urban and rural Nigerian women which found that only 4.2% had ever done Pap smear test was an indicator that Cervical Cancer screening is not practiced to the expectations and many women present with late-stage disease.

In a study in Onitsha, a metropolitan city in Anambra, Southeast Nigeria, only 1.8% of respondents had done a cervical screening test (Olubodun, Odukoya, et al. 2019). This is similar to the findings of women of Entebbe Municipality with 17.07% who have screened. This can be explained due facility unawareness, low knowledge, and no interest A

In a study conducted among women in Taraba, North-East Nigeria 45.2% of the women regularly engaged in screening and other prevention practices which is contrary to this study with 17.07% who have screened(Rimande-Joel and Ekenedo 2019)

In this study (14.3%) of participants screened using Visual Inspection with Acetic Acid (VIA This result is similar to studies conducted in Western Kenya (11%) (Swanson, Ibrahim, et al. 2018). This similarity might be explained that Pap smear is the most common method used in Entebbe General Referral hospital and in public facilities of Western Kenya

In addition, low uptake of cervical cancer screening was however, also observed in a study of Olusosun, a commercial and residential area of Lagos where only 5% of the female respondents had undertaken a pap smear (Wright, Aiyedehin, et al. 2014). Similarly, for Entebbe Municipality with 17.07% of the small number that had screened having done a Pap smear test, this could be due to unawareness and fear of the outcome.

Table 1: Study participant characteristics

Factor	Level	FREQUENCY (%) n=246
Age(years)	25-30 31-35 36-40 41-49	124(50.41) 48(19.51) 40(16.26) 34(13.82)
Education	No education Primary Secondary Tertiary Other(Specify)	11(4.47) 54(21.95) 128(52.03) 44(17.89) 9(3.66)
Marital status	Single Married Co-habiting Separated Others(Specify)	68(27.87) 150(61.48) 6(2.46) 17(6.97) 3(1.23)
Religion	Catholic Anglican Moslem Pentecostal SDA Others(Specify)	81(33.06) 44(17.96) 40(16.33) 62(25.31) 4(1.63) 14(5.71)
Employment	Employed full time Employed part time Unemployed Self employed Housewife Others(Specify)	53(21.54) 15(6.10) 45(18.29) 89(36.18) 34(13.82) 10(4.07)
Number of births	None 1 child 2-4 children 5 and above children	37(15.04) 56(22.76) 120(48.78) 33(13.41)

In Tanzania, a cross-sectional study sampled 512 primary school teachers; only 21% had been screened for cervical cancer among women aged 20-39 years(Kileo, Michael, et al. 2015). This is consistent with Women of Entebbe Municipality aged 25 to 49 years with 17.07%. This might be the issue of low knowledge and poor attitude among others

A study conducted by (Aswathy, Quereshi, et al. 2012) reported some factors that contribute women not to going for screening including 15.1% no time, no money, and psychosocial factors 10.2% included lack of interest and fear of the procedure. Similar results for Entebbe Municipality included 16% fear of the outcome, fear of the cost 9%, no knowledge 24%, facility unawareness 21%, and no interest 23%. Therefore, this implies that factors that constrain women from going to screening are somehow similar but in different proportions.

A study conducted by (Oche, Kaoje, et al. 2013) in Sokoto Nigeria found of the 220 study subjects only 22 (10%) had ever done the screening test and of these 19 (86.4%) had done it only once while only one person 4.5% had done the test thrice. Of the 22 respondents who had undergone the screening test, 68.2% of them did it within the last 3 years. 17 (77.3%) of the study subjects did the test voluntarily without anybody prompting them or having any signs or symptoms of the disease thus generating the perspective of women concerning the practice of Cervical cancer screening. This is slightly different for Entebbe Municipality where 13.9% tested more than two times, 9.3% tested twice and 76.7% tested once.

5. Limitation:

This study was quantitative in nature and did not give an in-depth understanding of why the Knowledge, attitude, and practice of the participants are as they are. All the same, it generated insightful information on areas where there is a need for improvement to raise the uptake of cervical cancer screening in Entebbe Municipality. Future studies could go beyond this descriptive study to explore qualitatively the knowledge, attitude, and practice of women in relation to cervical cancer screening.

6. Conclusion

There is a clear need among women's health care providers for education regarding cervical cancer etiology, and risk factors and for training in low-tech, low-cost screening methods.

The focus should be put on training health care providers extensively on cervical cancer and its

Table 2: Practice of Women aged 25-49years regarding Cervical Cancer Screening

ITEM	FREQUENCY (%)
How many times have you gone for cervical cancer screening	
1 time	33 (76.7%)
2 times	4 (9.3%)
>2 times	6 (13.9%)
Why have you not gone for screening?	
No opportunity	14 (7%)
Fear of the outcome	32 (16%)
No interest	46 (23%)
Fear of cost	18 (9%)
No knowledge	49 (24%)
Facility unawareness	42(21%)
Where did you screen?	
Entebbe general hospital	15 (45%)
Mulago hospital	3 (9%)
Outreaches	10 (30%)
Katabi health centre	3 (9%)
Mengo hospital	2(6%)
Which method of screening did you use	
pap smear	36(85.7%)
visual inspection	6 (14.3%)
Were you charged money for cervical cancer screening	
Free	33(82.5%)
20000	1(2.5%)
30000	1(2.5%)
40000	2(5%)
60000	2(5%)
100000	1(2.5%)
What influenced you to go for cervical cancer screening	
Family	14(32.56%)
Health care provider	6(13.95%)
Awareness	15(34.88%)
Symptoms	5(11.63%)
Free service	3(6.98%)

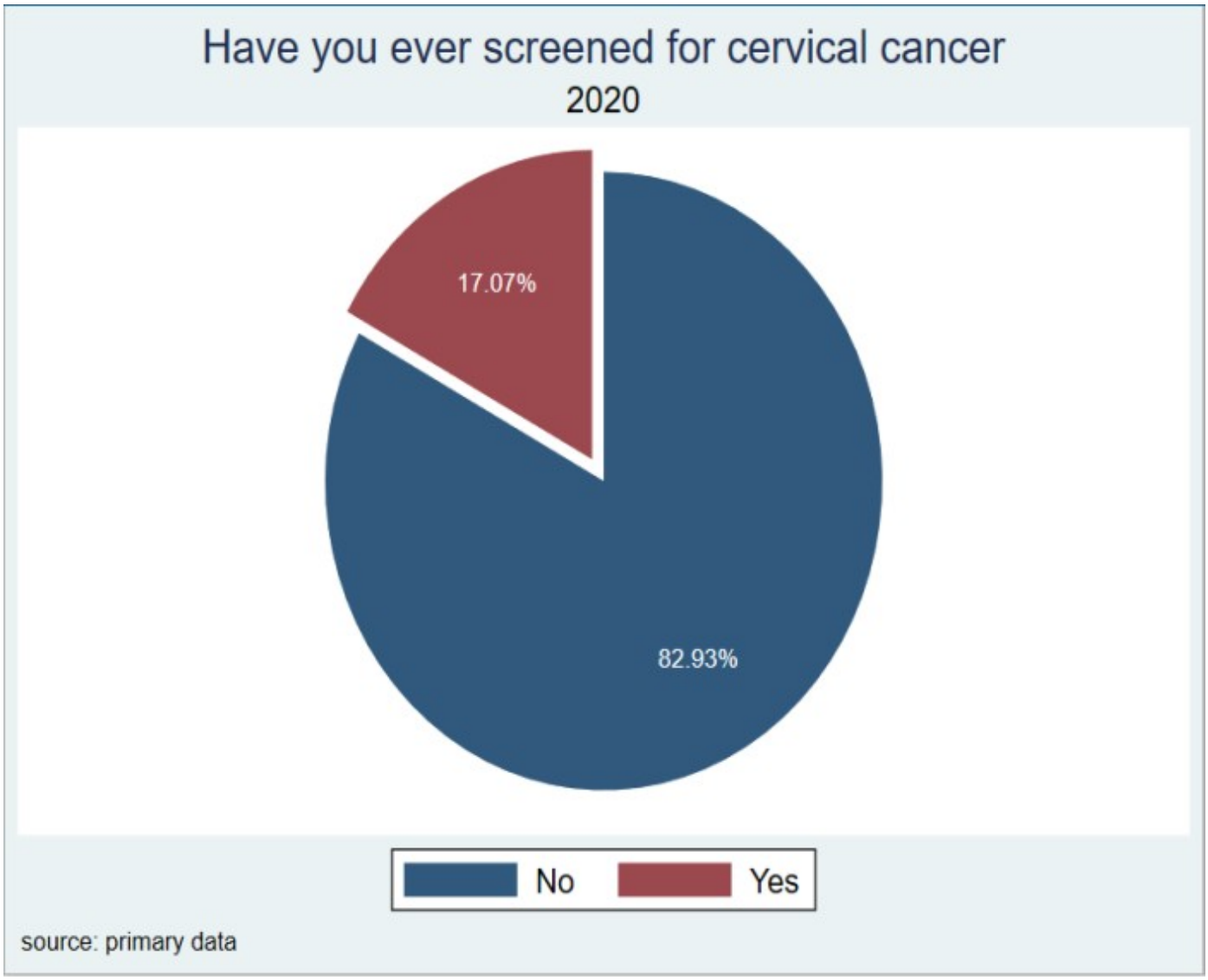

Figure 1: showsparticipants who have ever screened for cervical cancer

screening since they are the primary source of information among the population in Entebbe Municipality.

Need to sensitize the general population to the screening sites/ facilities, screening methods, and signs and symptoms.

7. Recommendation:

In this study majority of women had poor practicing behavior regarding cervical cancer screening. Therefore the Ministry of Health through the health professionals of Entebbe Regional Referral Hospital should sensitize and also include such information in their health education materials and packages as they deliver Health education to clients at MCH clinics and this will improve the practice of cervical cancer screening

8. Acknowledgement:

We are grateful to the participants of the study and data collectors for performing the interviews.

9. List of Abbreviations:

CC: Cervical cancer
HIV: Human immunodeficiency virus
HPV: Human papilloma Virus
VIA: Visual inspection with acidic acid

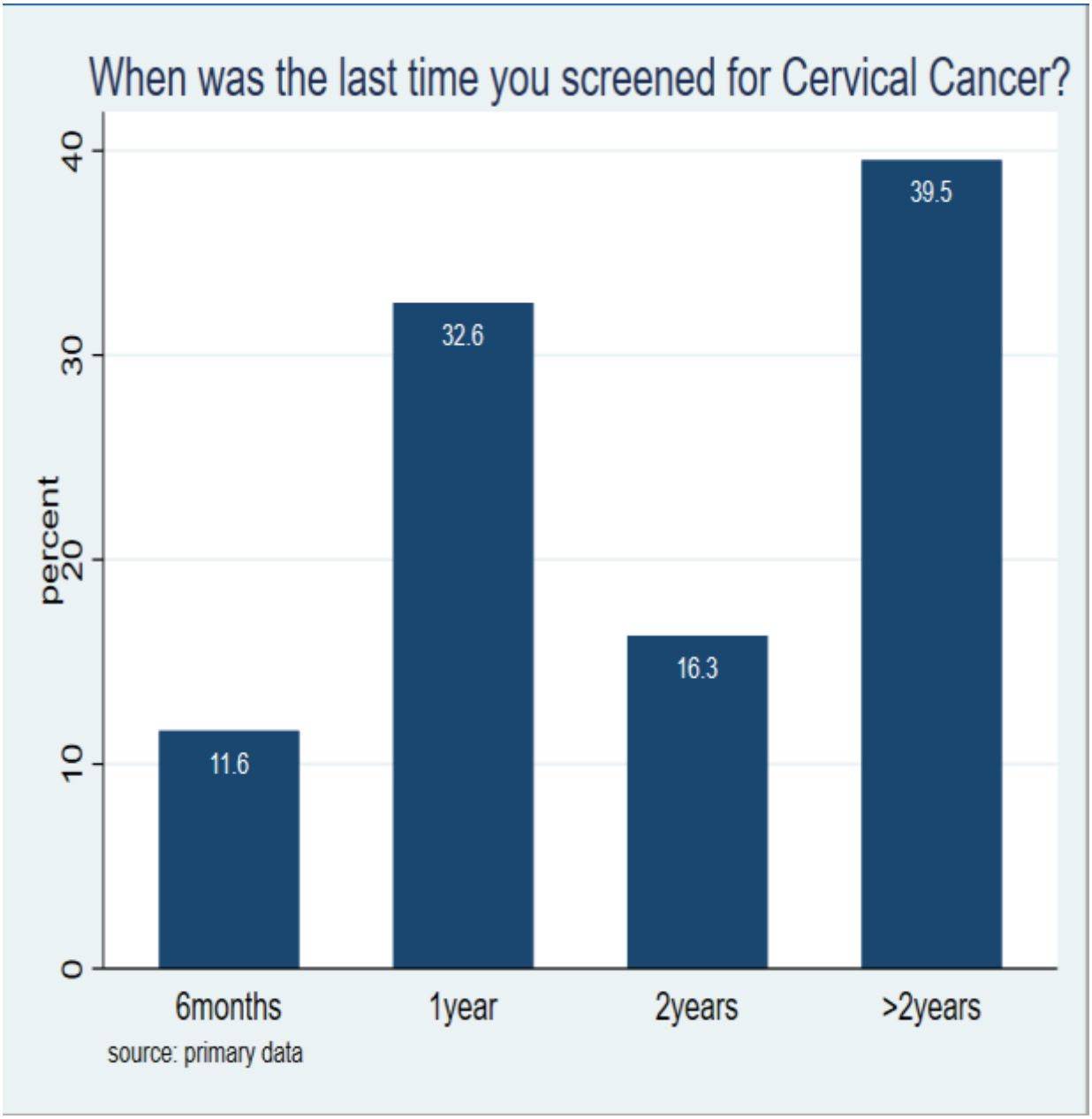

Figure 2: Shows the number of times participants ever screened.

VHT; Village Health Teams

WHO: World health organization

UNCST: Uganda National Council of Science Technology

HMIS; Health Management Information System

CCS: Cervical Cancer Screening

REC: Research Ethics Committee

HAUREC: Hospice Africa Uganda Research and Ethics Committee

10. Source of funding

This research was sponsored by the Medical Research Council & London School of Hygiene and Tropical Medicine. The funders had no role in the study design, data collection, analysis, the decision to publish, or the preparation of the manuscript.

11. Conflict of interest

None

12. Publisher details:

Publisher: Student's Journal of Health Research (SJHR)
(ISSN 2709-9997) Online
Category: Non-Governmental & Non-profit Organization
Email: studentsjournal2020@gmail.com
WhatsApp: +256775434261
Location: Wisdom Centre, P.O.BOX. 148, Uganda, East Africa.

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March 26, 2023

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