

## Factors Associated with the Uptake of Cervical Cancer Screening Among Women of Reproductive Age in Homabay County, Kenya: A Case of Kanyadhiang Sub Location

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### Abstract

Cervical cancer is the leading cause of deaths in developing countries compared with other forms of cancers. Screening for cervical cancer remains the most effective way for early detection and its management. The main aim of this study was to identify factors associated with cervical cancer screening among women of reproductive age in Kanyadhiang Sub location. A descriptive cross sectional study with interviewer administered questionnaires was conducted on 74 women of reproductive age selected through multi stage sampling method. The largest population of the respondents was composed of the married women, educated up to secondary level. Apart from the health care providers, most respondents obtain their information from media especially radio and television (60.81%). Despite a large population being aware only 39% women of Kanyadhiang sub location have ever been screened for cervical cancer which indicates a low uptake. Although the highest number is aware of the services, majority don't seek cervical screening services and this need a multi-agency approach for initiation of programs that will promote uptake of this essential service as a means of reducing morbidity and mortality associated with cervical cancer. There is a need for community based health education programs that will help in increasing awareness on cervical cancer screening services.

### Introduction

Cervical cancer is the second commonest cancer in women globally and commonest in developing countries cancer among women of reproductive age globally [1]. Cervical cancer is estimated to contribute to about 12% of the cancers in women [1]. Creating awareness on cervical cancer screening services has been found to promote early detection of cervical cancer hence mitigating its progression [2]. Burden of cervical Cancer seems to be increasing in developing countries as well developed countries showing a significant decline in its morbidity and mortality [3]. This is attributed to lack of screening services and financial constraints associated with these services among women in the developing countries [3]. There is lack of or poor organization of screening services on cervical cancer in developing countries in the world and this has led to increase in deaths associated with cervical cancer [4].

Providing screening opportunities and creating awareness for cervical cancer is indeed one of the most effective way of promoting access and utilization of these services. Screening is an individual's decision that is reached upon self-perception and deliberations on the importance of such services [4].

Most African countries including Kenya have limited cervical cancer screening and treatment programs [5]. In Kenya, cervical cancer accounts for 20% of reproductive cancers in women [6]. It is estimated that in Kenya, the risk of getting cancer before the age 75 years is 14% while risk of dying of cancer is estimated to be 12%. This is expected to be higher if the stage of cancer is advanced [6]. This underscores the importance of identifying barriers and facilitators of cervical cancer screening in Kenya. The objective of this study was to assess factors that are associated with uptake of cervical cancer

screening in kanyandhiang Sub location in Homabay County, Kenya (Table 1).

### Materials and Methods

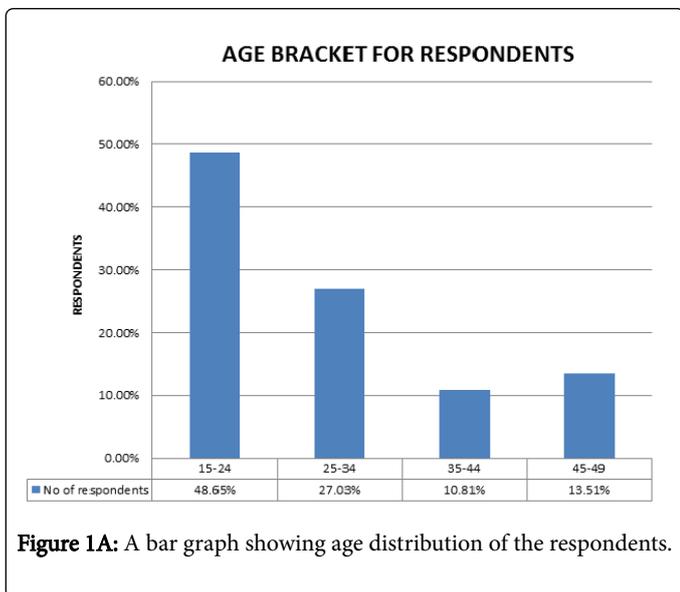
This was descriptive cross-sectional study involving women of reproductive age in Kanyadhiang sub location, which is in Homabay County, Kenya. Study population included women of reproductive age (15-49 years) residents of Kanyadhiang sub location (Figures 1A-1E). Multi stage sampling method was used where kanyandhiang sub location, which has nine villages was subdivided into four clusters and one village from each cluster was selected through simple random sampling. The selected villages included Nyangajo from cluster A, Ng'oché from cluster B, Rairi A from cluster C, and Simbi from cluster D. The participants were recruited from households with the assistance from village elders. Data was collected through a semi structured, interviewer administered questionnaire designed in English language. Translation to local dialect was availed for those who didn't understand English. The tool was pre-tested in upper Kakwajuok sub location to ensure clarity, validity and reliability of the data collection tool. Adjustments and modification of the data collection tool were done after pretesting session.

### Ethical consideration

Permission to collect data was obtained from the area chief and consent obtained from all the respondents who participated in a study.

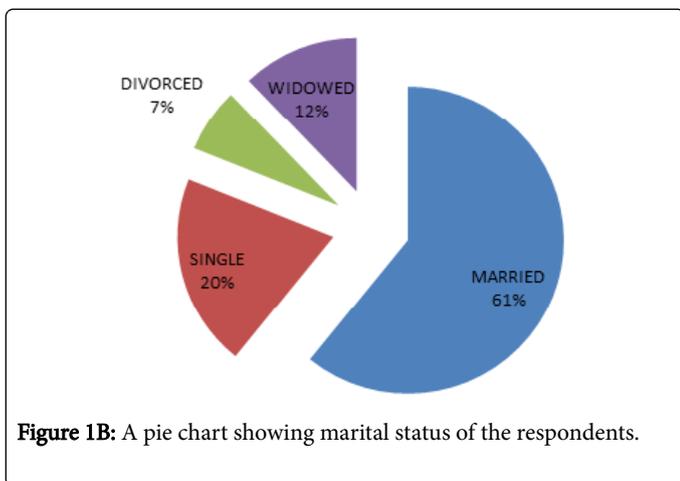
## Results and Findings

### Demographic data



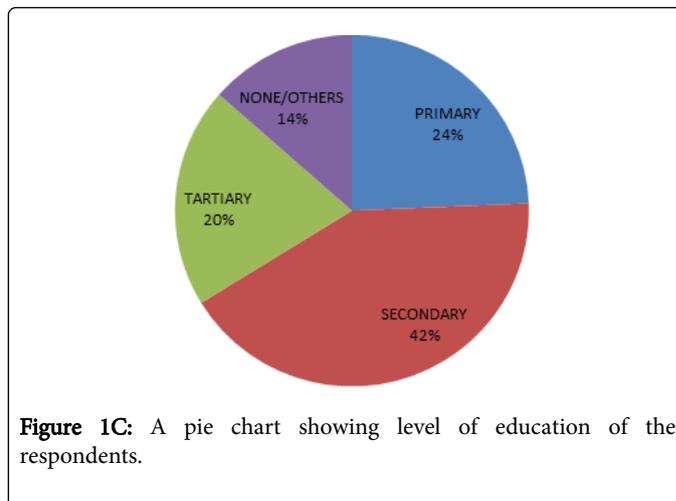
**Figure 1A:** A bar graph showing age distribution of the respondents.

The bar graph above, shows the age distribution of the respondents who participated in the study. Majority of the respondents (48.65%) were aged between 15-24 years, followed by those aged between 25-34 years (27.03%), those aged 35-44 years constituted 10.81% and those aged 45-49 years forming 13.51% of the respondents.



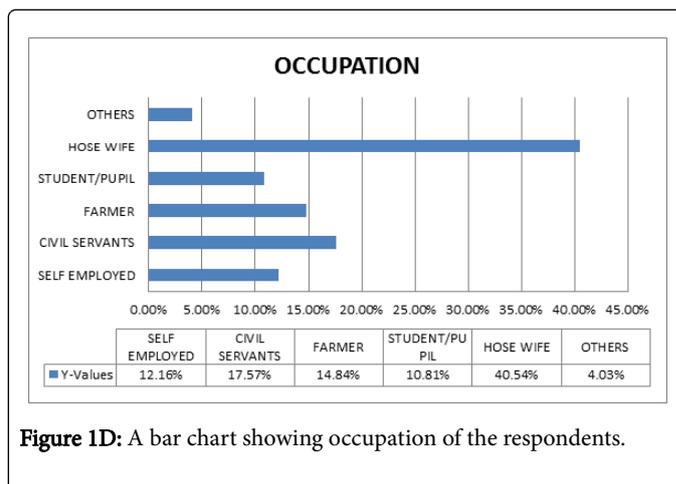
**Figure 1B:** A pie chart showing marital status of the respondents.

Out of the total respondents, it was found out that 61% are married, 20% are single, 7% divorced, 12% widowed.



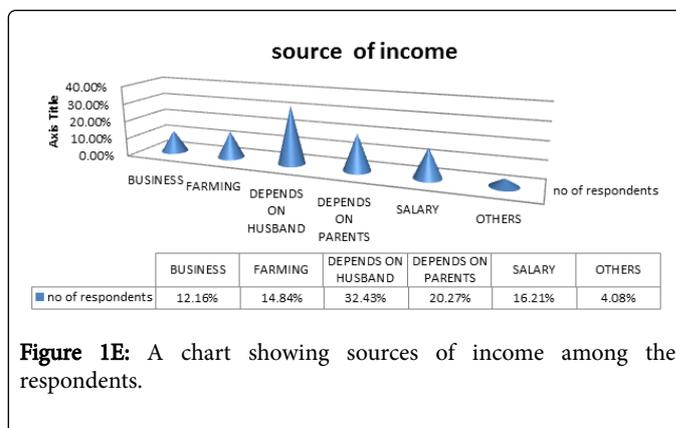
**Figure 1C:** A pie chart showing level of education of the respondents.

Among the interviewed women, only 20% have schooled to tertiary institutions, 42% secondary, 24% primary and 14% others or never been to school who were able to provide us the information we required.



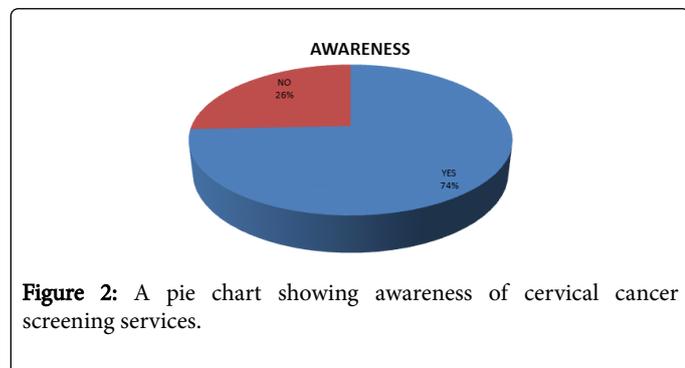
**Figure 1D:** A bar chart showing occupation of the respondents.

From the study findings, majority of the respondents were housewives (40.54%) followed by those who had formal employment in civil service (17.57%). 14.84% of the respondents were farmers and 12.16% were self-employed.



**Figure 1E:** A chart showing sources of income among the respondents.

As shown in the chart above, majority (32.43%) of the women depends on their husband for their income, 20.27% from their parents, 16.21% from salary, 14.84% from farming and 12.16% from business.



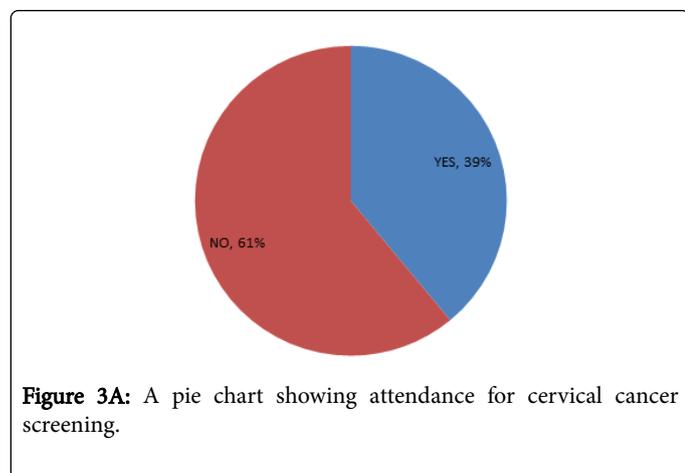
**Figure 2:** A pie chart showing awareness of cervical cancer screening services.

As showed in the pie chart above, 74% of the women among those interviewed said they were aware of the cervical cancer screening services while 26% have never heard of the existence of screening services (Figure 2).

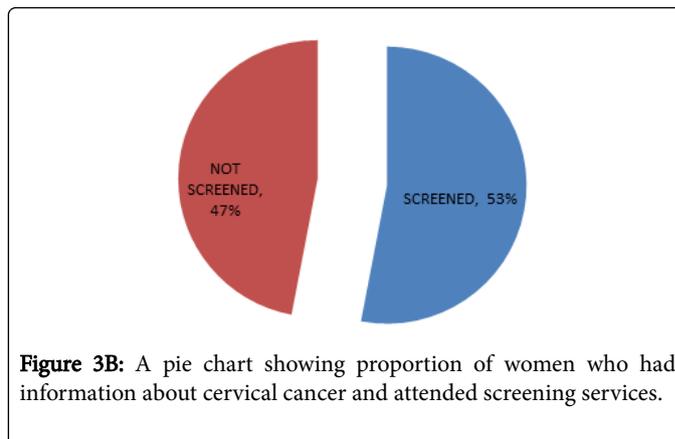
Source of Information	No of Respondents	Percentage
Radio	30	40.54%
Television	15	20.27%
Friend	10	13.51%
Health Care Provider	9	12.16%
Chews	5	6.76%
Others	5	6.76%
Total	55	100%

**Table 1:** A table showing source of information regarding cervical cancer screening.

Majority of the respondents reported to have received information regarding cervical cancer from the media (60.81%) followed from friends (13.51%), health care providers and community health workers 12.16% and 6.76% respectively.

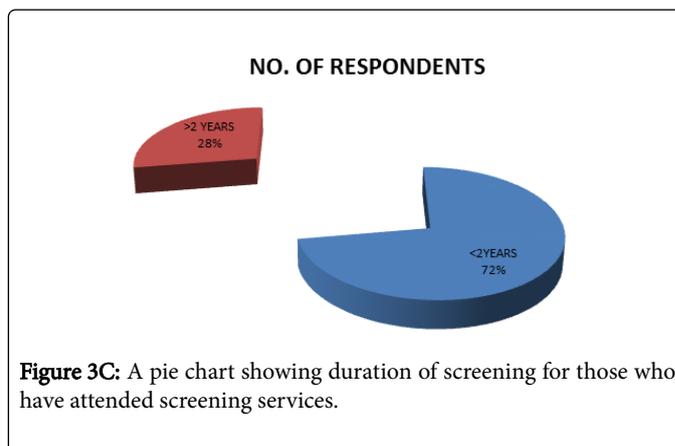


**Figure 3A:** A pie chart showing attendance for cervical cancer screening.



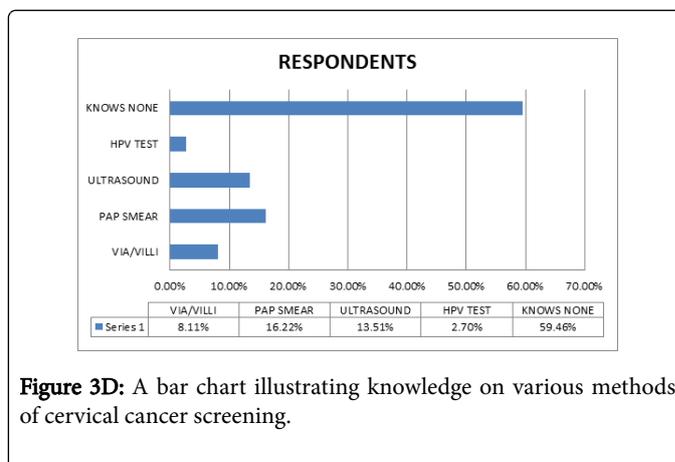
**Figure 3B:** A pie chart showing proportion of women who had information about cervical cancer and attended screening services.

Attendance of screening services among respondents who had information about cervical cancer shows that only 53% attended screening services as illustrated (Figures 3A,3B).



**Figure 3C:** A pie chart showing duration of screening for those who have attended screening services.

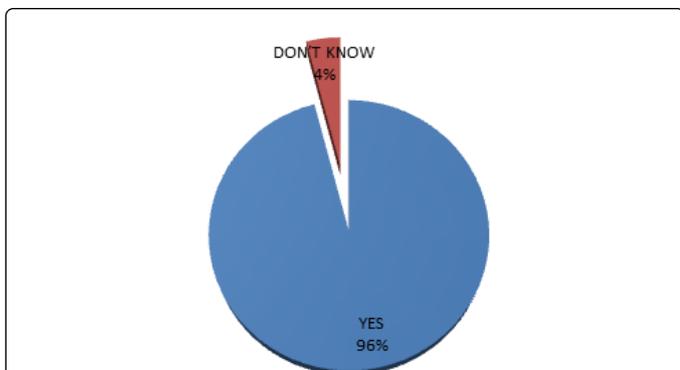
28% of women who were interviewed had attended screening services for a period of more than 2 years 72% subjects who had the knowledge sought the cervical cancer screening services within an interval of less than 2years (Figure 3C).



**Figure 3D:** A bar chart illustrating knowledge on various methods of cervical cancer screening.

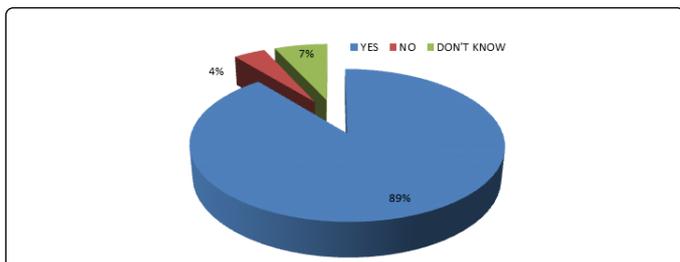
Most of the respondents interviewed (59.46%) were not aware about the various methods used for cervical cancer screening. 8.11% of the women knew about VIA/VILI test, 16.22% knew about pap smear, 13.51% reported of ultrasound while 2.70% said they knew of HPV

test. This shows that though majority of the respondents were aware of the existence of cervical screening services, only 40.54% were able to name various screening methods (Figure 3D).



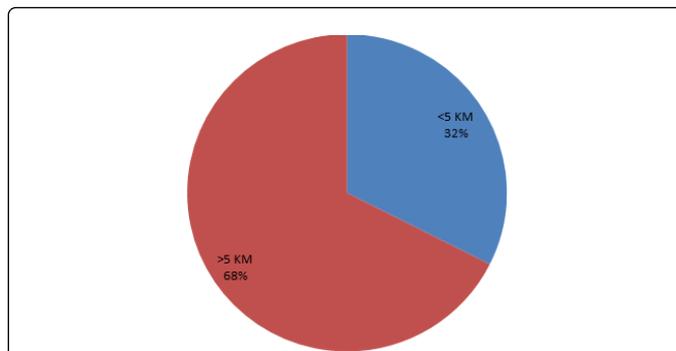
**Figure 4A:** A pie chart showing cultural influence on cervical cancer screening.

Among the total respondents 96% of them confirmed that their culture allowed cervical screening services while only 4% of the respondents were uncertain of existence of any form of cultural restriction on seeking cervical cancer screening services. This indicate that cultural practices and believes are not major barriers to screening services (Figure 4A).



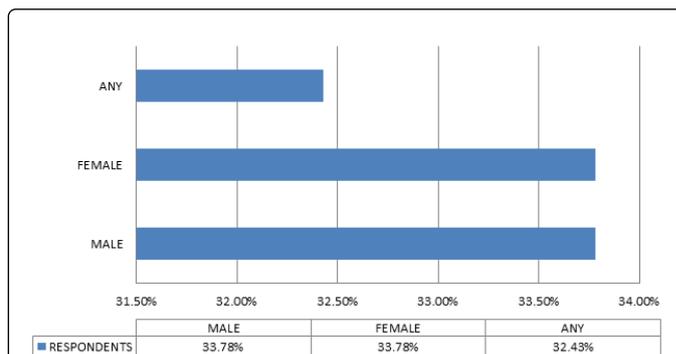
**Figure 4B:** A pie chart illustrating influence of religion on seeking cervical cancer screening services.

The pie chart above shows that 89% of the total respondents said that their religion allowed uptake of cervical cancer screening while 4% said the religion doesn't allow. 7% showed that they were uncertain on whether their religion allow or does not allow cervical cancer services. Some of the reasons given by those who said religion do not allow cervical cancer observed that there is no need screening for cervical cancer since it is only God who can show the truth about such diseases and not human beings who are sinners (Figure 4B).



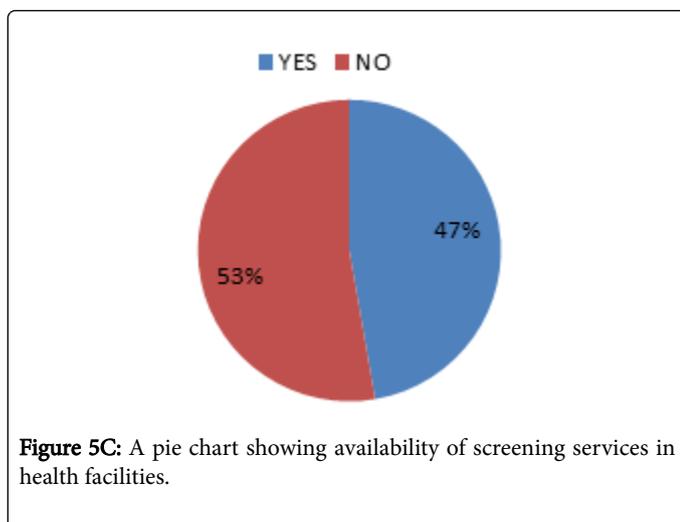
**Figure 5A:** A pie chart showing distance to the nearest health facility by the respondents.

Based on the respondent's estimate, 68% of the respondents accessed the health facility from a radius of more than 5 km while only 32% accessed the same services within a radius of less than 5 km. W.H.O recommends that a health facility should be within a radius of 5 kilometres (Figure 5A).



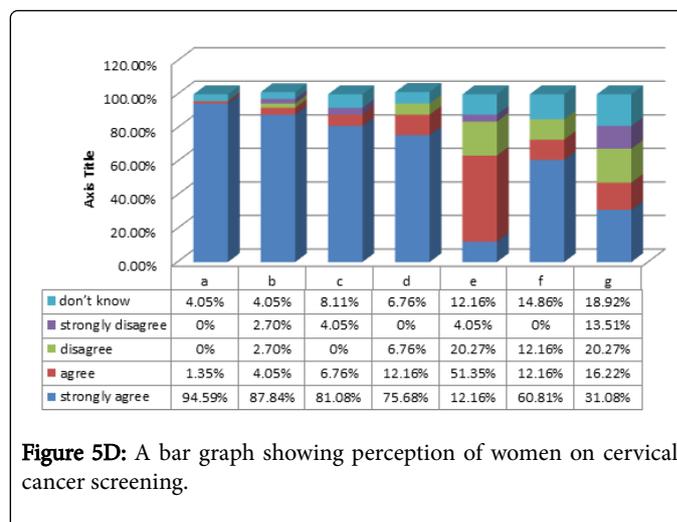
**Figure 5B:** A bar graph showing service provider preference among the respondents.

The findings of this study showed that the preference of the service provider by the respondents based on gender appeared to have a uniform distribution in terms of males, females or any as showed in the Figure 5B.



**Figure 5C:** A pie chart showing availability of screening services in health facilities.

The pie chart above shows that 53% of those who attempted to seek screening services only 53% received the service with 47% reported not to have received screening services yet they required them. Some of the reasons given by those who missed services included; Shortage of screening reagents; shortage of trained staff on cervical cancer screening; lack of clear screening programmes and policies within health facilities (Figure 5C).



**Figure 5D:** A bar graph showing perception of women on cervical cancer screening.

The bar graph above is a graphical presentation of Table 2. Showing proportions on ratings regarding perception of women on cervical cancer screening. Small letters on the base of the bar graph corresponds to the rating statements in Table 2 and Figure 5D.

	STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE	DON'T KNOW
a)Your culture allows cervical cancer screening	70	1	0	0	3
b)Health care providers are client friendly	65	3	2	2	2
c) Cervical cancer screening is important for women of reproductive age	60	5	0	3	6
d) The procedure is less painful and effective	56	9	5	0	4
e) Those women that have been screened came back with negative information on the screening services	9	37	15	3	9
f) Most women are worried about the outcome of the procedure	45	9	9	0	11
g) Unmarried women should not be screened for cervical cancer since they are not sexually active	23	12	15	10	14

**Table 2:** A table showing perception of women on cervical cancer screening.

### Reasons given for not seeking screening services among respondents who had never attended screening services

As indicated by the findings of this study, a big population of the respondents reported not to have sought cervical screening services in their lifetime. Some of the reasons given were that: respondents never knew existence of such services in the local health facilities; having no time since they are always committed at work, business place or household duties; lack of funds to pay for services, especially those that depend on their husbands; distance to the facilities; fear of the diagnostic outcome and fear of the medical procedures.

### Discussion

Most of the women in the sub location are married followed by the single, widowed and the divorced respectively. Most educated up to secondary, primary, tertiary and others levels respectively.

Most women depend on their husbands for the daily living as we see that very few are employed and others are self-employed. This shows a low income rate which may affect the uptake rate for cervical cancer screening services. This may explain the reasons why some of those who had not attended screening services pointed out that lack of finance as a reason for that. Studies conducted in other parts of the

world have indicated that economic status of an individual is a great determinant on the uptake of cervical cancer screening services [7,8].

Although the study found out that majority of the women were aware of the existence of cervical cancer screening, a large population were not able to identify various forms of screening methods available and also a huge proportion did not seek these services. This indicates that there are other barriers associated with uptake of cervical cancer. These findings were supported by a research by Olumide et al. that in Nigeria that had showed that knowledge of cervical cancer screening being very poor at 93.9% [9]. Findings from this study further showed that majority of the respondents obtained information about cervical cancer screening services from the media (60.81%). This makes Media the main source of information regarding existing health services. A study conducted by Perkins et al. on community based education program and cervical cancer knowledge and screening behaviour among Honduras women found out that radio programs improved knowledge and screening behaviour [4]. These findings supports the findings of this study in recognizing media as key channel of packaging and social marketing of health information relating to cervical cancer screening.

Among the respondents who had information about the availability of services, only 53% had been screened for cervical cancer while the rest 47% had not been screened. This clearly depicts that quite a significant number of the community don't utilize the services. It was further noted that out of those who had been screened, only 72% who again sought the services in duration of less than 2years while 28% sought screening services beyond duration of more than 2years.

There is need to address barriers that are seen to inhibit uptake of cervical cancer screening services. The study found out there were myriads of several factors that hinder uptake of cervical cancer screening services. Some of these factors were: respondents never knew existence of such services in the local health facilities; having no time since they are always committed at work, business place or household duties; lack of funds to pay for services, especially those that depend on their husbands; distance to the facilities; fear of the diagnostic outcome and fear of the medical procedures. This indicates the need for a collaborative and multi-sectoral community programs that will demystify inappropriate perception on cervical cancer screening services.

## Recommendations

From the study findings; the following are the recommendations:-

That the ministry of health and other relevant authorities to help sensitize and create awareness on the importance of cervical cancer screening since from our analysis quite a good number only know that the services exist but only very few utilize the services.

Religion leaders should help in encouraging the church members to participate in cervical cancer screening services.

Health care provider to be trained on cervical cancer screening skills and customer relations principles.

Ministry of health of Homabay County should employ more health staffs breach the shortage of health care providers.

Ministry of health should initiate community based outreach services in Kanyadhiang Sub location.

County government of Homabay should introduce community based educational program through local media to promote uptake of cervical cancer screening services.

## Conclusion

The findings of this study show gaps in the uptake of cervical cancer screening services. This calls for a multi-agency approach in promoting uptake of cervical cancer services. There is an urgent need to initiate programs that will ensure coordinated efforts in addressing this key aspect of cervical cancer screening.

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