

**FACTORS INFLUENCING LOW UPTAKE OF CERVICAL CANCER SCREENING
AMONG WOMEN OF REPRODUCTIVE AGE IN SHAURI YAKO, HOMABAY
COUNTY, KENYA**

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ABSTRACT

Cervical cancer screening is testing of all women at risk of cervical cancer most of whom will be without symptoms. It aims to detect pre-cancerous changes which if not treated may lead to cancer. The screening uses cytology also known as the Pap smear test, it's a procedure used to collect cells from the surface of the cervix and vagina. The cells are then viewed under a microscope to determine if they are abnormal. The main objective of the study was to assess factors contributing to low uptake of cervical cancer screening among women of reproductive age in Shauri Yako in Homabay County. The study design used was cross sectional descriptive method which adopted quantitative approach in collecting information directly from the people. The study used convenient sampling method to identify the respondents. Fisher's formula was used to determine sample size of 37 subjects. Questionnaires were used to collect data which were analyzed using Microsoft excel software and SPSS Version 21. Descriptive statistics computed included frequencies, proportions and percentages. The results were presented in tables and figures. The results showed that level of awareness, social cultural and economic factors still contributes inadequate cervical cancer screening. The study recommends efforts to address barriers for screening such as fears and the misconceptions women have about cervical cancer and create a more open discussion about reproduction, and women be adequately informed about risks of cervical cancer so as to increase the uptake of cervical cancer screening.

KEYWORDS: Cervix, Cancer, Screening, Uptake.

INTRODUCTION

According to World Health Organization cervical cancer screening is testing of all women at risk of cervical cancer most of whom will be without symptoms. Cervical cancer screening is used to find changes in the cells of the cervix that could lead to cancer. The cervix is the opening to the uterus and is located at the top of the vagina. Screening includes cervical cytology (Also called the Pap test or Pap smear) and for some women, testing for (HPV) human papilloma virus.^[6] A pap test is done by positioning the client in an exam table and a speculum is gently inserted to open the vagina and to view the cervix and the upper vagina. A broom/spatula combination is used to collect the cell. The cells are then sent to the laboratory where they are prepared and evaluated under microscope.^[11] There are several methods available for detection of various forms of pre-

cancerous and these includes, direct visual of the cervix aided by chemicals like 5% Acetic acid and iodine (Visual iodine) VILLI which causes recognizable color changes.^[6]

Globally, invasive cervical cancer (ICC) is the leading cause of cancer related deaths among women and 80% of these cases occurring in the developing and underdeveloped countries.^[12] Cervical cancer is the easiest gynecological cancer to prevent with regular screening tests and follow up.^[15] There were more than 530,000 new cases of cervical cancer worldwide and 275,000 deaths from the same. Over 90% were recorded in the developing countries.

According to research done in the United States, they found out that most cases of cervical cancer occur in

women who have not been appropriately screened. Strategies that aim to ensure that all women are screened at appropriate intervals and receive adequate follow ups are most likely to be successful in further reducing cervical cancer incidence and mortality. In the WHO African regions, 75,000 new cases were recorded in the same year and 50,000 women died of the disease.^[16]

A study carried out in Kenya on client perception about cervical cancer screening shows that most women would like to have regular pap smear but only 61% know where to obtain one and only 21-35% understood the benefit of the screening. Most of the health facility across Kenya offers cervical cancer screening services almost freely but despite of this there is still a marked low uptake of services nationwide as reported by the Alliance of cervical cancer screening 2010.^[10] Despite the magnitude of the problem in Kenya and the fact that it's easily preventable, the cervical cancer screening coverage for all women 18-69yrs of age is only 32%.^[11]

1.2 MATERIALS AND METHODS

Study Design

The study adopted descriptive cross-sectional design to assess the awareness, determine socio-cultural factors, and establish how economic factors hinder cervical cancer screening among women of reproductive age in Shauri Yako, Homabay County.

Study setting

The study was conducted in Shauri Yako Estate in Homabay County. Shauri Yako Estate is a slum and exhibits both rural and urban characteristics of the study attributes. The choice of the study area was based on the fact that it hosts majority of young women who are sexually active and that would greatly benefit from cervical cancer screening services.

Study population

The study included women of reproductive aged 18-49 years in Shauri Yako estate.

Eligibility criteria

Inclusion criteria

Included women of reproductive age 18-49 years, who consented and were willing to participate in the study.

Exclusion criteria

Potential participants who were mentally and physically challenged were excluded from the study.

Study variables

Dependent variable uptake of cervical cancer screening among women of reproductive age.

Independent variables included awareness, socio-cultural, and economic factors.

Data collection tool

The data collection tool for the study was a semi-structured questionnaire administered to all consenting. The tool was formulated guided by the specific objectives for the study and with sufficient questions for each variable.

Sampling technique

Convenience sampling method was used in selecting respondents as they met the criteria. Thus 37 participants were selected who formed the sample for the study.

Validity

Data validity was achieved by ensuring that the data collection tool was formulated based on the study objectives with adequate number of questions addressing each of the study variables. The questionnaires were numbered in a sequential order before being dispatched to the field and confirmed after a day of data collection. The study was limited to the area of study

Reliability

Reliability was ensured through the use of a standard well-designed questionnaire and; proper selection, training and supervision of research assistants on interview techniques. The research assistants were also involved in pre-testing to ensure they administered the questionnaires correctly during the actual data collection. Completed questionnaires were checked at the end of each day of data collection.

Data collection procedure

The interviewer would introduce him/herself to the participant, and having obtained an informed consent, he/she would read out the questions to the participant as they were on the questionnaire and allow the participant to respond appropriately without any influence.

Data analysis

Data was collected, coded and entered in the excel software, Microsoft office Excel 2010. All statistical analyses were performed using statistical package for social sciences (SPSS) software version 21 (SPSS Inc., USA). Descriptive statistics and Proportions for categorical data were computed. The results were presented in form of pie charts, tables and bar graph for easy interpretation.

Ethical considerations

Permission to carry out the study was sought from the KMTC Homabay Campus Research Committee and further authorization was obtained from Homabay town administrative. A research permit was thereafter, granted by National Commission for Science Technology and innovation, (NACOSTI). Informed consent was obtained from participants prior to their inclusion in the study. The respondents were assured of privacy and confidentiality throughout the study

1.3 RESULTS

Table 1: Showing socio-demographic characteristics of study participants.

Variable	Category	Frequency (n = 37)	Percentage (%)
Age(years)	15-19	8	22
	20-29	23	62
	30-39	7	16
	40-49	0	0
Marital status	Married	33	90
	Single	2	5
	Divorced	2	5
	Widowed	0	0
Level of education	Primary	8	22
	Secondary	10	27
	College /university	19	51
Religion	Christians	30	81
	Muslims	4	11
	Hindu	3	8
Occupation	Employed	15	40
	Self employed	10	27
	Unemployed	5	14
	Student	7	19

Majority of the participants were aged 20-29 years (62%) with the least being aged 30-39 years. The highest proportion of the participants 90% were married while 5% were single and divorced. More than half of the participant were educated up to college/university 51%

with 22% attaining primary education. Majority of the study participants 81% were Christian while 8% were Hindus. Less than half of the study participants were employed (40%) while 14% were unemployed.

Table 2: Showing knowledge on cervical cancer screening.

Variable	Category	Frequency (n=37)	Percentage (%)
Ever heard of cervical cancer screening	Yes	24	65
	No	13	35
Source of information	Hospital	22	60
	Friends	2	6
	Books	4	10
	Mass media	8	20
	Spouse	1	4
Knowledge on severity of cervical cancer	More severe	18	50
	Similar like others	4	10
	Less severe	0	0
	Don't know	15	40
How often should one visit the hospital for cervical cancer screening	Every 2 Years	28	75
	Every 5 Years	7	20
	Every 10 Years	2	5

More than half of the study participants had ever heard of cervical cancer screening (65%) while 35% had never heard of cervical cancer screening. Slightly more than half of the study participants 60% indicated that their source of information was from hospital while spouse as a source of information was the least 4%. Half of the study participants knew cervical cancer to be more severe 50 % while those who knew that the severity was similar with other cancers were 10%. When asked how often should one visit the hospital for screening 75% of

the study participants reported that it should be every 2 years while 5 % reported every 10 years.

Table 3: Showing social cultural factors contributing to low uptake of cervical cancer screening.

Variable	Category	Frequency(n =37)	Percentage %
Age of first sexual experience	Below 15 years	5	14
	16-18 years	10	27
	19-21years	10	27
	22-25 years	6	16
	Above 25 years	6	16
Spouse support towards screening	Yes	23	67
	No	14	33
Ever screened for cervical cancer	Yes	35	95
	No	2	5
What motivated them to be screened	Friends	10	29
	Spouse	10	29
	Media	8	23
	Health worker	7	19
Frequency of screening for the last 5 years	More than 3 times	3	8
	3 times	13	35
	2 times	8	21
	Once	11	30
	Never	2	6
Cigarette smoking and alcohol intake with developing cervical cancer	Does not increase risk	15	40
	Increase.	9	25
	Not known	13	35
Do cultural beliefs hinder screening	Yes	2	5
	No	35	95
Religion support to screening	Yes	28	75
	No	9	25

27% of the study participants had their first sexual experience at the age of 18-25 years while those who were below 15 years were the least 14%. When asked what motivate to be screened most of them reported that it was their spouse and friends. 30 % of the study participants had been screened once in a duration of 5 years. Less than half of the participants reported that

cigarette and alcohol does not increases the risk of getting cancer 40% while 25% reported that alcohol and cigarette increases the risk. Majority of the participants reported that culture beliefs don't hinder them from seeking services 95%. Religion had some support for cervical cancer screening 75% while 25% reported that religion does not support screening services

Table 4: Showing social economic factors that hinder uptake.

Variable	Category	Frequency (n =37)	Percentage %
Charged for cervical cancer screening	Charged	4	10
	Not charged	9	25
	Don't know	24	65
Charged amount if it was affordable	Affordable	8	22
	Not affordable	29	78
If on had hospital insurance cover	Yes	7	20
	No	30	80
Health facilities provide free cancer screening	Yes	7	19
	No	3	8
	Don't know	27	73
How often the free screening was done	Once	5	14
	Twice	1	3
	Thrice	1	3

Slightly more than half of the participants reported that they did not know if cervical cancer screening was charged 65% while 10% knew that the services were charged. Most of the study participant reported that the fee that was charged was not affordable 78% while

22% of the study participant reported that it was affordable. Most of the study participant 80% reported that they had no hospital insurance cover while those who had the cover were 20%. 73% of the study participants reported that health facilities were offering

free cervical cancer screening while 8% reported that health facilities never offered free screening services. Those who reported that free screening was being done 72% reported it being done once.

1.4 DISCUSSION

Socio-demographic characteristics of participant

Findings from the study indicated that the highest number of the participants was aged between 20-29 years with the largest proportion being married while small number being single and widowers. Regarding participants' level of education more than half of the participant were educated up to college/university. Regarding participants' religious background Christians were of the largest proportion. The findings are congruent with those from Nakalevu argues that, if women and communities were educated they understood the importance of having a cervical cancer screening.^[9]

Knowledge of women on cervical cancer screening

The study findings indicated majority of the participants knew about cervical cancer screening. They knew cervical cancer as being as severe form of cancer. The participants indicated their source of information about cervical cancer screening as health care provider. Majority of the participants knew that one should visit the hospital for screening after every 2 years. This findings were similar to a study which was conducted in clinic in Lagos, Nigeria among 500 attendees of maternal and child health only 4.3% were found to be aware of screening cervical cancer. Similarly studies in Kenya and Tanzania also reported very poor knowledge of the disease in patients, 71% of women surveyed in Kenya were not aware of what cervical cancer is and for those who had been screened cited barriers for cervical cancer screening such as fear, lack of time and lack of knowledge about cervical cancer.^[8]

Socio-cultural factors contributing to low uptake of cervical cancer screening

The study findings indicated a few of the participant their first sexual experience at a tender age (below 15 – 21years) and are aware that this puts them at a higher risk of contracting HIV/AIDS and other STIs, and even developing cervical cancer. Majority of respondents had attended cervical cancer screening at least twice in the past 5 years and those who sought cervical cancer screening services were either wanted to know their status, seeking treatment for vaginal bleeding, as an advice from friends, or it was a free cancer screening day. In Singh study, participants who once undergone the pap smear test the participants responded the purpose of test was for knowing cause of excessive vaginal discharge and infertility, infection respectively and rest of them don't know the purpose of the test. None of them reported exact purpose of the Pap test.^[13]

Most of the participants reported that it was their spouse who motivated them to seek cervical cancer screening. this was in line with a study that was conducted in South

Africa where it was found out that women without partners were less likely to participate in screening.^[15] The findings revealed that religious institutions supported the fight against cervical cancer. Most churches in Homabay County including Catholic, Seventh Day Adventist Church, Voice of Healing and Salvation and Anglican Church were found to allow cervical cancer screening by encouraging their congregations to seek cancer screening whenever advised, supporting medical outreach camps, and through church social groups.

The study findings reveal that at least the participants knew that cigarette smoking and alcohol drinking increases the risk of getting cancer. The findings were similar with a study done in Uganda which indicated that Women leading risky lifestyles such as cigarette smoking and alcohol intake were reported to have a higher risk of developing cervical cancer.^[2] The findings indicated that there were no cultural believes hindering participants from seeking cervical cancer screening

Economic factors leading to low uptake of cervical cancer screening

The study findings indicated majority of the participants never knew if cervical cancer screening was being charged in the facilities while those who knew they reported that the amount was not affordable for them hence hindering them from seeking the service. The study findings were similar with a study that was conducted in India that indicated money is an imperative factor influencing the health seeking behavior, most women reported high cost of transport to the facilities and expensive costs of the different tests performed.^[13] The findings also indicated that most of the participants did not have national hospital insurance cover which is an indicator that economic status determines one's ability to pay. This was similar to a study done in Kenya where it was found out that that 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^[8]. Most of the participants never knew if the screening services were being offered free in health care facilities. The findings were in line with other studies where by it was identified that health promotion by the health care providers in relation for the services offered in the hospitals that are available.^[1,5,7] Majority of the respondents knew that cervical cancer screening should be done once every year.

1.5 Recommendation

This study recommends that.

1. The cervical cancer screening programs should address barriers for screening such as fears, lack of time and the misconceptions women have about cervical cancer screening.
2. Unlike past studies that linked lack of knowledge and information as a determinant in the poor uptake of screening, it is important to stress that cervical cancer is associated with sexually transmitted disease should involves open discussion about reproduction, and women be adequately informed about risks of cervical cancer.

1.6 REFERENCES

1. Arbyn ME, Jerome Antoine, Margit Magi Trends in cervical cancer incidence and mortality in the Baltic countries. *International Journal of Cancer*, 2011; 128(8): 1899-1907.
2. Cox, E. *Cervical Cancer in Uganda*. Kisoro, Uganda: PINCC Prevention International, 2010.
3. JD Makuza, Nsanzimana S, Marie Aimee , Pace LE, David Jame.Prevalance and risk factors for cervical cancer and precancerous lesions in Rwanda. *Pan African Medical Journal*, 2015; 22: 26.
4. Kagumire, R. Cancer Treatment out of reach for Ugandan Women .*Daily Monitor News Paper*, 2010; 4(6).
5. KNBS: 2014 KDHS Key Findings (International Kale d.pp.17. Maryland: GoK, 2015; 17.
6. MJ Huchko, Elizabeth, Bukusi, Craig R. Cohen successful integration of a cervical screening and prevention .*Int J Gynecol Obst*, 2011; 114(2): 106-10.
7. MOH. Strategic Plan for Cervical Cancer Prevention and Control in Uganda, 2010.
8. Morris MR *Factors associated with the uptake of cervical cancer screening among Women of Reproductive age in HomabayCounty: A Case of Kanyadhiang Sub Location*. Clinics Mother Child Health, 2016; 13: 232.
9. Nakalevu, S.M, S.M *The Knowledge, Attitude, Practice and Behavior of Women towards Cervical Cancer and Pap smear Screening*. Fiji School of Medicine, 2009.
10. National Cervical Cancer Coalition. Cervical cancer screening saves lives. Available at www.nccc-online.org/
11. National Cervical Cancer Prevention Program: Action Plan 2012-2015.In: Health DoR, edition: Government of Kenya *The Kenya national guidelines on cervical cancer*, 2012.
12. Rosser JI, Hamisi S, Njoroge B, Huchko MJ. Barriers to Cervical Cancer Screening in Rural Kenya: Perspective from a Provider Survey. *J Community Health*, 2015; 40: 756-61.
13. Singh S, Badaya S. *Factors influencing uptake of cervical cancer screening among women in India: A hospital based Pilot Study*. J Community Med Health Educ, 2012; 2: 157.
14. Sudenga SL, Rositch AF, Otieno WA, Smith JS. Knowledge, attitudes, practices and perceived risk of cervical cancer among Kenyan women: brief report.*Int J Gynecol Cancer*, 2013; 23(5): 895-9.
15. WHO *Human Papillomavirus and Related Cancers in the World. Summary Report*, 2010.
16. WHO *Prevention of cervical cancer through screening using visual inspection with acetic acid and treatment with cryotherapy. Summary report*, 2012.