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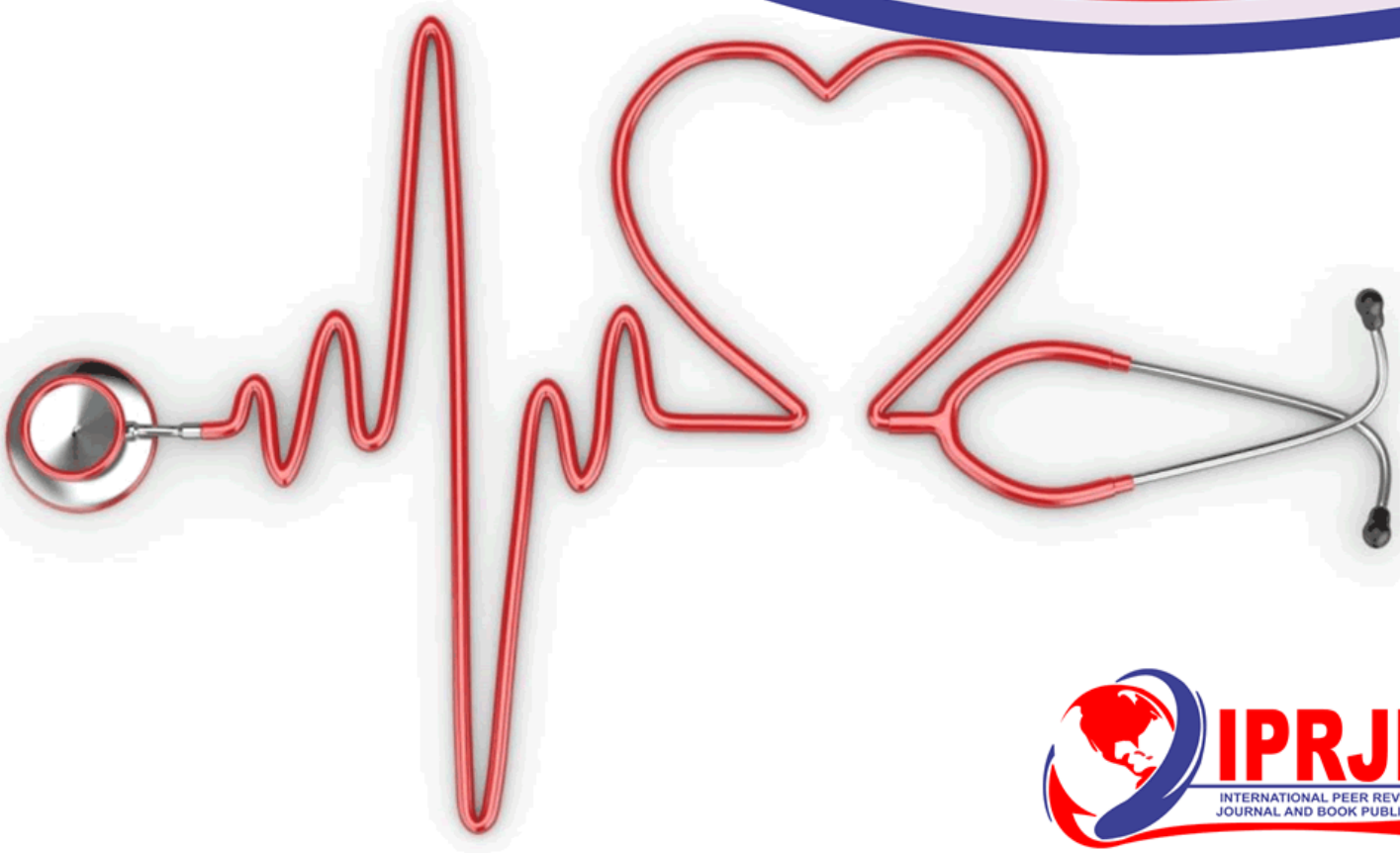

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AWARENESS AND KNOWLEDGE ON CERVICAL CANCER SCREENING SERVICES AMONG WOMEN AGED 30-49 YEARS IN KITUI WEST SUB-COUNTY

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Abstract

Purpose: The purpose of the study was to establish the Awareness and Knowledge on Cervical Cancer Screening Services Among Women Aged 30-49 Years In Kitui West Sub-County

Methods: A cross-sectional descriptive study design was used. The study population was women aged 30-49 years of age. A Multi-stage cluster sampling technique, simple random sampling, proportionate sampling and systemic sampling was used to obtain 270 respondents from the study population. Data was collected using interviewer administered questionnaire to women aged 30-49 years in Kitui west sub-County. The study used quantitative research methods to obtain data from selected respondents. Quantitative data was collected using closed and open ended questionnaires. All interviews were done after obtaining approval from relevant bodies and consent from study respondents. Data from the respondents was analyzed using statistical package of social sciences (SPSS) in conjunction with Microsoft excel. The study used chi-square test calculated at 95% interval and a margin of 0.05% error to determine the relationship between dependent and independent study variables.

Results: The results found out that Majority of the participants 145 (53,7%) were aware of the cancer screening. There was a no significant relationship (p =0 .054) between the awareness and cervical cancer screening services among women aged 30-49 years. The study established that, majority 152 (56.3) of the respondents had low knowledge on cervical cancer and there was an association between knowledge on warning signs (p=0.001) and prevention of cervical cancer (p=0.002) and utilization of cervical cancer screening services.

Unique Contribution to Theory, Practice and Policy: The study recommends the NGOs and other stakeholders addressing cervical cancer issues should ensure that when creating awareness on screening, they should organize events targeting women and thereafter offer free cervical cancer screening services. The Ministry of Health together with relevant stakeholders should tailor and scale up advocacy and health education seminars in the community to help improved transfer of correct knowledge on cervical cancer screening services thus signify importance of seeking such services early enough.

Key Words: *Awareness, Knowledge, Cervical Cancer*

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1.0 INTRODUCTION

Cervical cancer is one of the most prevalent cancers in developed countries and the third most common cancer among women worldwide, with an estimated 569,847 new cases and 311,365 deaths recorded in 2018 (Bruni et al., 2019). Generally, the mortality rate in developed countries is around four times higher than in advanced nations, with 80–85 per cent of cervical cancer deaths occurring in developing countries, according to Mupepi, Sampselle & Johnson, 2011; Ferly et al, 2010). In 2010, cervical cancer killed 200,000 people worldwide (Lambert, 2013). Cervical cancer is primarily associated with young women. Women who are 50years and below accounts for 62% of all cervical cancers with the highest number raging between 22-29 years (Benard, Watson, Castle & Saraiya, 2012). The incidence of Cervical cancer can be reduced by approximately 25% to 35% if women are screened once at the age of 35years, however, if women get screened twice between the age of 35yaers to 40 years this would reduce the risk of cervical cancer to up to 40%.

Cervical cancer is ranked 4th in relation to incidence and mortality rates. It has an estimate of 569,847 and 311,365 deaths per year accounting for 13.1% among cancer new cases globally. It remains the most common cancer in Eastern Africa (Bray, 2018). In Kenya alone, new cases per year are 5,250 (12.9%) and contribute to 3,286 (11.84%) of all cancer deaths annually. It is the 2nd leading cause of cancer amongst all female cancers. (Bray, Ferlay, Soerjomataram, Siegel, Torre & Jemal, 2018). According to WHO (2014), prevention of cervical cancer can be done through screening and testing for precancerous lesions among women who have no symptoms and are healthy. Cervical cancer screening can detect cancerous cells at an early stage. This enables early treatment, therefore preventing the progression of cervical cancer. When cervical cancer cells are detected early, treatment can be effective.

More than a million women in the world are living with cervical and most of them have no access to screening, treatment and palliative care, resulting in late when treatment. Cervical cancer usually develops slowly, which means that most cases can be identified and managed when screening is performed regularly (Siegel, Miller & Jemal, 2018). Treatment, therefore, becomes difficult and expensive and chances of cure diminish (WHO, 2014). Reduction of the burden of disease associated with cervical cancer can be greatly achieved through pap-smear cytology screening (WHO 2010).

The level of awareness on cervical cancer and cervical cancer screening can influence an individual's intention to seek for the services. In a study conducted among Tunisian it was revealed that the awareness level was moderate (around 40%) and the acceptability of the anti-HPV vaccine was found to be high (over 80%). The research also revealed that there was a strong statistical association between awareness and utilization of cervical cancer screening services (Gamaoun, 2018).

In a study done in Nigeria to investigate community awareness on cervical cancer among respondent's majority of them were aware about its causes through health talks even though they were reluctant to seek for screening services. In another study done in south east of Nigeria to determine the influence of awareness on uptake of screening services, it was further revealed that majority of those interviewed had higher awareness levels and relatively higher rate of uptake of screening services (Aniebue *et al*., 2010).

In study conducted among Gabonese women revealed that, majority women had heard about cervical cancer but only few reported knowing the causes of cervical cancer. However, there were common knowledge gaps concerning the risk factors of cervical cancer. The risk factors that were most frequently cited included abortion, sexually transmitted infection, smoking, multiple sexual partners, inserting products/fingers into the vagina, sex at an early age and lack of hygiene (Assoumou *et al*., 2015)

A cross sectional study findings on knowledge and screening for cervical cancer found that majority of the women in Mangalore city in India had poor knowledge about cervical cancer, 81.3%, cervical cancer screening, 85.5%. Women who had been screened were 7.2%. (HN Harsha *et a*l, 2014).

A study in Moshi Tanzania on important factors related to the uptake of cervical cancer screening services showed that out of the 354 women interviewed aged between 18- 69years, 59.6% had low level of knowledge of cervical cancer and its prevention 22.6% had been screened on cervical cancer. It also revealed that those with high level of knowledge on cervical cancer and its prevention were more likely to be screened (Lyimo & Beran 2012).

2.0 METHODOLOGY

A cross-sectional descriptive study design was used. The study population was women aged 30-49 years of age. A Multi-stage cluster sampling technique, simple random sampling, proportionate sampling and systemic sampling was used to obtain 270 respondents from the study population. Data was collected using interviewer administered questionnaire to women aged 30-49 years in Kitui west sub-County. The study used quantitative research methods to obtain data from selected respondents. Quantitative data was collected using closed and open ended questionnaires. All interviews were done after obtaining approval from relevant bodies and consent from study respondents. Data from the respondents was analyzed using statistical package of social sciences (SPSS) in conjunction with Microsoft excel. The study used chi-square test calculated at 95% interval and a margin of 0.05% error to determine the relationship between dependent and independent study variables.

3.0 FINDINGS AND DISCUSSIONS

3.1 Socio-demographic Information

The research findings revealed that the respondents were at least 30 years of age. Regarding the age of the respondents the results found out that, slightly below a third 81 (30%) of the respondents were aged between 30-34 years followed by 86 (25.2%) aged who were 35- 39 years. Proportions of participants in different age groups varied across the sample. The findings showed that most of the participants 173 (64%) were married while 54 (20%) of the respondents reported to be single. Concerning the academic level of the respondents, slightly more than half 148 (54.8%) of the respondents had primary level as their highest academic level followed by 68 (25.2%) with secondary level of education. On the respondents' religion, it was established that majority 216 (80%) of the sampled participants were Christians while 32 (12 %) Muslims.

Regarding the respondents' occupational status, the results revealed that below half 123 (45.2%) of the respondents were unemployed followed by 87 (32.4%) of the respondents who reported to be self-employed. The results further showed that slightly below half 130 (48%) of the participants were earning between Kshs 5,000 – 9999 per month followed 86 (31.9%) who reported to be earning between less than Kshs 5,000 per month. The results were presented in the table 1 below:

Table 1: Socio-demographic characteristics of the respondents (n=270)

Variables	Category	Frequency(n=270)	Percent
Age in years	30-34	81	30.0
	35-39	68	25.2
	40-44	67	24.8
	45- 49	54	20.0
Marital status	Married	173	64.0
	Single	54	20.0
	Separated	11	4.0
	Widowed	13	4.8
	Divorced	19	7.2
Education level	None	27	10.0
	Primary	148	54.8
	Secondary	68	25.2
	College	27	10.0
Religion	Christian	216	80.0
	Muslim	32	12.0
	Others	22	8.0
	Employed	60	22.4
Occupation	Self employed	87	32.4
	Unemployed	123	45.2
	<Kshs 5,000	86	31.9
Income	Kshs 5000-9999	130	48.1
	Kshs 10,000-19999	32	11.9

3.2 Awareness on Utilization of Cervical Cancer screening services

The results revealed slightly above half 145 (53.7%) of the participants had high awareness on the cervical cancer screening while 125 (46.3%) had low awareness level. The researcher used a checklist to establish whether the study respondents were aware about cervical cancer screening services. The checklist had 5 statements regarding cervical cancer screening services. A score of more than 3 correct answers were considered high awareness while those with less or equal to 3 correct were classified as low awareness. The results were as shown in Figure 1 below:

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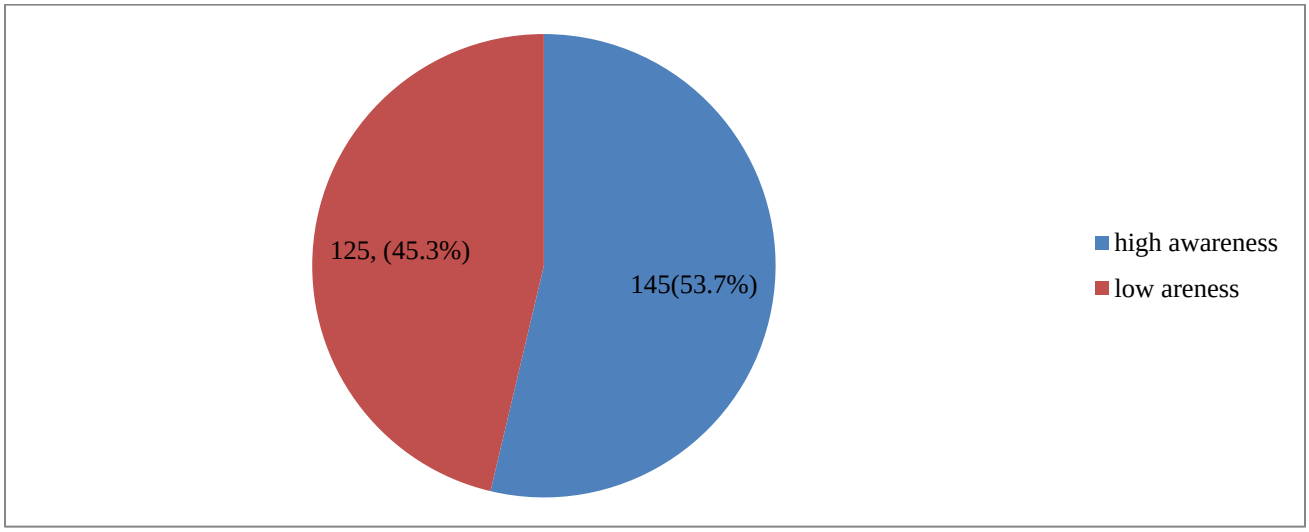

Figure 1 Awareness of Cervical cancer screening services (n=270)

3.2.1 Source of information on cervical cancer screening among the respondents

Concerning information on cervical cancer screening, 173 (79%) who have received information on cervical cancer as demonstrated in figure 4.3. 142 (65% of the participants knew someone with cervical cancer. On enquiring the source of information on cervical cancer screening, majority 140 (64%) had heard from a healthy provider while 38 (17.2%) had heard from the media. The results were as shown in the table 2 below:

Table 2 Source of information on cervical Cancer (n=270)

Source	Frequency	Percent
Relatives	23	8.4
Friends	28	10.4
Health provider	173	64.0
Media	46	17.2
Total	**270**	**100.0**

3.3.2 Association between awareness and utilization of cervical cancer screening services (n=270)

The results showed that majority 122(69.0%) of respondents with high awareness levels did not utilize cervical screening services. There was no significant statistical association between awareness and utilization of cervical cancer screening services (p=0.054) as shown in Table 3

Table 3: Association between awareness and utilization of cervical cancer screening services among the respondents (n=270)

Independent Variable	Respondent response	Dependent variable Utilization of Cervical cancer screening services		Statistical significance
		Yes	No	

		(N=95)	(N=175)	
Awareness level	High	23(24.2%)	122(69.8%)	χ^2=21.180 df=1 p=0.054
	Low	72(75.8%)	53 (30.2%)	

3.3 Knowledge of cervical cancer screening services

Knowledge level about the services may influence an individual to utilize the service. The researcher used a 5-pointer rating scale from poor to excellent. The results were presented on a scale of 1-5, where 5 = Excellent knowledge, 4 = very good knowledge, 3 = Good knowledge, 2 = Fair knowledge and 1= poor knowledge The questions were in 3 groups on knowledge on signs of cervical cancer, warning signs of cervical cancer and prevention of cervical cancer.

3.3.1 Knowledge of signs of cervical cancer

The respondents were first required to indicate 4 signs of cervical cancer. The scale for Excellent was awarded to those who wrote all the 4 signs, Very good was for those who wrote 3 signs, Good was for those who wrote 2 signs, Fair was for those who wrote 1 sign and poor was for those who gave no sign. The results revealed that more than a third 93 (34.4%) of the respondents had fair knowledge followed by 69 (25.6%) who had poor knowledge on signs. The responses were presented in Table 4

Table 4: Cervical Cancer screening Knowledge on signs

Knowledge level	Frequency	Percentage
Excellent	25	9.3%
Very good	22	8.1%
Good	61	22.6%
Fair	93	34.4%
Poor	69	25.6%
Total	**270**	**100.0**

3.3.2 Knowledge of warning Signs for cervical cancer

The respondents were presented with four question upon which they were to indicated Yes, No or Don't know. The data was analyzed using a rating of 1-5, where 5 = Excellent knowledge, 4 = very good knowledge, 3 = Good knowledge, 2 = Fair knowledge and 1= poor knowledge. The scale for Excellent was awarded to those who answered 'Yes' in more than 5 questions (above 100%), Very good was for those who answered 'Yes' in 4 questions (80%), Good was for those who answered 'Yes' in 3 questions (60%), Fair was for those who answered 'Yes' in 2 questions (40%) and poor was for those who answered 'Yes' in less 1 question (0%-20%). The results revealed that below a third 78 (28.9%) of the respondents had fair knowledge on warning signs of cervical cancer followed by 67 (24.8%) who had good knowledge. The responses were presented in Table 5.

Table 5: Cervical Cancer screening Knowledge of warning signs

Knowledge level	Frequency	Percentage

Excellent	19	7.0%
Very good	44	16.3%
Good	67	24.8%
Fair	78	28.9%
Poor	62	23.0%
Total	**270**	**100.0**

3.3.3 Knowledge on how cervical cancer can be prevented

The respondents were first required state 4 ways on how cervical cancer can be prevented. The results were presented on a scale of 1-5, where 5 = Excellent knowledge, 4 = very good knowledge, 3 = Good knowledge, 2 = Fair knowledge and 1= poor knowledge. The scale for Excellent was awarded to those who wrote all the 4 method, Very good was for those who wrote 3 methods, Good was for those who wrote 2 methods, Fair was for those who wrote 1 method and poor was for those who gave no method. The results showed that slightly above a third 92 (34.1%) of the respondents had fair knowledge on prevention of cervical cancer followed by 62 (23.0%) who had poor knowledge. The responses were presented in Table 6.

Table 6: Cervical Cancer screening Knowledge on prevention

Knowledge level	Frequency	Percentage
Excellent	36	13.3%
Very good	42	15.5%
Good	38	14.1%
Fair	92	34.1%
Poor	62	23.0%
Total	**270**	**100.0**

3.3.4 Overall knowledge level on cervical cancer

The researcher further sought to find out the overall knowledge level on the cervical cancer. Those who had excellent and very good knowledge on signs, warning signs and prevention of cervical cancer were categorized to be having high knowledge. Those who had good knowledge on signs, warning signs and prevention of cervical cancer were categorized as having average knowledge while those with fair and poor knowledge were categorized as having low knowledge level. The results revealed that more than half 152 (56.3%) of the respondents had low knowledge on cervical cancer, 63 (23.3%) had high knowledge while 55 (20.4%) had average knowledge. The results were as shown in the table 7 below

Table7 Overall knowledge on cervical cancer

Respondents' knowledge	Frequency	Percent
High	63	23.3
Average	55	20.4
Low	152	56.3
Total	270	100.0

3.3.5 Relationship between Knowledge level and utilization of cervical cancer screening services

The result revealed that below half 76 (43.4%) of the respondents who had fair knowledge did not utilize cervical cancer screening services. There was no association between knowledge on signs of cervical cancer and utilization of cervical cancer screening services (p=0.056). slightly above a third 33 (34.7%) of the respondents who utilized cervical cancer screening services had good knowledge on the warning signs of cervical cancer. There was a significant statistical association between knowledge on warning signs of cervical cancer and utilization of cervical cancer screening services p=0.001).

The results further showed that slightly below a third 29 (30.5%) of the respondents who had very good knowledge on prevention of cervical cancer screening had utilized cervical cancer screening services. There was an association between knowledge on prevention of cervical cancer screening and utilization of cervical cancer screening services (p=0.002). The results were as presented in the table 8 below

Table 8: Relationship between knowledge and utilization of cervical cancer screening

		Utilization of cervical cancer screening services (270)		Statistical inference
Independent variables on Knowledge		**Yes (95)**	**No (175)**	$\chi2$= 8.352
	Excellent	15(15.8%)	10(5.7%)	df = 4
	Very good	14(14.7%)	8(4.6%)	p = 0.056
	Good	31(32.7%)	30(17.2%)	
	Fair	17(17.9%)	76(43.4%)	
Signs of cervical cancer				
	Poor	18(18.9%)	51(29.1%)	
	Excellent	13(13.7%)	6(3.4%)	$\chi2$= 9.244
	Very good	25(26.3%)	19(10.9%)	df = 4
	Good	33(34.7%)	34(19.4%)	p = 0.001
	Fair	11(11.6%)	67(38.3%)	
Warning signs of cervical cancer	Poor	13(13.7%)	49(28.0%	
	Excellent	25(26.3%)	11(6.3%)	$\chi2$= 10.224
	Very good	29(30.5%)	13(7.4%)	df = 4
	Good	22(23.2%)	16(9.1%)	p = 0.002
	Fair	11(11.6%)	81(46.3%)	
Prevention of cervical cancer	Poor	8(8.4%)	54(30.9%)	

4.0 SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

4.1 Summary

Majority of the participants were aware of the cancer screening. There is also no significant relationship between the awareness and cervical cancer screening services among women aged 30-49 years. These results were contrary with Ombech et al (2012) who carried out a study on female primary school teachers on risk factors and awareness and established that there was low awareness level on cervical cancer screening.

The results were consistent also contrary to a study conducted among Tunisian which revealed that the awareness level was moderate among the women aged above 30 years (Gamaoun, 2018). In a study done in Nigeria to investigate community awareness on cervical cancer among respondent's majority of them were aware about its causes through health talks even though they were reluctant to seek for screening services. The results were in agreement with another study done in south east of Nigeria to determine the influence of awareness on uptake of screening services, which revealed that majority of those interviewed had higher awareness levels and relatively higher rate of uptake of screening services (Aniebue *et a*l., 2010).

The study established that, majority of respondents had low knowledge on cancer the screening. There was a significant relationship between the knowledge and cervical cancer screening services among women aged 30-49 years. These results agree with a study carried out by Nthiga (2014) in Embu County on cervical cancer which indicated that majority of the women had heard about cervical cancer and only few had ever been screened for cervical cancer. Similar results were given by HN Harsha *et al*, (2014) who argued that knowledge and screening for cervical cancer influence the screening.

The results were also consistent with a study in Moshi Tanzania on important factors related to the uptake of cervical cancer screening services showed that majority of the respondents had low level of knowledge on signs , warning signs and prevention of cervical cancer (Lyimo & Beran 2012).

4.2 Conclusion

The study concludes that majority of the respondents were aware of cervical cancer screening. Ironically, the rate of utilization of cervical cancer screening services was low despite results revealed that the respondents were aware of cervical cancer and cervical cancers screening services. The study further concluded that the knowledge level of respondents on cervical cancer is low since majority of the respondents were unable to state the signs, warning signs and prevention of cervical cancer. It was however un clear how the respondents were aware of cervical cancer screening services but not knowledgeable on the same.

4.2 Recommendations

The study recommends that the NGOs and other stakeholders addressing cervical cancer issues should ensure that when creating awareness on screening, they should organize events targeting women and thereafter offer free cervical cancer screening services. The Ministry of Health together with relevant stakeholders should tailor and scale up advocacy and health education seminars in the community to help improved transfer of correct knowledge on cervical cancer

screening services thus signify importance of seeking such services early enough. The study also recommends that there should be Health messages on cervical cancer to demystify the wrong perception among the community members about cervical cancer.

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