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Cervical Cancer Knowledge and Screening among Young Female Adults in the Kintampo Municipal Hospital, Bono East Ghana.







Cervical Cancer Knowledge and Screening among Young Female Adults in the Kintampo Municipal Hospital, Bono East Ghana.

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Abstract

Purpose: This study sought to determine the cervical cancer knowledge and screening among young female adults in Kintampo North Municipality.

Methodology: A cross-sectional study was employed using a quantitative approach. Data was collected from 341 participants using a consecutive sampling with structured questionnaire and analysed using SPSS version 23. Descriptive statistics was used to analyse continuous variables like age and expressed as means and standard deviations, whilst categorical variables were summarized into frequencies and percentages. Pearson's Chi-square test was used to determine the associations between the independent and dependent variables.

Findings: More than half (58%) of the respondents had knowledge of cervical cancer. The two major sources of cervical cancer knowledge to respondents were the health workers (45.6%) and radio/television/internet (45.1%). Most (70.5%) had no idea about the causes of cervical cancer. Again, more than half (55.5%) of the respondents had no idea on the signs and symptoms of cervical cancer while less than half (48.4%) also had no idea about prevention of cervical cancer. Almost all (94.6%) the respondents had never been screened.

Recommendations: Cervical cancer knowledge and screening is low among young female adults attending the Kintampo North Municipal Hospital. As such, there is the need to put strategies in place to increase cervical cancer knowledge and screening in the Kintampo North and its environs.

Keywords: Cervical cancer, knowledge, young female, screening.



Introduction

Cervical cancer continues to be a public health issue across the world causing high mortalities in women [1]. Its incidence and mortality rates remain high in developing nations like Ghana, notwithstanding the introduction of its prevention and management options [2]. Cervical cancer is the 4th frequently occurring malignancy and the 4th primary cause of deaths linked to cancer in women across the world, representing 13% feminine cancers of most developing nations [3,4]. The maximum regional occurrence and death rates of the disease are found around Africa with 7-10 times more than in developed nations. In low-and-middle income countries where industrialization and per capita income is low, almost 90% of deaths occur currently [5].

Human Papillomavirus (HPV) is the main cause the disease (close to 99% of cervical cancer diseases are caused by HPV). Though HPV is identified as the main cause of cervical cancer, infection with the HPV does not necessarily result in invasive cervical cancer (ICC). Other contributory factors such as the age of a woman at first delivery, the number of live-born children to a woman, use of oral contraceptive pills, smoking, obesity, and biological heredity aside the HPV are important for the advancement of the cancer [4]. Women diagnosed with cervical cancer present no symptoms but unusual bleeding, unpleasant stinking, unusual fluid flow from the vagina, and bleeding after sexual intercourse are the most identified indicators [4,6].

Because cervical cancer remains a public health challenge, the World Health Organization (WHO) has called for a global effort to eliminate the disease with specific aim and objectives famously described as the WHO triple–intervention which need to be achieved by 2030. These include the following; full vaccination of 90% of females who are 15 years with Human Papillomavirus vaccine, to ensure that 70% of females are protected from the disease twice in their lifetime at ages 35 and 45 years and 90% of females diagnosed with cervical cancer disease get care and attention. Cancer of the cervix according to the WHO, is a condition which shows variations between people subject to the presence of a national inoculation programme, people-centred cancer protection against cancer of the cervix and accessibility to the degree of care provided. It has a worldwide approach in place to kick out cervical cancer which has it that cancer of the cervix would be seen as not a public health issue if the age adjusted occurrence rate is less than 4 out of every 100,000 women years [5].

Globally, in 2018, according to [7] the disease was rated as the 4th most recurrent cancer and cause of mortalities associated with cancer in young female adults with approximately 570,000 fresh cases and 311,000 deaths. Incidence and deaths are high in Africa compared to the globe; it is expected that about 267.9 million females between 15-49 years are at risk of acquiring cancer of the cervix disease. Over 80,000 women in Africa are identified every year with cervical cancer, and out of this about 60,000 of them die every year [8]. Global statistics show cervical cancer in West Africa is ranked second highest [9].

The HPV are classified into low and high risks (wart-causing and cancer causing). Over 200 types of HPV strains are recognized of which 40 types frequently infect the anus and the genital organ areas. Other areas HPV can infect are vagina, penis, vulva and oesophagus. Cervical cancer screening involves either cytology, HPV testing or both. Only HPV testing or together with cytology is highly sensitive than cytology only [10]. Cervical cancer among young female adults with normal cytology associated with the general occurrence of HPV is estimated at 21.8%. In



Sub-Sahara Africa, the familiar HPV strains are HPVs 16 and 18 with an estimated prevalence of 69.2%. Senegal and Ethiopia however, have were reported to have prevalence of 43.7% and 90.2% respectively [11].

The HPV genotype 16 and 18 contribute to about 70% cervical cancer across the world. Across the globe, the frequently occurring HPV strains are the types 16, 18, 45, 33 and 31; whilst in Sub-Saharan African HPV types 16, 18, 45, 35 and 33 were recognized as the most occurring types of HPV [12]. Cervical cancer was seen to be more prevalent in the developed world, however, recently the prevalence of HPV and related cancer is expected to be elevated to 5,000 cases by the year 2025 and there will be an annual death of 3,361 in Ghana [13]. But the ability to identify and know what cervical cancer is can contribute to the reduction of the barriers to seeking help earlier, this is because awareness and seeking early help will decrease the rate of morbidity and death associated with the disease [14].

In most developing countries the greatest pressing issues facing cervical cancer prevention and management activities include but not limited to conscientizing the women, improving the knowledge of the service providers, as well as the effective and efficient evaluation and assessment of methodology. Largely, intelligence from many low-and-middle income nations reported that females had insufficient knowledge on what causes the disease, predisposing factors, and how cervical cancer could be avoided [15].

Deficit in knowledge of the signs, symptoms and risk factors of the disease have been established in studies as contributing to increase of Cervical cancer in lower and middle income countries [16,17]. Cervical cancer knowledge remains low in developing countries. A case in point; in Ghana the cervical cancer knowledge is 28% [18], 23% in Nigeria [19] and 31% in Ethiopia [20].

It could be controlled if effective preventive measures are put in place. These are sufficient to reduce morbidity and mortality. Inadequate knowledge and awareness can, however, result in the inability to participate in activities to prevent and protect oneself [4,11]. According to [21], for protection against the condition to be effective, there should be access and commitment, adequate follow-ups, quality of screening tests and the identification, and care for the damage discovered. Cancer preventive facilities are scanty in developing nations representing an estimated average of 19 percent [22]. This could be attributed to challenges which include but not limited to inadequate trained health care givers, under resourced funds to maintain and sustain preventive activities [11]. Amongst 6%-27% of adult females in Sub-Saharan Africa reported to have protected themselves against the disease [23]. In East Africa region, however, the incidence of the disease is on the rise which is alarming[24].

Inadequate knowledge on the disease is a known significant barrier to early diagnosis, cure, and prevention of the disease and its associated complications [8]. According to [15] in Nepal, 80.9% of the cases identified were recognized at the terminal stage, those who had no information about prevention of the disease using the Pap smear test were 86%. These statistics mean that there are issues concerning cervical cancer screening practices and prevention. About 95% of the recruited women had not been protected against the cervical cancer disease in developing nations due to inadequate access to the screening [15].

In Elmina, Ghana, it was found out that young female adults reported late to the hospital for checkups on cervical cancer because of the inadequate knowledge. It was established that 68.4 per

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cent of those interviewed had knowledge of cervical cancer, 93.6% could not identify the risks connected to the disease and 92% had no knowledge on treatment and prevention [25]. According to [25] variables such as occupation, level of education, marital status, misconceptions, negative belief, partner's denial and cost have a significant link with knowledge about the disease and protection among young female adults. This study, therefore, sought to find out cervical cancer knowledge and screening among young female adults in Kintampo North Municipal Hospital.

Methods and materials

Study area

The study was conducted at the Kintampo Municipal Hospital, Kintampo North, Bono East.

Study Design and setting

This was a cross-sectional study that used structured questionnaire to obtain data from respondents November 2019 to December 2019.

Study Population

The study population were women in their reproductive age group that attended the Kintampo North Municipal Hospital during the study period.

Inclusion and Exclusion Criteria

The study included women within the reproductive ages of 15-49 years who consented or assented to participate in the study. Those below the ages of 15 years and above 49 years were not interviewed and those who met the inclusion criteria but were not willing to participate in the study were also excluded.

Sample Size determination, sampling techniques, and procedure

The sample size was estimated using the formula [26]. But 10% of the estimated sample was calculated and added to round the sample size to 341 to take care of non-respondents, damaged questionnaires, questionnaires that may not be returned and withdrawers from the study.

The study was carried out among women who attended the Out Patient Department (OPD), antenatal clinic (ANC) and women who got admitted to the female's ward in the Kintampo North Municipal Hospital. The participants who met the inclusion criteria and consented to participate willingly were selected using consecutive sampling technique.

Data collection tools and procedures

Data was collected using a standardized structured self-administering questionnaire which contained twenty-seven questions. Data was collected from November 2019 to December 2019.

Data analysis

The data were analysed using SPSS version 23. Descriptive statistics was used to analyse the age and presented in mean and standard deviation. The categorical variables were reported in the form of percentages and frequencies. Pearson's chi-square analysis was used to determine the associations between the independent and dependent variables. A P-value < 0.05 was considered for statistically significant association. Unadjusted and adjusted logistic regression models were



subsequently fitted to test for the strength of association between the independent and dependent variables.

Ethical Consideration

The protocol of this study was ethically considered because authorization was obtained from the Ethics Review Board of Department of Development Policy; School of Public Service and Governance (SPSG); Ghana Institute of Management and Public Administration (GIMPA). Official permission was equally sought and granted by the Health Service Administrator on behalf of the medical superintendent of the Kintampo Municipal Hospital to conduct the study in the hospital.

Results

Socio-Demographic Characteristics of Respondents

A total of 341 questionnaires were administered of which 335 (98.2%) were returned and analysed. The age of respondents ranged from 15 to 49 years with a mean (SD) of 26.57 ± 5.9 years. Majority (28.1%) of the respondents were within the ages of 20 - 24 years, 161(48.1%) were married, and 227(67.8%) being Christians. The majority (88.7%) of respondents had some form education of formal education and about 157 (46.9%) were nulliparous. Details are as shown in the table below.

Variable	Frequency (N=335)	Percent (%)	
Age (Mean ± SD)	(26.57 ±7.59)		
15-19	61	18.2	
20-24	94	28.1	
25-29	80	23.9	
30-34	47	14.0	
35-39	24	7.2	
40-44	20	6.0	
45-49	9	2.7	
Educational level			
No formal education	38	11.3	
Primary	45	13.4	
JHS	85	25.4	
Secondary	135	40.3	
Tertiary	32	9.6	
Religion			
Christian	227	67.8	
Muslim	99	29.6	
Traditionalist	8	2.4	
others	1	0.3	
Marital status			
Single	159	47.5	
Married	161	48.1	
Co-habiting	6	1.8	
Divorced	6	1.8	
Widowed	3	0.9	

Table 1: Socio-Demographic Characteristics of Respondents



Ethnicity		
Bono	87	26.0
Мо	35	10.4
Ewe	23	6.9
Frafra	24	7.2
Sissala	17	5.1
Dagarti	27	8.1
Akan	79	23.6
Kokomba	33	9.9
Others	10	3.0
Occupation		
Farmer	38	11.3
Trader	75	22.4
Government worker	34	10.1
Housewife	46	13.7
Student	70	20.9
Artisan	9	2.7
Unemployed	56	16.7
Other	7	2.1
Number of children		
None	157	46.9
1 - 4	159	47.5
Above 4	19	5.7

Knowledge of Cervical Cancer among Respondents

When respondents were asked if they have heard of cervical cancer before, out of 335 participants, 58% answered in affirmative with 42% reported to have not heard of cervical cancer before as shown in figure 1.



Figure 1: Knowledge of Cervical Cancer



Sources of Knowledge of Cervical Cancer

Out of the 195 respondents who reported to have heard of cervical cancer before, when further asked their sources of information, it was found that the highest percentage was health workers 45.6% followed by radio/TV/internet 45.1 percent denoting 88 of the study participants. Family members and friends were other means through which they secured their information on cervical cancer representing 3.6% and 5.1% respectively.

When asked about sources of information on cervical cancer among those who had knowledge of cervical cancer, out of the 195 respondents, about 45.1% reported television, radio, internet and 45.6% reported health workers. This is different from a study findings from [27] which had 97.1 percent attributing their sources of information about cancer of the cervix to relatives and friends but similar to findings by [28], which found out that majority of the women had their information from the mass media. Another study also done in Ethiopia by[29], also found that most of the women had their information from health workers. This suggests that health workers in Kintampo hospital are doing their work so well in informing young female adults about cervical cancer and other related issues.

Source of knowledge	Frequency	Percentage
Health worker	89	45.6
Radio/TV/Internet	88	45.1
Family members	7	3.6
Friends/peer	10	5.1
Other	1	0.5

Table 2: Source of knowledge of cervical cancer

Cervical Cancer Knowledge on causes, symptoms and prevention

Responses given by the study participants on how knowledgeable they were about the disease are presented in table 3. Knowledge of the causes, signs and prevention of the disease was assessed among the respondents. The result showed that 236 (70.5%) of the participants indicated they had no idea what causes the sickness whiles 18.5% and 11.0% mentioned Human Papilloma Virus and Herpes Simplex Virus respectively. With respect to symptoms of the disease, 55.5% respondents indicated that they have no any idea. Similarly, with regards to prevention of the disease, 152(48.4%) reported that they have no idea on how cervical cancer is prevented.



Variables	Frequency	Percentage	
Cause of cervical cancer			
Human Papilloma Virus (HPV)	62	18.5	
Herpes Simplex Virus (HSV)	37	11.0	
No idea	236	70.5	
Symptoms of cervical cancer			
Bleeding in between period	51	15.2	
Vaginal bleeding after menopause	27	8.1	
Foul smelling vaginal discharge	49	14.6	
Pelvic pain during intercourse	17	5.1	
Bleeding after intercourse	5	1.5	
No idea	186	55.5	
Cervical cancer can be prevented			
Yes	152	44.5	
No	21	6.3	
No idea	162	48.4	

Table 3: Cervical Cancer Knowledge on Causes, Symptoms and Prevention

Practice of cervical cancer screening

Practice of cervical cancer screening is whether respondents had ever screened or not. Out of the 335 of respondents interviewed, the findings showed that, 317(94.6%) had no history of screening for the illness as indicated in figure 2. Discoveries from the analysis proved just 5.4% respondents had taken part in screening for cervical cancer.



Figure 2: Cervical Cancer Screening



Association between Knowledge of Cervical Cancer and Demographic Characteristics

A chi-square test of association was run to assess the association between knowledge of cervical cancer and demographic characteristics of respondents. Age (p=0.07), marital status (p=0.62), ethnicity (p=0.09) and number of children (p=0.07) were not statistically significant hence, not associated with cervical cancer knowledge. However, educational status (p<0.01), religion (p<0.01) and occupation (p<0.01) were statistically significant with cervical cancer knowledge (Table 4).

Variables	Frequency (N=334)	Have knowledge of cervical cancer N=195	Have no knowledge of cervical cancer N=140	P-Value
Age				0.07
15-19	61	29(47.5)	32(52.5)	
20-24	94	52(55.3)	42(44.7)	
25-29	80	55(68.3)	25(31.3)	
30-34	47	30(63.8)	17(36.2)	
35-39	24	10(41.7)	14(58.3)	
40-44	20	12(60.0)	8(40.0)	
45-49	9	7(77.8)	2(22.2)	
Educational level				<0.01*
No formal education	38	11(28.0)	27(71.1)	
Primary	45	16(35.6)	29(64.4)	
JHS	85	39(45.9)	46(544.1)	
Secondary	135	100(74.1)	35(25.9)	
Tertiary	32	29(90.6)	3(9.4)	
Religion				<0.01*
Christian	227	145(63.9)	82(36.1)	
Muslim	99	44(44.4)	55(55.6)	
Traditionalist	8	5(62.5)	3(37.5)	
Others	1	1(100.0)	0(0.0)	
Marital status				0.62
Single	159	93(58.5)	66(41.5)	
Married	161	96(59.6)	65(40.4)	
Co-habiting	6	3(50.0)	3(50.0)	
Divorced	6	2(33.3)	4(66.7)	
Widowed	3	1(33.3)	2(66.7)	
Ethnicity				0.09
Bono	87	59(67.8)	28932.2)	
Мо	35	18(51.4)	17(48.6)	
Ewe	23	16(69.6)	7(30.4)	
Frafra	24	12(50.0)	12(50.0)	
Sissala	17	6(35.3)	11(64.7)	
Dagari	27	12(44.4)	15(55.6)	
Akan	79	50(63.3)	29(36.7)	
Kokomba	33	16(48.5)	17(51.5)	
Others	10	6(60.0)	40(40.0)	

Table 4: Knowledge of Cervical Cancer and Socio-Demographic Characteristics



Occupation				<0.01*
Farmer	38	15(39.5)	23(60.5)	
Trader	75	39(52.0)	36(48.0)	
Government worker	34	34(100.0)	0(0.0)	
Housewife	46	33(71.7)	13(28.3)	
Student	70	46(65.7)	24(34.3)	
Artisan	9	2(22.2)	7(77.8)	
Unemployed	56	24(42.9)	32(57.1)	
Other	7	2(28.6)	5(71.4)	
Number of children				0.07
None	157	99(63.1)	58(36.9)	
1-4	159	89(56.0)	70(44.0)	
Above 4	19	7(36.8)	12(63.2)	

* Chi-Square test is significant at P< 0.05.

Logistics Regression on Cervical Cancer Screening

A logistics regression analysis was instituted to assess the impact of the demographic variables that were expressively linked to the cancer screening. Women who were divorced were significantly associated with cervical cancer screening (OR=38.204, CI=3.180-459.039). A regression analysis was done to find out the strength of association from the chi-square analysis and women divorced (p<0.01) stood the greater chance of screening for cervical cancer.

Variables	Odds Ratio	(95% confidence interval)	P-value
Marital status			
Single	Ref	Ref	
Married	1.356	(0.317-5.798)	0.68
Co-habiting	8.033	(0.561-115.120)	0.13
Divorced	38.204	(3.180-459.039)	<0.01*
widowed	0.000	(0.000-0.000)	0.99
Occupation			
Farmer	Ref	Ref	
Trader	5.439	(0.744-39.795)	0.10
Government worker	5.598	(0.631-49.653)	0.12
Housewife	1.554	(0.098-24.712)	0.76
Student	0.000	(0.000-0.000)	0.10
Artisan	0.000	(0.000-0.000)	0.10
Unemployed	1.781	(0.208-15.247)	0.60
Other	0.000	(0.000-0.000)	0.10
Number of children			
None	Ref	Ref	
1-4	4.45	(0.856-23.080)	0.07
Above 4	4.61	(0.397-53.600)	0.22

Table 6: Regression Analysis for Cervical Cancer Screening

NB: Ref represent the reference category

*p<0.05



Barriers to Cervical Cancer Screening

It was requested from the research participants what could serve as barriers for them to refused screening. Out of the total of 335 respondents, 77.6 percent reported lack of information as the major factor, this was followed by shyness (25.1%), cost of service (23%), and unavailability to healthcare delivery services (17%) as graphically shown in figure 3.



Figure 3: Barriers to Cervical Cancer

Discussion

The study showed that most of the respondents were within the age category of 20-29 years. This is the same as that captured in the Ghana Demographic Health survey 2008, suggesting that more than half of Ghanaian population are below age 30years. Women in this age group have the likelihood of engaging in polygamous activities and partake in other practices that expose them to cervical cancer. It is important that they have knowledge on cervical cancer in order to prevent it. With respect to the years of formal education, majority of them representing 40.3% were in the senior secondary school, with the highest level of education being junior high school. This might be the reason why 58% of them were knowledgeable about the disease, because the further you progress in your education, the more likely you are to have knowledge and information on some diseases such as cervical cancer. This finding is in support of a similar one conducted and revealed that knowledge on cervical cancer may be relatively higher among more educated women than the less educated ones, most especially among health care workers [14,29].

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Of the 195 respondents who reported to have heard of cervical cancer before, when further asked about their sources of information; it was found that the highest was health workers (45.6%), followed by radio/TV/internet (45.1%). Family and friends were other means through which they secured their information on cervical cancer representing 3.6% and 5.1% respectively. This is different from a study findings from [27] which had 97.1 percent attributing their sources of information about cancer of the cervix to relatives and friends but similar to findings by [28], that found out that majority of the women had their information from the mass media. Another study also done in Ethiopia by [29], also found that most of the women had their information from health workers. This suggests that health workers in Kintampo hospital are doing their work so well in informing young female adults about cervical cancer and other related issues.

High knowledge on cervical cancer means an improved healthcare seeking behaviours among the people in relation to treatment and prevention services. The outcomes of this study revealed that cervical cancer knowledge amongst young female adults in Kintampo North is somehow high. The knowledge level was 58% representing 195 respondents out of a total of 335 respondents. This outcome is similar to the finding of [19], which reported that, there is high knowledge of cervical cancer and its associated symptoms, signs, risk factors and treatment which will help to increase women's ability to detect early abnormalities which lead to the disease. Likewise, it agrees with a similar research conducted in Lagos University to assess the knowledge of female students on cervical cancer which showed that 56.4% of the students had knowledge about the disease [30].

Nonetheless, it is in contrast with a similar study conducted among a section of Zimbabwean women that show a comparatively lower cervical cancer knowledge [16]. Furthermore, this study outcome is in contrast with another study that revealed a significantly lower knowledge of 27.7% that had adequate knowledge, and again it was reported in another study done among the Uyghur women that had as low as 27% of the women studied were knowledgeable about the cervical cancer [31,32]. The outcome of about the knowledge of cervical cancer was 18 percent higher than another research finding from a study by [33] conducted among women in the United States among women aged between 18 and 75 years.

Even though most of those who took part in the study were knowledgeable about the disease, it was surprising when the findings showed that 152 respondents out of 335 of the respondents symbolizing 70.5% could not indicate what bring about the disorder, 29.5% mentioned Human Papilloma Virus and Herpes Simplex Virus as the causative agents of the disease. It has the same opinion with [34], which reported that only 8% of the respondents mentioned virus as the cause of the disease. This outcome is comparable to a discovery with findings that 17.7 percent knew that HPV causes cervical cancer which also agrees with another finding which indicated a 10.5 percent higher knowledge on HPV being the major predisposing factor to cervical cancer [30,33].

Furthermore, knowing the symptoms of cervical cancer can also be a significant contributory factor in identifying when there is an infection. From the findings as demonstrated in the table below, even though 44.5% of the respondents reported to have known one symptom or the other, about 55.5% had no knowledge about the indications of the disease. Findings from this study is dissimilar to that of another research outcome which reported 90.8 percent of study participants who had no idea on the signs and symptoms of cancer of the cervix even though 5.6 percent mentioned foul-smelling vaginal discharge, 0.7 percent said vaginal bleeding after sexual intercourse and 1.7 percent indicated vaginal bleeding as the signs and symptoms [35].



It been established by a study that cervical cancer knowledge helps women to screen and prevent it [14]. This position is not different from what [36], came out with that when women have high knowledge of cervical cancer and its associated symptoms, signs, predisposing factors and treatment it will help to increase women's ability to detect early abnormalities which lead to the disease. Being knowledgeable and appreciating cervical cancer will influence commitments of young female adults to participate in screening against the disease. Yet knowledge about the symptoms, as well as its prevention is limited among young female adults in Kintampo Municipal Hospital [37].

A chi-square test of association was done to assess an association between knowledge of cervical cancer and demographic characteristics of respondents. Age (p<0.07), marital status (p<0.62), ethnicity (p<0.09) and number of children (p<0.07) were not statistically significantly associated with cervical cancer knowledge, however, educational status (p<0.00), religion (p<0.01) and occupation (p<0.00) was statistically significant with cervical knowledge (Table 4.4). A test of association was done to find out if there is any association with demographic features of those interviewed, and knowledge about the disease and it was found out that, age, marital status, ethnicity and number of children did not significantly associate, however, educational status, religion and occupation had a great link to knowledge of cervical cancer. This is in agreement with a similar work which revealed that, some socio-demographic features which involve where an individual's place of abode, educational status, employment status and religion affected the knowledge and consciousness, behavior and practice of some Ethiopian women [14]. Conversely, it contradicts fallout from the study which found out no significant association of age and marital status, a study done in Nigeria by [38], which revealed that, age of women and marital status have a stronger relationship with their knowledge and awareness of the disease. Similarly, this current outcome is in contravention with a research finding which demonstrated that specifics of the demographic factors that are significantly associated with increased cervical cancer predisposing factors are low socioeconomic status and not being married according to [39].

Practice of cervical cancer screening is whether respondents had ever screened or not. Out of the 335 of respondents interviewed, the findings showed that, 317(94.6%) had no history of screening for the illness (figure 4.2). Discoveries from the analysis proved just 5.4% respondents had taken part in screening for cervical cancer. Though not encouraging, this is by far better than another study conducted and had none of the study participants who had undergone cervix screening for the disease before[27]. Conversely, out from this research agreed with another one conducted in Elmina by [40], to evaluate the knowledge, barriers and practice towards the screening of the ailment. This study recorded only 0.8% women who were ever screened. Moreover, it is consistent with another work carried out in Bolgatanga, where 5.3% of the entire participants who were interviewed had done the screening [41]. However, a study conducted in Ethiopia had 14.8% of the entire study participants who had screened against the disease [20].

A logistics regression analysis was instituted to assess the impact of the demographic variables that were expressively linked to the cancer screening. Women who were divorced were significantly associated with cervical cancer screening (OR=38.204, CI=3.180-459.039) (table 4.6). A regression analysis was done to find out the strength of association from the chi-square analysis and women divorced (p<0.00) stood the greater chance of screening for cervical cancer.



This agrees with [42], which revealed that young female adults who were separated or divorced stood the greatest chance to screen for cervical cancer.

It was requested from the research participants what could serve as barriers for them to refused screening. Out of the total of 335 respondents, 77.6 percent reported lack of information as the major factor, this was followed by shyness 25.1%, cost of service 23 percent and unavailability to healthcare delivery services denoting 17% as graphically shown below (figure 3). Regarding the obstacles to the screening; the prominent among the barriers they stated included absence of information or knowledge on the screening, access to health care services, cost of services, attitudes of healthcare providers, feeling shy to go for services, religion, busy schedules and partners' refusal. They are in agreement with another study conducted by [32], which revealed that, lack of knowledge on the disease and screening are established to be serious setback to the screening of the disease. Also, another barrier which prevents women from up taking the screening is the cost involved in the cervical screening, which is consistent with a similar study which mentioned financial ability as limiting factors to screening for the sickness, most particularly in populations where per capita income and industrialization are slow, other emergency health situations which need financial attention are always on the rise and removing money to pay for a non-emergency services can be very difficult hence become an obstacle to the acceptance by women to go in to screen [43]. Another study reemphasized that, the amount of money involved in travelling to access screening services is a factor that contributed to low utilization of services [44].

On the on the hand, discoveries from this present study are in contrast with a similar study conducted and revealed that study participants expressed fear of the procedure in caring out the disease's screening [45]. It is again different from another findings from a study that suggested that respondents indicated that procedure was concerned with the removal of the cervix and fixing it back which invariably is painful, hence a great challenge to young female adults up-taking the cervical cancer screening [46]. Also, the outcome of this study is in contrast with the lack of knowledge and misinformation on cervical cancer and screening as identified by findings from works as significant factors linked to cervical cancer screening. The identified misconceptions linked to cervical cancer and screening were that the procedure brought about abortion, it is caused by excessive sexual intercourse, poor eating habits, spiritual affliction and environmental pollution [18]. Not only that also, this current findings are contrary to a similar study which revealed that the presence of male physicians were a major barrier to those who wished to go in for cervical cancer screening [47].

Conclusion and Recommendations

The study reports low knowledge level, causes, signs and symptoms and the barriers women encounter in up taking cervical cancer screening and preventive methods among young female adults attending Kintampo North Municipal Hospital. This calls for a prompt need for sensitization and provision of screening centres for young female adults in the communities in the Kintampo North Municipality. This should come with comprehensive periodic health education and information by health workers on cervical cancer to strenuously eschew all forms of superstitions, misconceptions, myths and perceptions about cervical cancer since a lot of the respondents indicated their sources of information on cervical cancer as through the radio/internet/TV which may not always be precise and sufficient.

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Significant efforts and attention should be tailored towards the eradication of the recognized obstacles and enhancing facilitators through mechanisms such as creating awareness about the disease, building robust health care delivery systems, human capacity development as well as ensuring that female health professionals are mainly allowed to carry out the screening of cervical cancer. Stakeholders, including the Ghana Health Service/Ministry of Health and other private investors should use the findings in this study as the benchmark to conceptualize public health education and promotion interventions among adolescents in and around the Kintampo North Municipality

Reference

- 1. WHO. Global strategy to accelerate the elimination of cervical cancer as a public health problem and its associated goals and targets for the period 2020 2030. Vol. 2, United Nations General Assembly. 2020. 1–3 p.
- 2. World Health Organization. World Health Statistics: Monitoring Health for the SDGs, Sustainable Development Goals. 2019. 132 p.
- 3. Donkoh ET, Agyemang-Yeboah F, Asmah RH, Wiredu EK. Prevalence of cervical cancer and pre-cancerous lesions among unscreened Women in Kumasi, Ghana. Medicine (Baltimore). 2019;98(13):e14600.
- 4. Heena H, Durrani S, Alfayyad I, Riaz M, Tabasim R, Parvez G, et al. Knowledge, Attitudes, and Practices towards Cervical Cancer and Screening amongst Female Healthcare Professionals: A Cross-Sectional Study. J Oncol. 2019;2019.
- 5. Gultekin M, Ramirez PT, Broutet N, Hutubessy R. World Health Organization call for action to eliminate cervical cancer globally. Int J Gynecol Cancer. 2020;1–2.
- 6. Franklina A. Awareness of cervical cancer and willingness to screen among young female adults in madina. 2017;15–23.
- 7. Cd E, Cn E, Me O, Ho N. Giant Lipomas . A Report of Two Cases. Niger J Gen Pract. 2017;15(2):46–9.
- 8. Okunowo AA, Daramola ES, Soibi-Harry AP, Ezenwankwo FC, Kuku JO, Okunade KS, et al. Women's knowledge of cervical cancer and uptake of Pap smear testing and the factors influencing it in a Nigerian tertiary hospital. J cancer Res Pract. 2018;5(3):105–11.
- 9. Awua AK, Sackey ST, Osei YD, Asmah RH, Wiredu EK. Prevalence of human papillomavirus genotypes among women with cervical cancer in Ghana. Infect Agent Cancer. 2016;11(1):4.
- 10. Guido R. Cervical Cancer Screening. Clin Obstet Gynecol. 2018;61(1):40–51.
- 11. Ndejjo R, Mukama T, Musabyimana A, Musoke D. Uptake of cervical cancer screening and associated factors among women in rural Uganda: A cross sectional study. PLoS One. 2016;11(2):1–13.
- 12. Krings A, Dunyo P, Pesic A, Tetteh S, Hansen B, Gedzah I, et al. Characterization of Human Papillomavirus prevalence and risk factors to guide cervical cancer screening in the North Tongu District, Ghana. PLoS One. 2019;14(6):1–19.



- 13. Khan TJ. Examining the influence of e-Health in motivating cervical cancer screening and HPV vaccination among college students. 2018.
- 14. Azam S. Awareness and Perspectives on Cervical Cancer and Practices Related to it: How far it has Promoted. Recent Adv Cerv Cancer. 2016;
- 15. Thapa N, Maharjan M, Petrini MA, Shah R, Shah S, Maharjan N, et al. Knowledge, attitude, practice and barriers of cervical cancer screening among women living in mid-western rural, Nepal. J Gynecol Oncol. 2018;29(4):1–12.
- 16. Mutambara J, Mutandwa P, Mahapa M, Chirasha V, Nkiwane S, Shangahaidonhi T. Knowledge, attitudes and practices of cervical cancer screening among women who attend traditional churches in Zimbabwe. J Cancer Res Pract. 2017;4(2):53–8.
- Kyeiwaa C. Knowledge on Cervical Cancer and Cervical Cancer Screening among Women Attending Agogo Presbyterian Hospital, Ashanti Region. University Of Ghana; 2018.
- 18. Lim JNW, Ojo AA. Barriers to utilisation of cervical cancer screening in Sub Sahara Africa: a systematic review. Eur J Cancer Care (Engl). 2017;26(1):e12444.
- 19. Mwaka AD, Orach CG, Were EM, Lyratzopoulos G, Wabinga H, Roland M. Awareness of cervical cancer risk factors and symptoms: cross-sectional community survey in post-conflict northern Uganda. Heal Expect. 2016;19(4):854–67.
- 20. Mulatu K, Motma A, Seid M, Tadesse M. Assessment of Knowledge, Attitude and Pratice on Cervical Cancer Screening among Female Students of Mizan Tepi University, Ethiopia, 2016. Cancer Biol Ther Oncol. 2017;1(1):1–5.
- Smith RA, Andrews K, Brooks D, DeSantis CE, Fedewa SA, Lortet-Tieulent J, et al. Cancer screening in the United States, 2016: A review of current American Cancer Society guidelines and current issues in cancer screening. CA Cancer J Clin. 2016;66(2):95–114.
- 22. Nabukalu F. Factors Influencing Uptake of Cervical Cancer Screening and Testing among Makerere University Students at School of Statistics and Planning. Makerere University; 2019.
- 23. Ghebre RG, Grover S, Xu MJ, Chuang LT, Simonds H. Cervical cancer control in HIVinfected women: Past, present and future. Gynecol Oncol reports. 2017;21:101–8.
- 24. Vaccarella S, Laversanne M, Ferlay J, Bray F. Cervical cancer in A frica, L atin A merica and the C aribbean and A sia: Regional inequalities and changing trends. Int J cancer. 2017;141(10):1997–2001.
- 25. Ebu NI, Mupepi SC, Siakwa MP, Sampselle CM. Knowledge, practice, and barriers toward cervical cancer screening in Elmina, Southern Ghana. Int J Womens Health. 2015;7:31.
- 26. Snedecor GW, Cochran WG. Statistical methods, 8thEdn. Ames Iowa State Univ Press Iowa. 1989;54:71–82.
- 27. Ghosh S, Mallya SD, Shetty RS, Pattanshetty SM, Pandey D, Kabekkodu SP, et al.



Knowledge, Attitude and Practices Towards Cervical Cancer and its Screening Among Women from Tribal Population: a Community-Based Study from Southern India. J Racial Ethn Heal Disparities. 2020;

- Naghavi M, Abajobir AA, Abbafati C, Abbas KM, Abd-Allah F, Abera SF, et al. Global, regional, and national age-sex specifc mortality for 264 causes of death, 1980-2016: A systematic analysis for the Global Burden of Disease Study 2016. Lancet. 2017;390(10100):1151–210.
- 29. Shiferaw N, Brooks MI, Salvador-Davila G, Lonsako S, Kassahun K, Ansel J, et al. Knowledge and awareness of cervical cancer among hiv-infected women in ethiopia. Obstet Gynecol Int. 2016;2016.
- 30. Ayamga R, Perprem A, Atampugre CA. Assessment of taxpayers ' perception on property tax administration in Lawra municipality of Ghana. 2018;7(1):329–42.
- 31. Aboagye F. Awareness of Cervical Cancer and Willingness to Screen among Young Female Adults in Madina Zongo, Accra. University of Ghana; 2017.
- 32. Getachew S, Getachew E, Gizaw M, Ayele W, Addissie A, Kantelhardt EJ. Cervical cancer screening knowledge and barriers among women in Addis Ababa, Ethiopia. PLoS One. 2019;14(5):1–13.
- 33. McBride KR, Singh S. Predictors of adults' knowledge and awareness of HPV, HPVassociated cancers, and the HPV vaccine: implications for health education. Heal Educ Behav. 2018;45(1):68–76.
- 34. Idowu, A., Olowookere, S. A., Fagbemi, A. T., & Ogunlaja OA. Determinants of cervical cancer screening uptake among women in Ilorin, North Central Nigeria: a community-based study. Journal of Cancer Epidemiology, 2016. 2016;
- 35. Olubodun T, Odukoya OO, Balogun MR. Knowledge, attitude and practice of cervical cancer prevention, among women residing in an Urban slum in Lagos, South West, Nigeria. Pan Afr Med J. 2019;32:1–10.
- 36. Mwaka, A. D., Orach, C. G., Were, E. M., Lyratzopoulos, G., Wabinga, H., & Roland M. Awareness of cervical cancer risk factors and symptoms: cross-sectional community survey in post-conflict northern Uganda. Health Expectations, 19(4), 854–867. 2016;
- 37. Binka C, Doku DT, Awusabo-Asare K. Experiences of cervical cancer patients in rural Ghana: An exploratory study. PLoS One. 2017;12(10):e0185829.
- 38. Chinaka C, Nwazue U. Awareness of cervical cancer and its screening in Abakaliki, Nigeria. African Journal of Cellular Pathology. 2013; 1(1):47–51. 2013;
- 39. Gelband H, Jha P, Sankaranarayanan R, Horton S. Disease Control Priorities, (Volume 3): Cancer. The World Bank; 2015.
- 40. Innocentia Ebu, N., Mupepi, S. C., Peter Siakwa, M., & Sampselle CM. Knowledge, practice, and barriers toward cervical cancer screening in Elmina, Southern Ghana. 2014;
- 41. Ziba FA, Baffoe P, Dapare PPM, Shittu SO, Antuamwine BB. Awareness and knowledge level of cervical cancer among women of reproductive age in Bolgatanga municipality. J



Med Biomed Sci. 2015;4(2):1–6.

- 42. Calys-tagoe BNL, Aheto JMK, Mensah G, Biritwum RB, Yawson AE. Cervical cancer screening practices among women in Ghana : evidence from wave 2 of the WHO study on global AGEing and adult health. 2020;1–9.
- 43. Gele AA, Qureshi SA, Kour P, Kumar B, Diaz E. Barriers and facilitators to cervical cancer screening among Pakistani and Somali immigrant women in Oslo: a qualitative study. Int J Womens Health. 2017;9:487.
- 44. Lee HY, Lee MH. Barriers to cervical cancer screening and prevention in young Korean immigrant women: implications for intervention development. J Transcult Nurs. 2017;28(4):353–62.
- 45. Ndejjo R, Mukama T, Kiguli J, Musoke D. Knowledge, facilitators and barriers to cervical cancer screening among women in Uganda: a qualitative study. BMJ Open. 2017;7(6):e016282.
- 46. Nyakang'o SB, Booth A. Women's perceived barriers to giving birth in health facilities in rural Kenya: A qualitative evidence synthesis. Midwifery. 2018;67:1–11.
- 47. Akinlotan M, Bolin JN, Helduser J, Ojinnaka C, Lichorad A, McClellan D. Cervical Cancer Screening Barriers and Risk Factor Knowledge Among Uninsured Women. J Community Health. 2017;42(4):770–8.