

## Awareness and Prevention of Cervical Cancer among Women in Bekwai Municipality in the Ashanti Region of Ghana

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### Abstract

*The study was a descriptive survey carried out to find out the awareness and prevention of cervical cancer among women in Bekwai Municipality in the Ashanti Region of Ghana. The participants for the study comprise all women in their reproductive age of 15-49 years. A sample size of 380 was purposively selected for the study. Quota sampling technique was used to select the participants from four largest communities in Bekwai Municipality. Questionnaire was the main instrument used for data collection. Frequencies and percentages were used to analyze the data. It was found out that most women in Bekwai Municipality are not aware of the risk factors and symptoms associated with cervical cancer. The study revealed that a greater number of women in Bekwai Municipality in the Ashanti region have never gone for cervical cancer screening before. Though a greater number of the women have never gone for screening before, the findings show that most women believe that when cervical cancer is detected early, it can improve the chances of survival. In all, the study revealed that most women are of the view that cervical cancer can be prevented and the best ways to prevent cervical cancer is through HPV vaccination, public health education, use of condoms during sex and avoiding multiple sex partners. Based on the empirical findings, appropriate conclusion and recommendations for practice were offered.*

**Key words:** Cancer, Cervical Cancer, Chlamydia infections, Human Papillomavirus Infections, Sexually Transmitted Infections, Awareness, Prevention, Gynecological Cancers

## 1. INTRODUCTION

Cancer is a major health problem around the world (Cook, 2009, U.S. Cancer Statistics Working Group, 2010). In 2012, a total of 14.1 million new cancer cases developed and 8.2 million cancer deaths occurred around the world (Center for Disease Control and Prevention, 2012). According to the National Cancer Institute (2016), 100 different types of cancers are diagnosed till now. Among these, both breast cancer and cervical cancer occur commonly in women population throughout the world. According to the World Health Organization (WHO) Information Centre on HPV and Cervical Cancer, 2010 report, cervical cancer is a disease that is peculiar to women, and has adverse effect on their sexual and reproductive health as well as their general condition and family life. Cervical cancer is the commonest gynaecological cancerous growth in women worldwide. It represents 13% of all female cancerous growths and a major cause of cancer-related death (Makwe & Ihuoma, 2012). Globally, cervical cancer is the second most common cancer worldwide after breast cancer (Awua, Sackey, Osei, Asmah, & Wiredu, 2016). Deaths due to cancer have cervical cancer as one of the main causes. It is ranked as the fourth most basic and frequently detected cancer-related deaths in women globally (Onsuz, Hidiroglu, Sarioz, & Karavus, 2014). Data from World Health Organization (WHO) indicate that about two million women worldwide have cervical cancer upon examination, with an estimated 570,000 new cases in 2018 representing 6.6% of all female cancers, and 274,000 women die because of cervical cancer each year. Approximately 90% of deaths from cervical cancer occurred in low and middle income countries (Onsuz et al., 2014). In West Africa about 28, 903 new cases of cervical cancer are recorded annually. It is common among women in the reproductive age of 15 to 49 years. West Africa region is rated second in cervical cancer statistics globally (Awua et al., 2016). The age- institutionalized death rate for cervical cancer in Ghana is more than three times the worldwide cervical malignancy death rate (7.8/100,000) (Williams & Amoateng, 2012).

In Ghana, cervical cancer is the leading cause of death in gynecological cancers. Of all gynecological cancers, cervical cancers make up for about 57.8% in Ghana. Every year, 3,038 new cases are recorded and out of this, over 2000 women die from the disease (WHO,

2012). It is a sexually transmitted disease caused by genital human papillomavirus (HPV) which stand out amongst the most widely recognized sexually transmitted infections (STI). Certain risk factors have been observed to be related with cervical cancer development which includes hereditary, early sexual debut, Chlamydia infections, smoking, HPV infections, multiple sexual partners, long term use of contraceptives (Williams et al., 2013). The aggregate risk of a woman dying of cervical cancer is about three times worldwide combined risk (Williams, Kuffour, Ekuadzi, Yeboah, Elduah, M., Tuffour, & Williams, 2013). Fortunately, cervical cancer can be prevented and mortality can be reduced by diagnosing the disease in its early stage if it is already there (Ranabhat, Tiwari, Dhungana, & Shrestha, 2014). Oncology specialists have demonstrated that cervical cancer can be annihilated through preventive screening and the early discovery of precancerous and carcinogenic injuries (Awua et al., 2016).

Despite the high prevalence rate of cervical cancer in developing countries, cervical cancer awareness and prevention is low in developing countries. Less attention has been given to cervical cancer compared to breast cancer. Recent global cancer statistics indicate rising incidence of cervical cancer and the increase is occurring at a faster rate (WHO, 2013). The lifetime risk of developing cervical cancer is at an incidence level of one in nine globally and cervical cancer is now one of the commonest malignancies in Ghana, accounting for 16% of all cancers (Binka, Nyarko, & Doku, 2015). Analysts at the World Health Organization (WHO) have anticipated that by 2025, there will be around 5007 new instances of cervical cancer growth and 3361 deaths every year in Ghana. The cervical cancer growth rate and death rates in Ghana is among the highest across the globe and these percentages have been increasing rather than diminishing (Awua et al., 2016). Thus, the Ministry of Health through Ghana Health Service has called for a reduction in cervical cancer mortality through awareness creation and prevention through regular screening but there is no confirmation that critical steps have been made to build the Ghanaian woman's awareness and prevention on cancer of the cervix and its subsequent screening (MOH/GHS, 2014). Williams et al (2013) further stated that past investigations demonstrate that in Ghana, awareness and prevention of cervical cancer is very low even among women with higher education. Information from the World Health Survey show that cervical cancer

prevention and screening rates in urban and rural settings in Ghana are to a great degree low at 3.2% and 2.2% respectively (Williams & Amoateng, 2012).

Upon all these staggering statistics, cervical cancer awareness and prevention is not rigorously promoted in Ghana. Many studies on cancer awareness and prevention have focused on breast cancer with little attention on cervical cancer among women. As such not much information is reported regarding women's awareness and prevention on cervical cancer across many part of the country. Again, it is also unclear the extent of cervical cancer awareness and prevention among women in Bekwai Municipality in the Ashanti Region of Ghana. Empirical evidence is needed to inform policy to rigorously promote the awareness and prevention of cervical cancer. Based on this, it is important to investigate the awareness and prevention of cervical cancer among women in Bekwai Municipality. As such the variations in literature and findings, many studies suffer from methodological challenges and these findings may not truly reflect the awareness and prevention of cervical cancer. It is undeniable fact that a good policy cannot be based on research findings that suffer from methodological weaknesses. Thus, this study aims at bringing out empirical findings through systematic and generally accepted methodological approach. This study seeks to examine the awareness and prevention of cervical cancer among women in Bekwai Municipality in the Ashanti Region of Ghana. This study differs from previous studies in many ways. This study provides in-depth explanation to the awareness and prevention of cervical cancer among women in Bekwai Municipality in the Ashanti Region of Ghana. This study has a number of theoretical and practical contributions. Firstly, this study adds to the literature by providing empirical evidence from the perspectives of women thereby widening the scope and applicability of the awareness and prevention of cervical cancer literature. It may also serve as useful literature for future researchers in this field. In terms of practical contributions, the findings of this study will go a long way to inform policy decisions regarding the awareness and prevention of cervical cancer in Ghana. Furthermore, findings from this research will provide specific information needed to be able to organize a much more effective educational campaign against cervical cancer in Ghana.

Findings from this study may guide policy makers, government, non-governmental agencies and public health

educational programs and also assist in the development of public health interventions on cervical cancer to complement the awareness and prevention on this important public health issue. Lastly, information that will be gained from this study will be useful to the Ministry of Health, Ghana Health Service, local and international health partners in the design of interventions aimed at preventing cervical cancer through increased awareness and improved screening. The rest of the paper was organised as follows: section two dealt with materials and methods. Section three focused on results and discussions. Finally, section four dealt with conclusions and recommendations.

## **2.0 MATERIALS AND METHODS**

### **2.1 Research Design**

The researcher employed the descriptive-survey method in the conduct of the study. Aggarwal (2008) opined that descriptive research is devoted to the gathering of information about prevailing conditions or situations for the purpose of description and interpretation. Cresswell (2009) also posited that descriptive survey research employs applications of scientific method by critically analyzing and examining the source of materials, by analyzing and interpreting data, and by arriving at generalization and prediction.

### **2.2 Participants**

The participants of the study comprise all women in their reproductive age of 15-49 years in four largest communities within Bekwai Municipality. They are Bekwai, Poano, Dominase and Ofoase-Kokoben community. According to the Ghana Statistical Service (2010), the total population of women in their reproductive age in Bekwai Municipality is 28, 480. A sample size of 380 was selected for the study. This was based on Krejcie and Morgan (1970) recommendation on selection of population sample. Females were purposively selected for the study because the study sought to find out the awareness and prevention of cervical cancer among women in Bekwai Municipality. Quota sampling technique was used to select the participants from the four largest communities in Bekwai Municipality. 25% of the participants fall within the ages of 15-24 years, 35% were between the ages of 25-34 years, 22% were between

the ages of 35-44 years while 18% were 45 years and above. In addition, 45% were farmers, 38% were traders while 11% and 6% were teachers and health workers respectively. Again, 47% had education up to JHS level, 30% had education up to SHS level, 17% had education up to tertiary level while 3% had no formal education.

### 2.3 Instruments

Questionnaire was the main instrument used for this study. The questionnaires were designed and validated by the researcher. According to Abawi (2013), questionnaires allow for collecting objective data in a large sample of the study population (such as the one used in the study) in order to obtain results that are statistically significant especially when resources are limited.

### 2.4 Data Gathering Procedure

Permission was sort from Assembly members and community elders before the actual data collection. one week later, the researcher and four trained research assistants collected the data from the participants. Data collection took two weeks. All ethical considerations involving the research and the participants were ensured. This allowed the researchers to clarify the misunderstandings that arose during the data collection.

## 3.0 RESULTS AND DISCUSSIONS

Table 1 indicates the awareness of cervical cancer among participants.

**Table 1: Awareness of cervical cancer by participants**

Response	Frequency	Percentages (%)
Yes	114	30
No	266	70
Total	380	100

Table 1 shows that 70 % of the participants indicated that they are not aware of cervical cancer while 30% were aware of cervical cancer. This indicates that a greater number of the participants are unaware of cervical cancer disease. This result is similar to a study conducted by Ahmed, Ahmed, Idris and Sabitu (2013) which revealed that women had poor knowledge and awareness of cervical cancer.

Table 2 indicates participant's awareness of the risk factors associated with cervical cancer.

**Table 2: Awareness of risk factors of cervical cancer**

Response	Frequency	Percentages (%)
Yes	95	25
No	285	75
Total	380	100

Participants were asked whether they are aware of the risk factors associated with cervical cancer. Table 2 indicates that 75 % of the participants indicated they are not aware of the risk factors associated with cervical cancer while 25% were aware of the risk factors associated with cervical cancer. This indicates that a greater number of the participants are unaware of the risk factors associated with cervical cancer disease. This finding is also consistent with a research conducted by Lambert (2001) and Peter & Navkiran (2009) which revealed that there is lack of awareness of the risk factors associated with cervical cancer among women of different demographic and other characteristics in many countries.

Table 3 indicates participant's response on the risk factors of cervical cancer.

**Table 3: Risk factors associated with cervical cancer**

Risk factors of cervical cancer	Frequency	Percentages (%)
HPV	27	7.2
Chlamydia infections	18	4.7
Smoking	10	2.6
Long term use of OCs	15	3.9
Weak immune system	12	3.2
Diethylstilbestrol (DES)	8	2.1
Obesity/Overweight	5	1.3
No idea	285	75
Total	380	100

Participants were asked to identify the risk factors associated with cervical cancer. Results from table 3 shows that 75% of the participants could not identify any risk factor associated with cervical cancer. 7.2% identified HPV as the risk factor, 4.7% identified Chlamydia infections as the risk factor, 3.9% identified Long term use

of Oral Contraceptives (OCs), 3.2% identified Weak Immune System as the risk factor while 2.6%, 2.1% and 1.3% identified Smoking, Diethylstilbestrol (DES) and Obesity/Overweight as the risk factors respectively.

This indicates that a greater number of the participants could not identify the risk factors associated with cervical cancer disease. The findings of this study is similar to a study conducted by Klug, Hukelmann & Blettner (2008) which stated that a review of several studies from different countries shows that overall, the general public has low level of awareness about the risk factors of cervical cancer. Again, the finding is consistent with a research by Wong (2016) among Malaysian women which revealed lack of awareness on risk factors of cervical cancer among the respondents.

Table 4 indicates participant's response on the symptoms of cervical cancer.

**Table 4: Symptoms associated with cervical cancer**

Symptoms of cervical cancer	Frequency	Percentages (%)
Unusual vaginal discharge	28	7.4
Pelvic pain	14	3.7
Vaginal bleeding	20	5.3
Leakage of urine	10	2.6
Swelling legs	7	1.8
Back pain	11	2.9
Fatigue	5	1.3
No idea	285	75
Total	380	100

Participants were asked to identify the symptoms associated with cervical cancer. The result from table 4 shows that (75%) of the participants stated they have no idea on the symptoms of cervical cancer. (7.4%) indicated Unusual vaginal discharge as the symptoms of cervical cancer, (5.3%) indicated Vaginal bleeding, (3.7 %|) indicated Pelvic pain whiles (2.9%), (2.6%), (1.8%) and (1.3%) indicated back pain, leakage of urine, swelling legs and fatigue as the symptoms of cervical cancer respectively. This indicates that a greater number of the participants are unaware of the symptoms associated with cervical cancer disease. This is similar to a research by DM (2016) which indicated that in Botswana, knowledge about the



symptoms of cervical cancer was inadequate among women with low incomes.

Table 5 indicates participant's response on early detection of cervical cancer.

**Table 5: Early detection of cervical cancer**

Response	Frequency	Percentages (%)
Yes	323	85
No	57	15
Total	380	100

Participants were asked to indicate whether cervical cancer can be detected early. (85%) of the participants responded (Yes) showing that cervical cancer can be detected early among females. (15%) of the participants stated (No) showing that cervical cancer cannot be detected early. Again, the participants were asked to indicate whether early detection of cervical cancer can improve the chances of survival. (85%) of the participants indicated that early detection of cervical cancer can improve the chances of survival while (15%) also stated that early detection cannot improve the chances of survival. This finding is also consistent with a study by Wright & Kuhn (2011) which revealed that a greater number (63.9%) of the respondents indicated that cervical cancer can be detected early and early detection can help improve the chances of survival.

Table 6 indicates how often participants do Cervical Cancer screening.

**Table 6: How often participants do cervical cancer screening**

Response	Frequency	Percentages (%)
Monthly	7	1.8
Quarterly	10	2.6
Yearly	34	8.9
Never done screening before	330	86.7
Total	380	100

Participants were asked to indicate how often they go for screening. The result from table 6 shows that (86.7%) had never gone for screening before, (8.9%) stated they go for screening on yearly bases, (2.6%) stated they go for screening on quarterly bases while (1.8%) stated they go for screening on monthly bases. This finding also add

on to support World Health Organization report, which stated that many women in developing countries have not heard and do not have access to cervical cancer screening services as a result they do not do screening. Again this finding is similar to a research by Nakandi, Kirabo, Semugabo & Kittengo (2013) which revealed that women in Uganda do not go for cervical cancer screening due to embarrassment and fear of knowing cervical cancer status. Participants were asked to indicate how cervical cancer screening is important to them. (75%) of the participants indicated that they do not see the importance of cervical cancer screening, (17%) indicated cervical cancer screening is very important while (8%) indicated is important to them.

Table 7 indicates participant's response on prevention of Cervical Cancer.

**Table 7: Prevention of cervical cancer**

How to prevent cervical cancer	Frequency	Percentages (%)
HPV Vaccination	85	22.4
Public Health Education	95	25
Using Condoms during sex	76	20
Avoiding multiple sex partners	35	9.2
Avoiding intake of oral contraceptives	22	5.8
Avoiding smoking	10	2.6
No idea	57	15
Total	380	100

Participants were asked to indicate whether cervical cancer can be prevented. (85%) stated indicated cervical cancer can be prevented while (15%) believe that it cannot be prevented. Again, they were asked to tell how cervical cancer can be prevented. Out the (85%) who believe that cervical cancer can be prevented, (25%) stated it can be prevented through public health education, (22.4%) stated HPV vaccination, (20%) indicated using condoms during sex, (9.2%) stated avoiding multiple sex partners while (5.8%) and (2.6%) stated avoiding intake of oral contraceptives and avoiding smoking respectively. This result is similar to the findings of Edwin (2010) and Anoud, Alaa, Haneen & Medhat (2013) which revealed that cervical cancer is preventable through public health education, HPV

vaccination, using condom during sex and avoiding multiple sex partners.

#### **4.0 CONCLUSION AND RECOMMENDATIONS FOR PRACTICE**

Based on the findings, the following conclusions are drawn. From the findings, the study concludes that women in Bekwai Municipality in the Ashanti region have low level of awareness on the risk factors and symptoms associated with cervical cancer. The study concludes that a greater number of the women in Bekwai Municipality in the Ashanti region have never gone for cervical cancer screening before. Though a greater number of the women have never gone for screening before, the findings show that most women believe cervical cancer like other diseases can be detected early and early detection can help improve the chances of survival. Most of women are of the view that cervical cancer can be prevented and the best ways to prevent cervical cancer is through HPV vaccination, public health education, use of condoms during sex and avoiding multiple sex partners.

Based on the findings, the following recommendations are made. Firstly, Health care providers seeing clients should give cervical cancer screening education at health facilities. Government should consider in cooperating cervical cancer screening programme into the National Health Insurance Scheme (NHIS). This will not only help create awareness about the disease but also aid early detection of cervical cancer. Ministry of Health, Ghana Health Service and NGOs should consider instituting cervical cancer awareness and screening on yearly bases. During this period in the year the Ministry of Health and other campaign groups will be expected to educate and screen women throughout the country. The Public health division of Ministry of Health and Ghana Health Service must increase educational campaign on cervical cancer. Government in partnership with NGOs should establish cervical cancer screening centres in each district across the country. Lastly, Public health workers should give more health talks on cervical cancer throughout the country in order to reach more women.

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