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CERVICAL CANCER SCREENING AWARENESS AMONG FEMALE HEAD PORTERS (KAYAYEI) IN AGBOGBLOSHIE, ACCRA

BY

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JULY, 2016.

DECLARATION

I declare that this dissertation is my own work and that any references made are duly acknowledged.

Signed..... Date.....

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(Student)

Signed..... Date.....

Dr. Ernest Tei Maya

(Supervisor)

DEDICATION

I dedicate this study to my husband, son and my siblings for their love, encouragement and support always. Last but not the least to my late mother who would have been so proud of me.

ACKNOWLEDGEMENT

I would like to thank the Almighty God for His Grace and Favour for seeing me through this program.

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LIST OF ABBREVIATIONS

CC	Cervical Cancer
CCS	Cervical Cancer Screening
GHS	Ghana Health Service
HIV	Human Immunodeficiency Virus
HPV	Human Papilloma Virus
LBC	Liquid Based Cytology
NHIS	National Health Insurance Scheme
SPSS	Statistical Package for Social Science
STI	Sexually Transmitted Infections
VIA	Visual Inspection with Acetic Acid
WHO	World Health Organization

DEFINITION OF TERMS

Vulnerable: the vulnerable refers to "*Kayayei"*, that is, female head porters who are exposed to cervical cancer predisposing factors.

Awareness: It implies knowledge of cervical cancer screening services and being able to give one example of a screening method.

ABSTRACT

Introduction: Cervical cancer affects the cervix of women. It is the second most common cancer in women worldwide (WHO, 2012). Cervical cancer is often caused by the Human Papilloma Virus (HPV) and is sexually transmitted. The general risk factors for cervical cancer include early age of first intercourse, multiple sexual partners, high parity, Human Immunodeficiency Virus (HIV), cigarette smoking and immuno-suppression. This disease can be prevented and often cured if early interventions are made available to those who are at risk of developing the cancer. The preventive strategies of reducing cervical cancer incidence should focus on preventing risk factors because the condition takes about 10 to 15 years to develop from the precancerous stage to a cancer. With early detection by screening, it can be prevented. The screening methods include Papanicolaou (Pap) Testing for all age groups or Visual Inspection with Acetic Acid (VIA) for ages 18-45 years. This study therefore, sought to determine the knowledge index of the head porters (*Kayayei)* in Agbogbloshie because cervical cancer research has not covered such a vulnerable group.

Objectives: To determine; the level of cervical cancer screening awareness among the female head porters (*Kayayei*), their attitude towards cervical cancer screening services and explore their readiness to undertake cervical cancer screening in the next one year as well as assess the sexual behavior of the group.

Methodology: A cross sectional design with quantitative and qualitative research methods was used. The area of the study was Agbogbloshie in the Greater Accra Region. 396 respondents were involved. For the quantitative section of the study, data was analyzed using SPSS version 22. A chi-squared test for independence was carried out to establish the relationship between awareness of cervical cancer screening and respondents' socio-demographical characteristics. The same test was carried out on readiness to screen in the next one year and the demographic characteristics of respondents. Qualitative analysis was also done for the responses obtained from one Focus Group Discussion formed. The data collected was coded and analyzed thematically.

Results: Awareness on cervical cancer was satisfactory with 59.9% of total respondents affirming awareness of the disease and 80.2% of the total respondents are aware of cervical cancer screening. The study also, found those with lack of interest towards cervical screening to be 7.8% of the 59.9% of total respondents. Again, their sexual behavior suggested that they are less prone to HPV infection. Finally, respondents showed

readiness to screening in the next one year and a definate association was found Between willingness to screen and their demographic characteristics. Most (63.8%) were aware and willing to screen in the next one year.

Conclusion: The study showed that more of the respondents were aware of cervical cancer and ready to undergo screening although they were not ready to screen in the past. Finally, the head porters are now aware of the disease and had taken its implications seriously. The study therefore recommended that the Ghana Health Service (GHS) in collaboration with other donor agencies should work to intensify efforts in ensuring awareness and accessibility of cervical cancer screening to women by women in service provision.

Keywords: Cervical cancer awareness, vulnerable, Accra, "*Kayaye",* cervical cancer screening.

CHAPTER ONE

INTRODUCTION

1.1 Background

Cervical cancer is unrestrained growth of the cells of the cervix. The cervix is the lower narrow part of the uterus which protrudes into the upper part of the vagina (National Cancer Institute, 2015). Cervical cancer is a sexually transmitted disease often caused by the Human Papilloma Virus (HPV) Types 16 and 18 as a result of exposure to early sex in girls or women. Women or younger girls (of age six to 14 years) with multiple sex partners and recurrence of sexually transmitted infections are at a higher risk of contracting cervical cancer. Other risk factors for cervical cancer include multiple births, early marriage and cigarette smoking (WHO,2006).

The Human Papilloma Virus (HPV) is responsible for more than 90% of the cases of invasive cervical cancer worldwide and it is related to 80% of pre-cancerous changes in the cervix (Walboomers, Jacobs and Manos, 1999). The main reservoirs of the genital HPV that infects women with cervical cancer are men. Uncircumcised men are reported to have a high prevalence ,46% of HPV infection of the glans/corona compared to circumcised men (29.0%).(Hernandez et al., 2008).

Globally, cervical cancer accounts for about 52% of all cancer related deaths (WHO, 2015). In Sub-Saharan Africa, East Africa has the highest (42.7%) sub regional incidence of cervical cancer followed by Southern Africa (31.5%); Middle/Central Africa (30.6%); West Africa (29.3%); and North Africa (6.6%) (WHO, 2014). At the national level, Ghana records an incidence of 35.4% (WHO, 2014). Mortality from cervical cancer at the sub regional level is led by East Africa (27.6%) followed by Middle/Central Africa (22.5%);

Southern Africa (17.9%) and North Africa (3.2%) (WHO, 2014). West Africa (18.5%); Ghana has an 18.9% mortality rate from cervical cancer (WHO, 2014). At the Korle-Bu Teaching Hospital (which is a tertiary hospital in Ghana) for example, cervical cancer is reported to be the commonest gynecological malignancy making up 64% of gynecological malignancies seen at the hospital (Adanu, Seffah, Duda, Hill and Anarfi, 2010).

Cervical cancer is the number two killer disease in women (Wong, Wong, Low, Khoo and Shuid, 2009) and the fourth most frequent cancer in women worldwide (WHO, 2015). Cervical cancer is one of the commonest cancers occurring in the developing and underdeveloped countries with an estimate of 440,000 new cases annually (Wong et al., 2009). Of the estimated, 270 000 deaths from cervical cancer annually, more than 85% of these occur in less developed regions (WHO, 2015),this is as a result of limited access to effective screening thus the disease is often identified in the advanced stage. Also, treatment for the late-stage of the disease is often poor which results in a higher rate of death. Cervical cancer can be prevented by identifying pre-cancerous lesions early using repeated Pap smear screening or Visual Inspection with Acetic Acid (VIA) and treating these lesions before they progress to cancer (Wong et al., 2009).

In a study conducted at the Korle Bu Teaching Hospital, it was observed that if the morbidity and mortality associated with gynecological cancers are to be reduced, then cervical cancers must be first on the action plan. Fortunately, cervical cancer is largely a preventable disease (Nkyekyer, 2000). However, in Ghana there is no systematic national cervical cancer screening. Most screenings are opportunistic where doctors request Pap Smears or VIA for patients during their visits to the clinics for either general medical examinations or for consultations unrelated to cervical cancer (Adanu et al., 2010). Some

public education has been done in Ghana on cervical cancer but there is still low patronage of screening services in Ghana (Adanu, 2002; Duda et al., 2005).

There is a low level of cervical cancer awareness and screening among women of low socio-economic status in Nigeria leading to high risk condition . (Balogun et al., 2012; Pillay, 2002; Wong et al., 2009).

1.2 Problem Statement

Cervical cancer is known to be one of the most common cancers among women and it has a high incidence rate in developing countries including Ghana (WHO, 2002). According to (Tripathi, Yugantara, Randhir and Alkal. 2014) cervical cancer claims the lives of 270,000 women globally every year with over 85 % of them found in developing countries. In 2012 alone, there were about 528,000 new cases of cervical cancer worldwide (Kristina, Mirabeau-Beale, Akila and Viswanathan 2014) . In sub Saharan Africa, 34.8 new cases of cervical cancer are diagnosed per 1,000 women annually, and 22.5 per 1,000 women die from the disease (Muthali, Ngwira and Taulo, 2015).

In Ghana, 3,000 women are diagnosed annually and about 2,000 of them die every year (MOH, 2015). At the Korle-Bu Teaching Hospital for example, cervical cancer is reported to be the commonest gynecological malignancy making up 64% of gynecological malignancies seen at the hospital (Adanu et al., 2010). The WHO has estimated additional cases of cervical cancer to be over 5,000 in Ghana with at least 3,300 deaths every year by the year 2025. The mortality and incidence rate in Ghana is among the highest in the world (WHO, 2006). Though preventable, a recent study in Elmina, Southern Ghana by Ebu, Mupepi and Sampselle (2015) suggested that women do not seek medical attention due to

lack of adequate knowledge about cervical cancer screening tests and where it could be done. It was also established that negative beliefs, misconceptions and other social barriers such as partners not allowing screening and financial constraints are associated with women not seeking medical care and the numerous deaths resulting from it.

Cervical cancer is one of the most preventable human cancers because of its slow progression from cytologically identifiable precancerous stages to full blown cancer stage. It also has effective treatments if detected early (Balogun et al., 2012) and an increase in knowledge of the disease will lead to an increase in cervical cancer screening which will invariably lead to the prevention of the disease. Wong et al. (2009) have argued that in Europe, the disease has dropped by 90% as a result of an increase in the level of awareness among women and young girls. In Africa, the high prevalence of the disease is attributed to lack of awareness and the absence of effective cytological screening programs (Balogun et al., 2012).

Vulnerable women like the "*Kayayei*", who are exposed to a whole lot of pre-disposing factors like rape, indulging in early sexual practices, having multiple sexual partners and unsafe abortions stand a greater risk of being infected with cervical cancer without the possibility of receiving treatment (Soneji and Fukui, 2008). In effect, the lack of awareness in this vulnerable group and their general socioeconomic conditions makes them more susceptible to the disease (Nkyekyer, 2000 and Canadian Public Health Association, 2016).

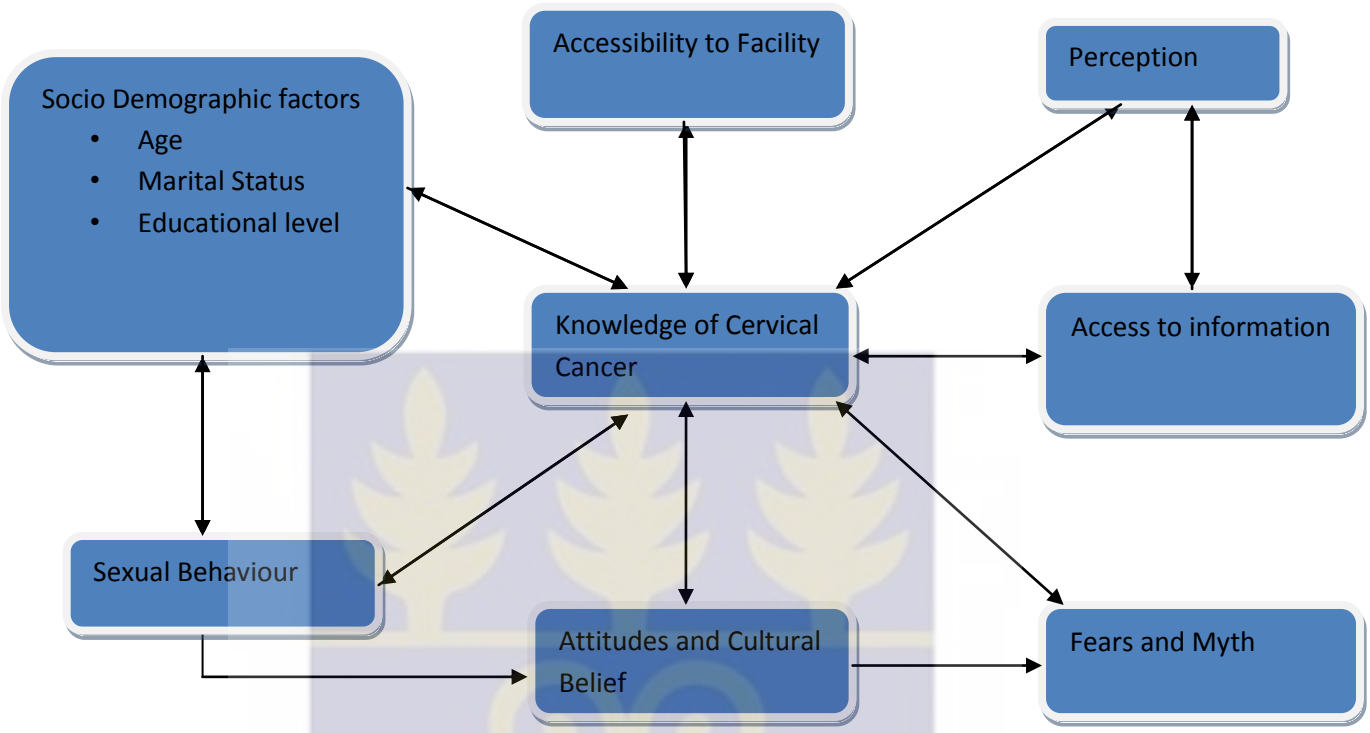
Balogun et al. (2012) reported, that the low level of awareness on cervical cancer in developing countries has accounted for the disparity in prevalence in developed and

developing countries. With Ghana being a developing country, the level of awareness of the disease especially among the female head porters (*Kayayei*) is the same. Therefore, it has become necessary to explore the level of awareness among this group (*Kayayei*) in order to be able to plan interventions for them and make some policy recommendations to key stakeholders.

1.3 Conceptual Framework

Factors such as age, marital status and educational level of vulnerable women affect their sexual behavior which in turn affect their previous experience with cervical cancer and perception of how to access and prevent HPV infection. Some attitudes and cultural beliefs cause fear and create a myth around cervical cancer among this group of women. Lack of access to information affects their perception about cervical cancer and its prevention. Accessing a health facility to enquire about cervical cancer is a challenge, as in the case of the *"Kayayei"* around the markets as a result of financial constraints. In addition, accessing a health facility poses a challenge which makes them pay no attention to it. All these individual factors affect the knowledge of cervical cancer among these vulnerable women. This is shown in figure 1.1.

Figure 1.1: Conceptual Flow Diagram



1.4 Justification of the Study

Preventive strategies of reducing cervical cancer incidence should be more focused on preventing risk factors. Knowledge of screening therefore is very important in the prevention of the disease where female head porters (*"Kayayei"*) are concerned. The importance of cervical cancer awareness in the control and prevention of the disease is significant to the prevention of early mortality in women. In a study conducted in Korle Bu, it was stated that if the morbidity and mortality associated with gynaecological cancers are to be reduced, then cervical cancer awareness must be first on the action plan (Nkyekyer, 2000).

There is paucity of information on studies on cervical cancer screening awareness among the vulnerable population (*"Kayayei"*) in Ghana. Thus, this study aimed to help in filling that gap in literature. Knowing about the disease, its risk factors and preventive methods

among "*Kayayei"* can also help policy makers in designing specific policy interventions to promote awareness of the disease.

1.5 Objectives of the Study

1.5.1 General

This study broadly aimed at determining the level of awareness on cervical cancer screening among the vulnerable women -head porters(kayayei) in Accra and their intention to screen in the next one year in Accra.

1.5.2 Specific

1. To determine the level of Cervical Cancer screening knowledge among the female head porters
2. To determine the previous experience with of the female head porters towards Cervical Cancer screening services
3. To describe the sexual behavior of the female head porters
4. To explore the readiness of the female head porters to undertake cervical cancer screening in the next one year.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

In this chapter the author has reviewed relevant studies that were retrieved largely from online sources. The literature was selected to reflect the specific objectives of the study which cover issues such as cervical cancer screening awareness/knowledge among the female head porters (Kayayei), their previous experience with cervical cancer screening, sexual behavior of the female porters and their intention or otherwise whether to undergo screening in the next one year.

2.1 Understanding Cervical Cancer Screening

There are various types of cervical cancer screening available worldwide. In Ghana, the screening methods available are: the Pap smear, Visual Inspection with Acetic Acid (VIA) and Liquid Based Cytology (LBC):

- **Pap smear**: A Pap smear (also called a Pap test) is a screening procedure for cervical cancer. It tests for the presence of precancerous or cancerous cells on the cervix, the opening of the uterus. Screening is done by gently sliding a vaginal speculum into the vagina to expose the cervix. The Ayre's spatula (wooden or plastic) is used in scraping the surface of the cervix and the Cytobrush is inserted into the endocervix and rotated approximately 4-5 times to obtain samples. Both the Ayre's spatula and the cytobrush are smeared onto the sample plate and the fixative (liquid) is poured over them and sent for cytology. The results obtained in surveys conducted in Ghana may be any of the following; negative for cancer, positive for cancer or the reading may be unclear or unsatisfactory.

- **Visual Inspection with Acetic Acid (VIA)**: It involves the inspection of the surface of the uterine cervix after 5% acetic acid has been applied to it. VIA is a test sometimes used to determine whether the cervix is infected with human papilloma virus or whether irregularities seen on the cervix may be cancerous or precancerous.

- **Liquid Based Cytology (LBC)**: It is a method of preparing and processing cervical smears. This test is done with the aid of a speculum, soft cervical brush and a small pot or container of fluid. The speculum is inserted into the vagina and the brush is used in gently scraping the cervix after which the brush is immersed into the fluid and taken to the laboratory for analysis for abnormal cells.
- **Evalyn brush (self-sampling device)**: This test is a variant of the liquid based cytology. The provider takes the client through the process of taking the smear. The test can be done at home by the client with no assistance from the provider. It is a self-sampling device where the Evalyn brush is inserted into the vagina and twisted 5 times clockwise and inserted into a liquid solution which is sent for analysis.

- **HPV testing:** Human Papilloma Virus (HPV) is a virus that can cause cell changes at the cervix. The test checks for the virus and not for changes in the cell. A Pap smear test and HPV test can be used to screen for cervical cancer. Before taking the test, the client is asked not to douche, use tampons or any vaginal medication for at least 48 hours. The test is done by a trained service provider. A speculum is introduced into the vagina and by the use of a cotton swab and a small brush, several sample cells are collected from the visible part of the cervix as well as the opening of the cervix. These samples are then placed in tubes and sent to the laboratory for analysis. It can also be done when taking Pap smear. The same cotton swab or another swab may be used to

collect the samples from the cervix. The technique called the liquid based Pap test is used. By rotating a plastic brush on the cervix, sample cells are collected and placed in jar with solution and sent to the laboratory for examination.

2.2 Cervical Cancer Screening Awareness among Female Head Porters(*Kayayei*)

The level of awareness on cervical cancer screening in Africa has stimulated academic curiosity to the extent that, over the last decade, there has been an increase in cervical cancer research in Sub-Saharan Africa (Finocchario-Kessler, Wexler, Maloba, Mabachi, Ndikum-Moffor and Bukusi, 2016).

According to Soneji and Fukui (2008), cervical cancer awareness varies with socio - economic status in the sense that, there is greater awareness among people of higher social and economic status; This accounts for the reasons why cervical cancer awareness being greater in developed countries than the developing ones a. Thus vulnerable populations are likely to have limited information on the disease and therefore suffer the most. For example, in Western Ethiopia which is characterized by low socio economic conditions, there is a low level of cervical cancer awareness (Getahun, Mazengia, Abuhay and Birhanu, 2013). Close to about 80% of Western Ethiopian women do not have any knowledge of the disease. According to Anorlu (2008) awareness of cervical cancer and socio economic status of women in developing countries is low.

A low level of cervical cancer screening awareness was observed in Elmina, Southern Ghana where it was reported that more than half of the women had not heard about the disease and over 90% were unaware of the risk factors (Ebu et al., 2015). Studying a vulnerable rural population in Nigeria, (Eze, Umeora, Obuna, Egwuatu and Ejikeme,

2012) reported that cervical cancer awareness in the study area is low; a reason accounting for the low uptake of cervical cancer screening in that part of the country. This seeks to suggest that the level of screening of the disease is related to the level of awareness among the populace.

Wong et al. (2009) also explored the knowledge and awareness of women on cervical cancer and discovered that there was lack of knowledge on cervical cancer and that women did not have a clear understanding of what the disease was for early detection and treatment. Pillay, (2002) stated that more than half of the women of African descent in both rural and urban areas in South Africa were even unaware of the test for cervical cancer but would rather seek help from traditional doctors about abnormal cervical bleeding.

In a more recent study, Blay (2013) reported that the vulnerable poppulation have a low knowledge base of sexually transmitted infections(STIs) this accounts for their being prone to cervical cancer. In a Focused Group Discussion (FDG), the researcher realized that the lack of knowledge and awareness is what has made most of the porters perceive and describe some STIs as non-sex related. Indeed, STIs such as gonorrhea, abnormal vagina discharge, genital warts and genital ulcers are referred to as "white water".

2.3 Sexual Behavior of the Female Head Porters

Cervical cancer is found in women who at an early age have had sex, had recurrent episodes of sexually transmitted disease, and had multiple sex partners but the risk is much greater if they have had more than 5 pregnancies (Cancer Research UK, 2015). Other risk factors are: age, smoking, long term use of oral contraceptives and family history of

cervical cancer etc (National Cancer Institute, 2015). Older women are more at risk than younger women (Gattoc, Nair and Ault, 2015) in addition they observed that women who use oral contraceptives are also known to be more sexually active thus making them susceptible to the cervical cancer therefore, oral contraceptives also enhance HPV gene expression in the cervix (Gattoc, Nair and Ault, 2015) .

Some studies have also suggested that, women whose partners have not been circumcised stand a higher risk of being infected with HPV than women with partners who have been circumcision (Cancer Research UK, 2015).

In discussing the various factors making *"Kayayei"* more vulnerable to cervical cancer, it was indicated that because a vast majority of female head porters *"Kayayei"* do not have permanent places of abode they are exposed to sexually transmitted diseases, rape and unwanted pregnancies making them vulnerable to cervical cancer. These people also rarely use condoms in their sexual encounters and this greatly increases their risk of contracting the disease because the HPV reservoir is largely men. (Ziblim, 2013).

A cervical cancer predisposing sexual behavior pattern has also been observed among women in Afikpo in Nigeria. Most of the women are sexually active and exhibit high tendencies to having multiple sex partners, abnormal vaginal discharge, and low condom use. Also 90% of the women were married with a high prevalence of pre- and extramarital sex (Eze et al., 2012).

2.4 Cervical Cancer Screening

The low level of cervical cancer screening uptake has been attributed to the lack of awareness on the disease. According to Eze et al. (2012) in their study on a vulnerable rural population in Nigeria, the low uptake was found to be as a result of the low level of awareness. However, on the contrary, it has been argued that, the cost of cervical cancer screening could be a determinant of the low level of screening uptake and that if the cost of cervical cancer screening is affordable the disease could be detected earlier and treated before it becomes a full blown cancer (Ndikom and Ofi, 2012).

Sudenga, Rositch, Otieno and Smith, (2013) in their cross sectional study on women seeking reproductive health services in Kisumu, Kenya found out that a large percentage of women are willing to undergo screening (95%). In North Central Nigeria, women have shown a positive attitude towards screening (Idowu, Olowookere, Fabgbemi and Ogunlaja, 2016), which helps in early case detection through screening and leads invariably to a reduction in morbidity and mortality from cervical cancer.

Cultural and religious values of minority populations have also been identified to have a bearing on cervical cancer screening (Matin and LeBaron, 2004). They pointed out that Muslim women resisted screening practices that are standard in the US but threaten their cultural and religious values. Their study also revealed that language barrier, transportation, insurance and family pressure are some of the challenges that prevented Muslim women from seeking cervical cancer screening and noted that the religious and the cultural background of these women played a significant role in determining their healthcare behavior.

Intention to screen for cervical cancer is also influenced by religion. This observation was made by Modibbo et al. (2016) who emphasized the need for cervical cancer related interventions to take into account the varying cultural and religious beliefs in multicultural and multireligious communities. In their research in the South West and Central Regions of Nigeria, Modibbo et al. (2016) observed some religious barriers to cervical cancer screening uptake among Muslim and Christian women. Religious and cultural obligations of modesty, gender of healthcare providers, fear of disclosure of results, fear of nosocomial infections, lack of awareness and need for spousal approval were some of the barriers.

Prempeh (2015) also studied the factors affecting the utilization of cervical cancer screening services among women aged 18 to 55 years, within the Ejisu Juaben Municipality of Kumasi. The factors accounting for low screening rates in the Ejisu-Juaben district of Ghana included the level of women's knowledge of cervical cancer screening service and accessibility of the screening service. It was realized that the major impediments to cervical cancer screening were accessibility and cost as majority of the respondents stated that they would participate in the cervical cancer screening program if it was more accessible and affordable.

In a cross sectional study of HIV positive women attending a large HIV treatment centre in Lagos, Nigeria, Ezechi, Gab-Okafor, Ostergren and Pettersson,(2013) reported of the willingness among the women to screen for cervical cancer - about 80% of the participants were willing to undergo cervical cancer screening. Based on this observation they suggested the integration of reproductive health service into existing HIV programs.

The organization and access to cervical cancer screening programs are virtually non-existent in developing countries (Roblyer et al., 2007). The screening services when available are sporadic and opportunistic in that, they are located in urban-based tertiary medical institutions and other urban facilities which are far from the vulnerable rural population (Eze et al., 2012). Even though the centers are in urban locations these female head porters *"Kayayei"* are not sufficiently aware of the disease because of their deprived social status.

At the Korle Bu Teaching Hospital, cervical cancer screening is done at the Gynaecological Department (Reproductive Health Centre) by trained staff. This service is available from 7am to 4pm and it costs forty (40) Ghana cedis. The challenges observed in the offering of the service include inability of many clients to pay it. There was unwillingness on the part of some clients in allowing male service providers to work on them

CHAPTER THREE

METHODOLOGY

3.1 Research Design

A cross sectional design was employed using quantitative and qualitative research methods. The quantitative method was adopted as the methodology for the study because the research sought to study a large population. The qualitative method (focused group discussion and in depth interviews) was used to obtain an in depth knowledge of the issue of cervical cancer awareness among the vulnerable.

3.2. Study Tools

The tools that were used in this study were; questionnaires, focused group discussions guides and in depth Interview guides.

3.3 Study Area

Agbogbloshie, an urban slum in Accra was the study area. It houses Ghana's largest commercial fresh agro-products market which draws traders from all over the country including seasonal migrants from rural agricultural Northern Sector, Burkina Faso, Niger and Mali. The study focused on female porters whose primary livelihood is derived from transporting goods on their heads for clients (Oberhausen & Yeboah, 2011). Other major markets in Accra include but not limited to Kaneshie , Mokola and Nima markets. The selection of Agbogbloshie market was informed by the number of female head porters working there (4,485) which makes it easier to get varied views for the study. Agbogbloshie is located near the Korle Lagoon which is in the north-eastern part of Accra Central business district. It is prone to flooding and most residents lack access to clean water, sanitation and accommodation (Joint UNEP/OCHA Environment Unit, 2011).

Agbogbloshie has the largest concentration of female head porters who migrated from the northern part of the country and are popularly known as "*Kayayei"* (Awumbila and Ardayfio-Schandorf, 2008).

In the 2010 National Population and Housing Census, Agbogbloshie recorded a total population size of 8,305 (54% female and 46% male) out of whom 5,466 were between the ages of 15 to 49 (Ghana Statistical Service, 2012). The residents of Agbogbloshie came from many regions in Ghana and represent a wide range of ethnicities present in the country. The residential dwellings of the community are a blend of concrete structures and wooden shacks with many unrelated families living within one structure (Joint UNEP/OCHA Environment Unit, 2011). In recent times, Agbogbloshie has gained international recognition as the hub for e-waste in Ghana with its resultant pollution stemming from the burning of plastics which poses an environmental hazard to its residents (Agyei-Mensah and Oteng-Ababio 2012; Oteng-Ababio, 2010, 2012).

Figure 3.1: The map of Agbogbloshie

3.4 Sampling Technique and Sample Size

Convenience sampling was used in selecting the respondents for the quantitative aspect of the study. The selection of the respondents was based on respondents' falling within the age group(18 to 45 years) of the study population and their willingness to be part of the study. They were selected among the various food stuff group areas until the expected sample size was attained. Good though the technique is, it has its limitations. It allows the generalization of findings, in that the selected sample cannot be said to be a true reflection of the variations in the study population. Again, this sampling technique was vulnerable to bias because respondents were selected simply on a convenient basis. The Focus Group Discussions members were selected based on purposive sampling (judgment of the research group) therefore selection of respondents was done with these factors in mind age , exposure, knowledge index (Black, 2000). The selection of the sample in this case was based on participants falling within the study population who are willing to participate in the Focus Group Discussion.

A similar study carried out in Nigeria among vulnerable group estimated knowledge of cervical cancer amongst the respondents to be 37.5% (Eze et al., 2012) and this was used in the Cochrane Formulae to calculate the sample size (Cochran, 1977)

$$n = \frac{z^2 p(1-p)}{e^2}$$

Where, n=minimum sample size

z=the desired level of confidence at 95% corresponding to a z-score of 1.96

p=proportion of a relevant characteristic, in this case 37.5%

e= the degree of precision assumed to be 5%

With the non-response rate of 10%, a sample size of 396 respondents was used for the study based on their knowledge index ,readiness to undergo cervical cancer screening and sexual behaviour.

3.5 Data Collection Procedures

The quantitative data was collected through the administration of semi-structured questionnaires made up of both open-ended and close-ended questions. The respondents were engaged in a face to face interview of 23 items which took approximately 30 minutes to administer. The essence of the open ended questions was to allow respondents to express their views on the questions being posed. The qualitative data was collected through one Focus Group Discussion made up of ten head porters at Agbogbloshie. The research assistants who are peer educators for the *"Kayayei"* recruited the 10 "*Kayayei"*. The study was explained to them and they were taken through the informed consent process. Each participant thumb- printed the consent form and were given the option to leave the study at any time. The rules were spelt out to them (including respecting the respondents opinion while answering questions, no interruption when respondent is answering questions, confidentiality and privacy) and the discussion was audio recorded with their permission.

3.6 Data Collection Instruments

- **Semi-structured Questionnaires:** Included both open-ended and close-ended questions. The close-ended questions had answer options that the respondents chose from while the open-ended questions had no predetermined responses.
- **Focus Group Discussion guides:** A Focus Group Discussion with ten head porters was conducted with the help of the guide prepared for that purpose.

3.7 Data Analysis

The statistical package (SPSS) was used in processing the quantitative data. The data analysis procedure included cleaning of the data collected, coding of both the open responses and entering then them into SPSS Version 22. A chi-square test was employed to compare the statistical significance of two sets of categorical variables(qualitative and quantitative data). Response to Q22-Q37 gave the respondent's knowledge index on awareness of the disease. The P - values showed the significance level.

The qualitative data was coded based on the themes from the interviews. The information was manually transcribed, coded into themes and manually analyzed. The codes were developed along emerging themes and linkages made between the concepts and the data. The responses were triangulated with the quantitative data.

3.8 Quality Control

Measures were employed in ensuring reliability and validity of data. To achieve this, a one day training was organized for the four (4) research assistants (Peer educators from Agbogbloshie) to translate questions into the different northern local languages. They were also trained on how to conduct interviews and collect data. Furthermore, research assistants were given briefing on the purpose of the study and participant selection.

Questionnaires filled were checked on the field by the researcher to make sure that all the questions have been answered whilst incomplete questionnaires were returned for completion. Data entry was done to collate all information received from the respondents for analysis and report writing.

3.9 Ethical Considerations

Prior to the inception of this study, all the necessary ethical issues were considered as shown below:

Ethical approval was granted by the Ghana Health Service Ethical Review Committee (Protocol ID NO: GHS-ERC 06/12/15) (Appendix) . Permission was obtained from the Assemblyman of Agbogbloshie to interact with the "*Kayayei*" which was granted. The following ethical clearance were: Consent process, confidentiality, risk and benefits and limitations of the study.

3.9.1 Consenting Process

Informed consent was obtained from all participants. Prior to data collection the research team explained what the study was about, the processes involved in collecting the data and the risk and benefits associated in participating in the study. In addition participants were informed that they could withdraw from the study any point even if they have given consent. They had the right not to answer any questions the find embarrassing to them especially as we asked questions about their sexual life. Opportunity to ask questions before consent was signed or thumb print was obtained.

3.9.2 Confidentiality

Privacy, and anonymity of participant was maintained by using identification numbers on the questionnaire instead of their names**.** Analysis was done and no participants name would be linked with the results. The data collected were stored in a password folder on a laptop. In addition, the filled questionnaire were kept under lock and key and were available only to the researcher and data management team.

3.9.3 Risks and Benefits

There were no physical risks in this study except for some participants who were likely to face emotional disturbances. Some of the questions bothering on their sexual behaviour may have caused bad memories that had been repressed by participants to resurface. Respondents were given a token of GH₵ 10.00 as compensation for participating in the study.

The study also provided valuable information which will enhance the work of the researcher as a health worker.

3.9.4 Limitations of the study

The limitation of this study was the language barrier between the researcher and the participants. During the Focus Group Discussion, the researcher had to talk through an interpreter to the respondents for clarification of issues raised.

CHAPTER FOUR

RESULTS

4.0 Introduction

This section of the study presents the results of the analyzed data gathered from field work.

4.1 Demographic Characteristics of Study Respondents

Data was gathered from 397 sampled respondents. However, analysis was based on 389 responses from respondents who responded to all the questions asked., the remaining 8 (2%) who did not who did not answer all the questions and could not be traced as a result of travelling back to the North in response to a duty call. Demographic characteristics of the 389 respondents are presented in Table 4.1.

The age of respondents ranged from 18 to 45 years with mean age of 24.72 years (SD = 6.095 years). Most of the respondents (32.4%) fell within the 20 to 24 age category and a large number (84.3%) were Muslims. Ethnicity also shows that 49.6% are Dagomba representing a majority with a few of them belonging to other tribes. About two-thirds (66.1%) were married with very few (0.8%) of them divorced. In addition (56.3%) had no formal education while a few (0.3%) of them had vocational education. The location of residence and residential facility also revealed that almost 90% of the respondents reside at Agbogbloshie, living in their slum type wooden houses while the few of them reside at Cow Lane.

Table 4.1: Demographic Characteristics of Respondents

Characteristics	Groups	Frequency (#)	Percent (%)
Age Category (Adjusted age groups)	15-19 years	87	22.4
	20-24 years	126	32.4
	25-29 years	87	22.4
	30-34 years	55	14.4
	35-39 years	16	4.1
	40-45 years	17	4.4
	Total	**389**	**100**
Religion	Traditional	4	1
	Christian	56	14.4
	Muslim	328	84.3
	Other[1]	1	0.3
	Total	**389**	**100**
Ethnicity	Akan	2	0.5
	Dagaati	22	5.7
	Ewe	2	0.5
	Frafra	26	6.7
	Dagomba	193	49.6
	Gushegu	2	0.5
	Ga Dangme	1	0.3
	Sisala	141	36.2
	Total	**389**	**100**
Marital Status	Single	116	29.8
	Married	257	66.1
	Cohabiting	5	1.3
	Divorced	3	0.8
	Widowed	8	2.1
	Total	**389**	**100**
Highest Educational Level Completed	None	219	56.3
	Kindergarten	21	5.4
	Primary	75	19.3
	Junior Secondary	47	12.1
	Senior Secondary	26	6.7
	Vocational/Technical	1	0.3
	Total	**389**	**100**
Area of Residence	Agbogbloshi	349	89.7
	Cow Lane	2	0.5
	Kaneshie	13	3.3
	Makola	25	6.4
	Total	**389**	**100**
Residency Facility	House(wooden houses)	193	49.6
	Kiosks	65	16.7
	Sharing of residency	84	21.6
	On the street	37	9.5
	Other[2]	10	2.6
	Total	**389**	**100**

Note: [1] *Religious sects other than above,* [2] *Dormitories and facilities not stated above*

4.2 Awareness of Cervical Cancer Screening

Out of the 389 respondents, 232 (59.6%) reported that they have heard of cervical cancer before, while the rest have not as shown in Table 4.2. The table also presents the distribution of the medium through which the 232 respondents heard of cervical cancer. Eighty one (34.9%) respondents heard of it on the radio while 22 (9.5%) of respondents got to know about cervical cancer through a health talk.

With regards to cervical cancer screening (CCS) awareness, out of the 232 who have heard of cervical cancer, 186 (80.2%) have heard of cervical cancer screening, while the rest had no idea of it as shown in Table 4.2. This also means that, less than half of the total population (47.8%) were aware of CCS at the time of study. On the causes of cervical cancer, 108 (46.6%) of those who have heard of it believed it to be caused by virus while a few 19 (8.2%) responded that they do not know its cause. One hundred and eight (85.3%) also believe that it is preventable.

Further most of them are informed of the various ways of preventing cervical cancer(screening, vaccination and use of condoms). Forty five point three percent (45.3%) respondents consider screening services as a preventive measure as compared to 100(43.1%) who think keeping one partner can be helpful in preventing CC. Out of the possible screening methods available, 43.1% of respondents were aware of the Pap smear as against 35(15.1%) and 12(5.2%) who know of the VIA and Evalyn brush. However 85 (36.6%) are not aware of the various screening methods for CC. Considering respondent's knowledge of possible places for screening services, majority 177(76.3%) of them were aware of Korle Bu Teaching Hospital whilst some respondents 28(12.1%) had no idea of the possible facility or medical centers that undertake CCS.

Table 4.2: Cervical Cancer Awareness and Cervical Cancer Screening Awareness

	Frequency	Percent (%)
Have you heard of Cervical Cancer?		
Yes	232	59.6
No	157	40.4
Total	**389**	**100.0**

Responses	**Frequency = 232**	**Percent (%)**
Where did you hear of Cervical Cancer from?		
Colleague worker	20	8.7
Radio	81	34.9
Television	59	25.4
Hospital	50	21.6
Health talk	22	9.5
Have your Heard of Cervical Cancer Screening?		
Yes	186	80.2
No	46	19.8
Causes of Cervical Cancer		
Virus	108	46.6
Bacteria	42	18.1
Sex	63	27.2
Don't know	19	8.2
Can Cervical Cancer be prevented?		
Yes	198	85.3
No	2	0.9
Don't Know	32	13.8
How can it be prevented?		
Screening services	105	45.3
Keeping one partner	100	43.1
Don't know	27	11.6
Known Screening Methods		
Pap smear	100	43.1
VIA	35	15.1
Evalyn brush	12	5.2
Don't know	85	36.6
Where can Cervical Cancer screening be done?		
Korle Bu	177	76.3
Ridge	15	6.5
La General	10	4.3
Other[1]	55	0.8
Don't know	28	12.1

[1] Private hospitals or polyclinics

To further examine the association between respondent's awareness of CCS, and their background characteristics, a bivariate analysis was undertaken using the chi-square or Fisher's exact tests as appropriate test of significance. The result is presented in Table 4.3.

Table 4.3 shows that both ethnicity and religion are statistically significant in determining the individual respondents' awareness of CCS at 1%.

Table 4.3: Socio-demographic Characteristics of Respondents and their Awareness of Cervical Cancer Screening

Characteristics (N=232)	Aware of CC Screening Frequency (%)	Not Aware of CC Screening Frequency (%)	Total (%)	P-Value [1]
Age				
18-25 years	104 (80.0)	26 (20.0)	130 (56.0)	0.941
26-45 years	82 (80.4)	20 (19.6)	102 (44.0)	
Ethnicity				
Dagomba	73 (83.9)	14 (16.1)	87 (37.5)	
Sisala	65 (67.0)	32 (33.0)	97 (41.8)	**0.000*** **
Other	48 (100.0)	0 (0.0)	48 (20.7)	
Religion:				
Muslim	138 (76.2)	43 (23.8)	181 (78.0)	**0.005*** **
Other	48 (94.1)	3 (5.9)	51 (22.0)	
Marital Status:				
Married	124 (80.0)	31 (20.0)	155 (66.8)	0.926
Other	62 980.5)	15 (19.5)	77 (33.2)	
Educational Level:				
None	89 (80.2)	22 (19.8)	111 (47.8)	
Basic	79 (80.6)	19 (19.4)	98 (42.2)	0.968
Secondary	18 (78.3)	5 (21.7)	23 (9.9)	

[1] *Pearson Chi-Square,* *** *denote 1% level of significance respectively*

4.3 Previous Experience with Cervical Cancer Screening (Ccs)

Results presented in Table 4.4 show that out of the 232 respondents who are aware of CCS, 18 (7.8%) have actually undertaken a CCS. Out of the 18 who had been screened before, 13 (72.2%) had undertaken the screening within the past one year. Again majority 10 (55.6%) of the 18 respondents did Pap smear, 5(27.8%) VIA and 3(16.7%) used the Evalyn brush and 16(88.9%) undertook the screening at a health facility. Again, 16(88.9%) of the respondent who did the screening did so because they wanted to know their status.

Table 4.4: Previous experience with Cervical Cancer Screening (CCS)

Response	Frequency	Percent (%)
Ever screened for CC?		
Yes	18	7.8
No	214	92.2
Total	**232**	**100.0**
Ever screened for CC in the past one year?		
Yes	13	72.2
No	5	27.8
Total	**18**	**100.0**
What kind of screening did you do?		
Pap smear	10	55.6
VIA	5	27.8
Evalyn brush	3	16.7
Total	**18**	**100.0**
Where was the CCS done?		
Home by myself	2	11.1
Health facility	16	88.9
Total	**18**	**100.0**
Reason for doing CCS		
Doctors' Recommendation	2	11.1
Just to know status	16	88.9
Total	**18**	**100.0**
Reason for not doing CCS:		
Cost of the screening	165	71.4
Fear of the results	26	11.3
Fear of pain	24	10.4
Other[1]	16	6.9
Total	**231**	**100.0**
What do you recommend to be done?		
Availability of services	58	25.0
Education	160	69.0
More female service providers	13	5.6
Other	1	.4
Total	**232**	**100.0**
Screened in the past 3 years?		
Yes	11	4.7
No	174	75.0
Never	47	20.3
Total	**232**	**100.0**

[1] *too busy, sex of service provider, not necessary, age limit*

Table 4.4 shows the Previous experience with respondents towards Cervical Cancer Screening (CCS). The three leading reasons for not undertaking screening although they

were aware of it were cost of screening (71.4%), fear of test results (11.3%), fear of pain (10.4%), within the past 3 years 95.3% which constitute a majority of those who are aware of CCS have not screened, while the remaining few on the whole (4.7%) have screened within the past three years. For the details refer to Table 4.4.

4.4 Sexual Behaviour of the Female Head Porters

To examine the sexual behaviour of the vulnerable, respondents were asked questions in relation to their experience of sexual intercourse, age at first intercourse, number of current and total partners, number of pregnancies, number of deliveries, number of children and fathers to these children were analyzed and presented in Table 4.5.

With regards to the sexual behaviour of the respondents, out of the total of 389 respondents, 309 (79.4%) of them had ever had sexual intercourse whilst the remaining have not. Table 4.6 shows the sexual behaviour of the 309 who had ever engaged in sexual intercourse. Twenty four respondents (7.8%) had sex at a younger age (10-14 years). While195(63.1%) had their first sexual intercourse at the age of 15-19 years, but two (0.6) were at age 30 and above.

Data also showed that most (90%) of those who had ever had sex at the time of the study currently have only one sexual partner. Same to the number of current partners, the distribution reduces for multiple sexual partners for results on the number of total sexual partners respondents have ever had. The distribution as depicted in the Table 4.5 is as follows: only 1 partner 254(82.2%), 2 partners 44(14.2%), 3 partners 8(2.6%), 4 partners 2 (0.6%) and 5 partners 1(0.3%).

Regarding the number of pregnancies recorded by respondents who have ever had sex, data revealed that 42(13.6%) of them never got pregnant, 83(26.9%) had once been pregnant, and 41(13.3%) have been impregnated for more than 6 times. Forty five respondents (14.6%) have had no deliveries. This consisted of those who had never been pregnant (42) in addition to 3 more women who have been pregnant before but never delivered live babies. However 88(28.5%) of respondents had delivered once and 36 (11.7 %) had more than 5 deliveries. Out of 170 who had two or more children, 133(78.2%) had their children with the same man.

With regards to cigarette smoking 2 (0.5%) respondents, reported of smoking. Again all four who reported to have ever smoked also reported that they have smoked for as long as a year. Results on number of sticks smoked per day show that one person smoked 3 sticks on a daily basis, whilst 2 of them indicated 4 sticks as the number of sticks smoked daily.

Table 4.5: Sexual Behaviour of the Female Head porters

Responses	Frequency = 309	Percent (%)
Age at first sex:		
10-14 years	24	7.8
15-19 years	195	63.1
20-24 years	67	21.7
25-29 years	21	6.8
30-34 years	1	0.3
34-39 years	1	0.3
Number of sexual partners currently:		
One (1)	278	90.0
Two (2)	25	8.1
Three (3)	4	1.3
Four (4)	2	0.6
Total Number of sexual partners:		
One (1)	254	82.2
Two (2)	44	14.2
Three (3)	8	2.6
Four (4)	2	0.6
Five and above	1	0.3
Number of pregnancies:		
None	42	13.6
One (1)	83	26.9
Two (2)	69	22.3
Three (3)	44	14.2
Four (4)	30	9.7
Five and above	41	13.3
Number of deliveries had:		
None	45	14.6
One (1)	88	28.5
Two (2)	68	22.0
Three (3)	48	15.5
Four (4)	24	7.8
Five and above	36	11.7
Number of children:		
None	48	15.5
One (1)	91	29.4
Two (2)	72	23.3
Three (3)	46	14.9
Four (4)	25	8.1
Five and above	27	8.7
Are these children of the Same father (Women with at least 2 children)		
Yes	133	78.2
No	37	21.8
Total	**170**	**100.0**

Source: Author's Estimation from Data, 2016.

4.5 Intention to Undertake Cervical Cancer Screening in the Next One Year

Respondents' intention to screen, proposed place of screening as well as reasons behind those who have no intention of screening is presented. Out of the 221 respondents who

have not screened in the past three years (see Table 4.5), 141 (63.8%) have intentions of screening within the next one year while the remaining do not. Most (57.4%) of those who intend to screen indicated that they will do so at the Korle Bu Teaching Hospital. For those who do not intend to screen, financial constraint 54(65.5%) was the main reasons why they will not screen. Three (3.8%) were just not interested in going for screening.

Also to understand the relationship between an individual's intentions to undertake CCS in the next one year and socio-economic condition, a bivariate analysis using the chi-square test statistic was undertaken among the respondents who have not undergone the CCS in the past three years (221 of them) The result indicated that education is not statistically significantly associated with intention to screen in the next one year, but strong and significant statistical association exists other variables (age, ethnicity, religion and marital) as shown in Table 4.6

Table 4.6: Chi-Square Independence Test (Biographical Characteristics on Intention to Undertake CCS in Next One Year

Characteristics (N=232)	Intention to Screen in Next One Year		Total (%)	P-Value [1]
	Yes	No		
Age:				
18-25 years	85 (69.7)	37 (30.3)	112 (55.2)	**0.044****
26-45 years	56 (56.6)	43 (43.4)	99 (44.8)	
Ethnicity:				
Dagomba	71 (87.7)	10 (12.3)	81 (36.7)	
Sisala	28 (28.9)	69 (71.1)	97 (43.9)	**0.000*****
Other	42 (97.7)	1 (2.3)	42 (19.5)	
Religion:				
Muslim	97 (55.4)	78 (44.6)	175 (79.2)	**0.000*****
Other	44 (95.7)	2 (4.3)	46 (20.8)	
Marital Status:				
Married	83 (56.1)	65 (43.9)	148 (67.0)	**0.000*****
Other	58 (79.5)	15 (20.5)	73 (33.0)	
Educational Level:				
None	63 (58.3)	45 (41.7)	108 (48.9)	
Basic	77 (68.8)	35 (31.3)	112 (50.7)	**0.207**
Secondary	1 (100)	0 (0.0)	1 (0.5)	

[1] *Pearson Chi-Square* ** & *** *denote 5% & 1% level of significance respectively*

4.6 Results from Qualitative Study

Demographic Characteristic of Study Respondents

All the 10 discussants fell within the inclusion criteria (18 – 45 years), however majority were 32 years of age. Almost all of the respondents reside at Agbogbloshie. Majority belonged to both the Dagomba and Sisala ethnic group with Ewes being in the minority. With reference to religion, the Muslims were in the majority.

Married women were in the majority (66.1%) with a few being single(29.8%) . All the discussants had children ,with those having more than 2 children being in the majority(75.8%). Only a few however had 5 or more children(8.7%). Majority of the discussants had been to school. Those who have had at least Primary education were in the majority while a few had secondary education as well as vocational training. The FGD was conducted in the local dialect and translated into English.

Awareness of Cervical Cancer Screening

Awareness of CC among the FGD discussants was low. The local name for fibroids (*nmatie*) was mistaken for cancer whilst other discussants said cancer was "*kooko*" (a mysterious disease responsible for many ailments in Ghana). These were however ,wrong answers because they were not informed of what cervical cancer is. Concerning Cervical Cancer Screening (CCS) awareness, a few of the discussants were aware though none had gone for the services. Since they have not done screening it was difficult to get screened persons for the FGD.

With regards to the cause of CC, majority of them rather talked about the risk factor such as multiple sexual partners and inserting herbs into the private parts and not the main causes of CC.

Respondent 10 from the FGD said

"*somebody will say "adurowura" - medicine seller give me medicine. She goes to have sex after which she goes to another man to have sex*

Despite the low awareness level, most of the discussants somehow think it is preventable. They referred to the risk factors in prevention of the disease. Respondent 5 from the FGD said

"*Madam you see to prevent that canfer* (meaning cancer) *the women must stop the habit of inserting medicines into the vagina and having sex with different men*"

None of the discussants, however, considered CCS as a preventive measure for CC. Again none of the discussants know of the screening methods for CC, let alone where to access CCS services. It explains why most of them (especially those resident at Agbogbloshie) did not know about CCS.

Attitude towards Cervical Cancer Screening (CCS)

Generally, none of the FGD discussants had gone through cervical cancer screening. Discussants expressed fear of the unknown(Outcome of test results, how to get treatment and the financial implications) while some were worried about the cost as they perceived it to be high. A discussant (R4) had this to say

"*it is God's sickness, He will protect us from it, but, when you sin then it is your problem".*

Another discussant (R9) had this to say about the cost for the screening*:*

"Madam, How much do I get in a day? I cannot pay for it. It will be too expensive."

Intentions to undertake Cervical Cancer Screening in the Next One Year

Generally, all of the discussants were willing to screen but those who had the intention to screen within the next one year were in the minority. They wanted to know the cost and would appreciate if the screening services were brought to Agbogbloshie. One discussant (R5) has this to say for herself and for her fellow female head porters ("Kayayei"):

"Madam, if you bring it here free of charge, me, I will do and i know my sisters will do".

The few discussants who were willing to screen within the next one year proposed Korle-Bu and Ridge Hospital as the place of choice. Discussant 3, 5 and 6 opted for Korle-Bu whiles 4 and 7 said:

"As for me I fear Korle bu so I will go to Ridge. People die when they go to Korle Bu"

CHAPTER FIVE

DISCUSSION

This chapter discusses the findings of the study.

5.1. Awareness on Cervical Cancer Screening

Out of a total of 396 respondents, 232 persons indicated an awareness of CC (232 persons). From respondents aware of the CC, 186 (80.2% of 59.6% of total respondents). Getahun et al. (2013) reported that the level of awareness of cervical cancer screening in Africa is low. Findings on CC awareness shows otherwise (Eze et al., 2012). which conforms to the observations made in this study.

Out of the number who know of cervical cancer, findings indicate that they are also informed about the screening, causes, preventive measures, methods of screening as well as the centers for screening with few who did not have knowledge of this. Particularly, findings on the known methods of screening show that most of them know of Pap smear and this conflicts with findings by Ebu et al. (2015). Again, there was definate association between awareness on cervical cancer screening and biographical characteristics of respondents as argued by Soneji and Fukui (2008). However, results for education contradicts the findings of Lindau, Lyons, Lanseth, Bennett,& Garcia (2002) who reported a relationship between literacy and cervical cancer awareness.

5.2 Attitude towards Screening

The *"kayayei"* who were aware and had awareness of CCS were not ready for screening as most of them had not undergone CCS before with just a few (less than 10%) having done it before. This contradicts findings by Idowu et al. (2016) which found positive

attitude toward screening. Those who never underwent the screening gave various reasons paramount among which were cost of screening, fear of test results and fear of pain. The lack of readiness towards CCS which is supported by findings of Prempeh (2015) is based on the argument that in the past three years most of the 232 who knew of the screening have not screened. Also, the negative attitude of the informed vulnerable is justified on their financial background as almost all of these people are less privileged, very poor and can barely afford the cost of screening.

5.3 Sexual Behaviour of the Female Head Porters

Again, the sexual behaviour was used as a factor in examining the risk of contraction or infection. Following from the argument by Cancer Research UK (2015), most of the vulnerable having had sex before, this factor(sexual behaviour)can be used to predict risk of contraction. Again, most of them who have had sex before did so at a very early age, which is also a sign of vulnerability to the CC infection or contraction according to Ziblim (2013) and Eze et al. (2012), these head porters seldom use condoms. Results on the number of sexual partners ever had and currently having however means that relatively few of them stand the high chance of contraction as most of them stick to one sexual partner. The number of pregnancies, deliveries and children indicate low levels of risk of contraction among the various respondents.

Implicitly, although most of the study respondents have had sex before and had their first sexual encounter at an early age, other factors like the number of sexual partners, number of pregnancies, deliveries, number of children, and fathers to these children were found to be positive.

5.4. Intention to Screen

Finally, results on intention to undertake CCS indicate high willingness as majority of those who have never done the screening responded in affirmation that they intend to undergo the screening in the next year. This means that although the initial attitude towards CCS was not encouraging as just a few people having heard of cervical cancer screening was able to undergo the test, most of them are now willing to undergo the test. This is a sign of positive attitude towards CCS. This findings agree with Ndikom and Ofi (2012) who found even the less informed participants about the cervical cancer to be very receptive to screening as they want to take a prudent measure through early detection and treatment. Similarly, Ezechi et al. (2013) also found high willingness to undergo CCS by majority of their study participants.

Apart from the educational level of respondents, results from the study also indicated significant association between the other biographical characteristics (age, ethnicity, religion, marital status, area of residence and residency facility) employed in the analysis and willingness to undertake CCS in the next year. Thus, the individual's intention to undertake CCS in the next year can be influenced by their age, ethnicity, religion, and marital status.

Results from qualitative analysis also draws similar conclusions. Thus, qualitative results did not deviate from the results from the quantitative analysis.

CHAPTER SIX

CONCLUSION AND RECOMMENDATIONS

6.0 Introduction

This section provides conclusion to the study and make constructive recommendations based on the study findings and practicable suggestions from respondents. It presents a summary of findings, make recommendations, look at research limitation(s) and suggest areas for further studies.

6.1 Conclusion

The study found 59.6% of awareness level (page x) on cervical cancer screening among the vulnerable women(*Kayayei*)

Most of them have some idea of what cervical cancer is, majority of those who knew of cervical cancer also had some awareness on the screening. They also had knowledge on the causes, preventive measures, the methods of screening and where screening can be undertaken.

The study also found negative attitude towards CCS as majority of *kayayei* have never undergone screening although they were aware of CC and CCS. The sexual behaviour of study sample who were aware of CCS showed that they were informed about cervical cancer contraction or infections. This is because apart from majority of them having had sex before and doing so for the first time at an early age, the other indicators (number of sexual partners (total and current), number of pregnancies, number of deliveries, number of children, number of fathers to those children and smoking habit) proved positive.

In conclusion, despite poor attitude toward CCS in the past, examination of respondent's willingness to screen in the next one year was found to be good. A test of association between intention to screen in the next one year and respondents demographic characteristics revealed age, ethnicity, religion and marital status to be significant.

In summary, most of the respondents had information on CCS and also were aware of CC as well. Implicitly, general awareness on CCS was high(59.6%). Past experience of CCS which showed negative attitude but willingness toward CCS in the next one year was found to have improved.

6.2 Recommendation

Based on the findings from this study, suggestions from study sample as well as researcher's experience and observations during the field work, the following bankable and constructive recommendations were advanced;

1. Ghana Health Service (GHS) should intensify efforts to get every adult woman to know about cervical cancer and cervical cancer screening

2. Ghana Health Service (GHS) should partner with donor agencies to make screening services affordable to these women.

3. GHS should also be gender bias in the provision of screening services, particularly on the providers of screening services as most women are not comfortable with men examining them.

6.3 Study Limitations and Areas for Further Studies

Despite the comprehensive nature of this study which employed mixed method of data collection and analysis to explore the various issues related to cervical cancer and cervical cancer screening, it was however limited in scope.

The study should be extended to other regions where most of the women are less privileged and highly vulnerable in order to give a true representation of the situation in Ghana. Nonetheless, the observations can be used to represent head porters ("*kayayei*") in Ghana since Accra is the major market place for most of these vulnerable to seek greener pasture. Further studies could however take a broad outlook by covering all the ten regions in Ghana, specifically the major market places in the various regions. This will give a better researched and true picture of the situation in Ghana.

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APPENDICES

Appendix A: Informed Consent

Background: Dear Participant, my name is Amanda Agnes Adu-Amankwah. I am a student of the Department of Population, Family and Reproductive Health, School of Public Health, University of Ghana. I would be working with a team of trained Research Assistants. I wish to invite you to take part in this study. Cervical cancer is a cancer that affects the mouth of the womb (cervix) which is inside of the vagina. It is the number two killer disease in women in the world. This cancer of the cervix is preventable and can be cured if detected early through screening. The objective of this study which is purely an academic work is to find out the cervical cancer screening awareness in Agbogbloshie among head porters '*Kayayei*'.

Right to Refuse: Participation is voluntary (if you like) and nothing will happen to you if you choose not to be part. Even if you initially agreed to be part of the study and later have a change of mind you free to stop taking part.

Procedure: If you choose to be part of the study, you will be asked some questions about yourself and cervical cancer. We would appreciate your accurate and honest responses.

Risks: Since we are going to ask you only questions there will be no physical risks to you in this study. However, you will be asked some sensitive question about your sexual activities which you may find embarrassing. You have the right not answer questions you are not comfortable with.

Benefits: There will be no direct benefits to you for participating in this study. However, the findings from this study can help in planning for cervical cancer screening for people like you which you may benefit from**.**

Compensation: There are no compensations or payments in this study.

Confidentiality and Anonymity: You will be interviewed in private and no one will hear or see you during the interview. Be assured that the information that you provide will be protected to the best of our ability. Your name will not be used so there is no way anyone will know what answers you gave.

Before taking the interview: Do you have any questions? Yes |__| No |__|

Question.....

Participants Consent: I ..... having fully understood what is required of me, which has been read to me. I asked questions about it and any question I have asked have been answered to my satisfaction. I have been made aware of the risk, benefits, procedures and purpose of this study, I therefore agree to take part in this study.

Signature/Thumb Print of participant. ..... Date ...../...../.....

Interviewers Statement: I..... have explained this consent form to this participant in the language she understands, clarified the purpose of the study, procedure, risk and benefits involved. The participant has freely agreed to participate in the study.

Signature of Interviewer: ..... **Date**.....

Address

Amanda Agnes Adu- Amankwah

Korle Bu Teaching Hospital,

Department of Obstetrics and Gynaecology,

P.O. Box 77, Korle Bu, Accra.

Appendix B: Study Questionnaire

SECTION 1: BACKGROUND CHARACTERISTICS OF RESPONDENTS

		Participant ID: |__|__|__|	
Qtn. #	**QUESTIONS**	**CODING CATEGORIES**	
1	How old are you	…… years	|____|
2	What is your ethnicity	Akan.....1 Dagaati.....2 Ewe.....3 Frafra.....4 Dagomba.....5 Gushegu.....6 Ga Dangme.....7 Other.....8	|____|
3	What is your religion?	Traditional.....1 Christian.....2 Muslim.....3 Other.....4	|____|
4	What is your marital status now?	Single.....1 Married.....2 Living together.....3 Divorced.....4 Widowed.....5 Separated.....6 Other.....7	|____|
5	What is the highest level of school you attended?	None.....1 Kindergarten.....2 Primary.....3 Junior Secondary.....4 Senior Secondary.....5 Vocational/Technical…….....6 Tertiary.....7 Other.....8	|____|
6	Which area in Accra do you live?	Agbogbloshi.....1 Cow lane.....2 Kaneshie.....3 Makola.....4 Other.....5	|____|
7	Where do you live?	House.....1 Kiosks.....2 Sharing/cohabiting.....3	|____|

		On the street.....4 Other.....5	
8	How long have you been working here?	|____|months	|____|
9	How much do you earn in a day	GHc 10.....1 GHc 15.....2 GHc 20.....3 GHc 25.....4 GHc 30.....5 GHc35-50.....6 GHc 50- 100.....7 Other.....8	|____|

SECTION 2: SEXUAL BEHAVIOUR OF THE VULNERABLE

10	Have you ever had sexual intercourse?	Yes.....1 No.....2 If "No"→ Q18	|____|
11	At what age did you first have sex?	10 - 15years.....1 16 - 20years.....,2 21 - 25years.....3 26 - 30years.....4 31 - 35years.....5 36 - 40years.....6 41 - 45years.....7	|____|
12	How many sexual partners do you have currently?	1.....1 2.....2 3.....3 4.....4 5.....5 6.....6 More than 6.....7	|____|
13	How many sexual partners have you had in all (total)?	1.....1 2.....2 3.....3 4.....4 5.....5 6.....6 More than 6.....7	|____|

14	How many times have you been pregnant?	1.....1 2.....2 3.....3 4.....4 5.....5 6.....6 More than 6.....7	|____|
15	How many times have you delivered?	1.....1 2.....2 3.....3 4.....4 5.....5 6.....6 More than 6.....7	|____|
16	How many children do you have now?	1.....1 2.....2 3.....3 4.....4 5.....5 6.....6 More than 6.....7	|____|
17	Is it by the same father?	Yes.....1 No.....2	|____|
18	Have you ever smoked cigarette?	Yes.....1 No.....2	|____|
19	Do you smoke cigarette?	Yes.....1 No.....2 *If "No" → Q22*	|____|
20	If yes for how long did you smoke?	|____|years, |____|months	
21	If yes, how many sticks do you smoke in a day?	1.....1 2.....2 3.....3 4.....4 5.....5 6.....6 More than 6.....7	|____|

SECTION 3: KNOWLEDGE ON CERVICAL CANCER SCREENING

22	Have you heard of Cervical cancer?	Yes.....1 No.....2	IF NO END INTERVIEW
23	Where did you hear about cervical cancer? Circle all that apply	Colleague worker.....1 Radio.....2 Television.....3 Hospital.....4 Health talk.....5 Other.....6 N/A.....7	|____|
24	Have you heard about cervical cancer screening?	Yes.....1 No.....2	|____|
25	What causes cervical cancer Circle all that apply	Virus.....1 Bacteria.....2 Sex.....3 Don't know.....4 N/A.....5	|____|
26	Can cervical cancer be prevented?	Yes.....1 No.....2 Don't know.....3	|____|.\\\\ \\\\\\\\\,/
27	How can cervical cancer be prevented? Circle all that apply	Screening services.....1 Keeping one partner.....2 Vaccination.....3 Don't know.....4 Other.....5	|____|
28	What screening methods do you know of?	Pap Smear.....1 VIA.....2 Evalyn Brush.....3 Don't know.....4	|____|
29	Where can cervical cancer screening be done	Korle bu.....1 Ridge.....2 La General.....3 Other.....4 Don't know.....5	|____|
30	How much does the screening cost?	GHc.....1 Free.....2 NHIS.....3 Don't know.....4	|____|
30	Have you done cervical cancer screening before?	Yes.....1 No.....2 If "No"→ Q 35	|____|
31	Have you done screening within the last one year?	Yes.....1 No.....2	|____|

32	What kind of screening did you do?	Pap Smear.....1 VIA.....2 Evalyn Brush.....3 Don't know.....4	|____|
33	Where did you do it?	Home by myself.....1 Health facility.....2 Other.....3	|____|
34	Reason for doing the screening	Doctors recommendation.....1 Previous test result.....2 Just to know status.....3 Other.....4	|____|
35	What is the reason for not doing it?	Cost of the screening.....1 Fear of test results.....2 Fear of pain.....3 Too busy.....4 Sex of the provider.....5 Not necessary.....6 Age limit.....7 Other.....8	|____|
36	What are the barriers to the uptake of the screening?	Attitude of service provider.....1 Cost of screening.....2 Clinic time for screening.....3 Lack of information.....4 Partner's refusal.....5 Busy schedule.....6 Other.....7	|____|
37	What do you think should be done to help you?	Availability of services.....1 Education.....2 More female service providers.....3 Other.....4	|____|

SECTION 4: INTENTION OF SCREENING IN THE NEXT ONE YEAR

38	Have you screened in the past 3 years?	Yes.....1 No.....2 Never.....3 ***If yes, end interview***	|____|
39	Do you intend screening in the next one year?		|____|
40	If yes, where do you intend doing the screening?	Ridge Hospital.....1 Korle-bu.....2 La General Hospital.....3 Other.....4	|____|
41	If no, please give reasons.	Financial constraints.....1 Fear.....2 Very busy.....3 Needs partner's consent.....4 Not interested.....5 Other.....6	|____|

PUBLIC HEALTH SCHOOL

COLLEGE OF HEALTH SCIENCES

UNIVERSITY OF GHANA

FOCUS GROUP DISCUSSION (WOMEN)

Background Information

This study is for academic work. It is intended to inquire about respondents' knowledge on cervical cancer screening. Your honest responds is very much needed for better planning of screening in Ghana. Respondents have the liberty to opt out or continue at any time of the study.

Your confidentiality is very much assured. None of your information will be disclosed to anyone neither will your name be linked to any information in this study. For more information, please contact **AMANDA AGNES ADU-AMANKWAH** on 0246534682. Thank you for participating. You have made this study possible.

Objective 1: Knowledge / Understanding of Cancer

Cancer/ Cervical cancer

1. How do you understand what cancer is?

Can anyone help us explain what cancer is?

2. How many types of cancers do you know of?

Would anyone help us the types of cancers?

3. Who do you think can get cancer? Men, women or children?

Would anyone tell us who can get cancer?

4. What is cervical cancer?

Would anyone help us explain what cervical cancer is?

5. Where can the cervix be found?

Would anyone help us explain where the cervix is?

6. Who can get cervical cancer? Men, women or children?

Would anyone help us explain who can get cervical cancer?

7. How does one get cervical cancer?

Would anyone help us explain how one gets cervical cancer?

8. How would one know whether one has cervical cancer?

Would anyone help us explain how one can know whether one has cervical cancer?

9. What causes cervical cancer?

Would anyone help us explain what causes cervical cancer?

Objective 2: Prevention of cervical cancer disease

10. Is cervical cancer preventable?

Would anyone help us explain how cervical cancer be prevented?

11. What is prevention?

Would anyone help us explain what prevention is?

12. How can cervical cancer be prevented?

Would anyone help us explain how cervical cancer can be prevented?

13. When can it be prevented?

Would anyone help us explain when it can be prevented?

Objective 3: Screening for cervical cancer

14. What is cervical cancer screening?

Would anyone help us explain what screening is?

15.Why should one have screening done?

Would anyone help us understand why it is necessary to have screening done?

16. Where can one have the screening done?

Would anyone help us explain where screening can be done?

17. Who can have cervical cancer screening?

Would anyone help us explain who can have screening?

18. Is there any age limit in having screening done?

Would anyone help us explain if there are any age limits?

19. Is there a treatment for cervical cancer?

Would anyone help us know if there is treatment for cervical cancer?

Objective 4: Challenges/Fears

20. What are some of the challenges for not going to have screening done?

Would anyone help us explain what some of the challenges are?

21. What are some of the fears for not having the screening done?

Would anyone help us explain some of these fears?

22. Is the screening costly?

Would anyone help us explain how much the screening cost?

23. Are you too busy to go for the screening?

Would anyone help us explain why you are too busy to go for the screening?