

**PERCEPTION OF RISK FACTORS AND UTILIZATION OF BREAST AND
CERVICAL SCREENING SERVICES AMONG FEMALE UNIVERSITY STUDENTS
IN OSUN STATE.**

A DISSERTATION SUBMITTED BY

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TO

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CERTIFICATION

This is to certify that this work was carried out by Oyekan Tolulope Janet, under the supervision of Dr. O. A. Esimai.

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Date

DEDICATION

This project is dedicated to Almighty God for His grace and is my source of inspiration. Also to my wonderful and ever loving family, Mr and Dr (Mrs) Ajani, Mr Olaremoeye and David.

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ACRONYMS

ACCP:	Alliance for Cervical Cancer Prevention
ACS:	American Cancer Society
AIDS:	Acquire Immuno Deficiency Virus
ASCCP:	America Society of Cervical Cancer Program
CBE:	Clinical Breast Examination
CDC	Center for Disease Control
CIN:	Cervical Intraepithelial Neoplasia
HC:	Hybrid Capture
HIV:	Human Immunodeficiency Virus
HPV:	Human Papilloma Virus
HSIL :	High Grade Squamous Intraepithelial Lesion
IARC:	International Agency for Research on Cancer
LBC:	Liquid-Based Cytology
MRI:	Magnetic Resonance Imaging
NDHS:	National Demography Health Survey
PRB:	Population Reference Bureau
SBE:	Self Breast Examination
STD:	Sexually Transmitted Diseases
STIs:	Sexually Transmitted Infections
UICC:	Union for International Cancer Control
UN:	United Nation
UNFP:	United Nations Population Funds
USPSTF:	United States Preventive Services Task Force
WHO:	World Health Organization

ABSTRACT

The study assessed level of awareness and knowledge of breast and cervical cancers and the screening services and opinion on risk factors associated with the cancers among female university students. It also determined the level of utilization and factors influencing utilization of screening services for breast and cervical cancers among female university students. These were with the view of providing information that may be useful in improving screening services among this group.

The study was a cross sectional descriptive survey carried out among female university students residing in halls of residence in Obafemi Awolowo University and Oduduwa University in Osun State. Four hundred and twenty two respondents were selected from the two universities using the multistage sampling technique. Data was collected for a period of 7 weeks, information on socio demographic characteristics of respondents, awareness and knowledge of breast and cervical cancers and its screening methods, opinion on risk factors and utilization of screening services were collected using pre-tested self- administered structured questionnaire. The questionnaire was analysed using Statistical Package for Social Sciences (SPSS) version 20.0 software. Data analysis was carried out in three stages; univariate analysis was used to determine the proportions and summary statistics. Bivariate analysis was used to assess relationship between some selected factors and utilization of breast and cervical cancers screening services using chi square test. Multivariate analysis was used to identify factors that influence utilization of breast and cervical cancers screening services among respondents. The level of significance was determined at p value less than 0.05

The study showed that 90% of the respondents have heard of breast cancer, 10% are aware of breast cancer screening services. If the 90% that have heard of breast cancer, 42% had poor knowledge, 39% had fair knowledge and 19% had good knowledge of breast cancer. Eighty nine percent of the respondents had utilized breast cancer screening services, of which 71.9% conducted self-breast examination and 4.3% had mammography done. Thirty percent of the respondents have heard of cervical cancer and 26.0% of the respondents are aware of cervical cancer screening services. Twenty two percent of the respondents utilized cervical cancer screening services of which 9.4% had visual inspection with acetic acid and 7.5% had Pap smear test done. It was observed that level of study and religion of respondents are factors associated with utilization of breast cancer screening services while, life style (sexual activity and smoking) and family history of cervical cancer are associated with utilization of cervical screening services.

It was concluded that knowledge on breast cancer and awareness of cervical cancer screening services was poor. Self-Breast Examination (SBE) was the most adopted breast cancer screening services and utilization of cervical cancer screening services was poor.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Cancer is a non-communicable diseases which all share a common feature, namely that cells in affected organs or tissues of the body such as breast, lung, skin or bone marrow, continue to grow indefinitely, without reference to the needs of the body (Coleman *et al*, 2008). Many cancers have the capacity to spread to other parts of the body and to kill the patient (Qalawa *et al*, 2013). Cancer is now the second leading cause of death, after cardiovascular disease worldwide, approximately 10 million people are diagnosed with cancer annually and more than 6 million die of the disease every year (Zyoud *et al*, 2010).Cancers of the breast and cervix are the two most common cancers in women and their control especially in developing countries have been a major concern. The overall burden of cancer of the breast and cervix is shifting substantially to vulnerable populations in ill-prepared developing countries (Ahmad *et al*, 2001). As for Nigeria, which has 52% of her 40.43 million women aged 15 years and older living in rural areas and at risk of developing breast and cervical cancers (Ajayi *et al*, 2013).

Screening is the identification of individuals within asymptomatic population who have, or are likely to develop, a specified disease at a time when intervention may prevent or halt the progress of the disease (Umeh, 2006). Poor screening practices have also been identified as major contributory factor to late presentation of these diseases in developing and rural/low-income earning women in developed countries (Okobia *et al*, 2006). Screening services are limited mostly to urban facilities and there is no established national screening program for the two cb cancers (Okobia *et al*, 2006). There are different methods of breast cancer screening

which include Self-Breast Examination (SBE), clinical breast examination (CBE) and mammography (CDC 2014). Mammography is the mainstay of screening for breast cancer. Although not a new screening method, it is yet to be widely available especially in the low-resource countries including Nigeria (Obajimi *et al*, 2013). Also, there are various cervical cancer screening methods such as: Pap smear test, Visual Inspection with Lugol's Iodine (VILI), Human papilloma virus test, Liquid-Base Cytology (LBC), Visual Inspection with Acetic acid (VIA) and Colposcopy (CDC,2016). In Sub-Saharan Africa and other low and middle-income countries like Nigeria, the most utilized cervical screening methods are: pap smear test, visual inspection with acetic acid and colposcopy (Dim 2012; Finocchiaro-Kessler *et al*, 2016)

There are number of behavioral, environmental, and genetic factors that have been identified to increase the risk of developing breast and cervical cancers (Anand *et al*, 2008). Some of these factors are modifiable or subject to health promotion interventions such as preventing excessive alcohol consumption, promoting good nutrition and exercise to avoid excess weight gain and obesity, promoting the practice of breast feeding among mothers, not having multiple sexual partners and reducing the use of post-menopausal hormone therapy (UICC 2015). Risk factors for cervical cancer include syphilis or gonorrhoea history, multiple sexual partners and intercourse at an early age, chemical, dietary and life factors, cigarette smoking, barrier and oral contraceptives use and poor personal hygiene while risk factors for breast cancer are positive family history of cancer (Murthy & Mathew, 2000), age, smoking habits, alcohol consumption (Hailuet *al*, 2014), early menarche and increased fat intake (Habib *et al*, 2010).

Although effective preventive strategies for breast and cervical cancer have yet to be developed, following early detection practices can reduce the impact of the disease and allow for a greater range of treatment options (American Cancer Society, 2013). Despite the benefits of

cervical and breast cancers screening, many women have never been screened or are not screened at regular intervals (American Cancer Society, 2013). The effective way of reducing the mortality of these cancers is through screening and early detection. Many women still go unscreened, even where screening is freely available (Remennick, 2006). Recommended preventive techniques to reduce breast cancer morbidity and mortality include Self Breast Examination (SBE), Clinical Breast Examination (CBE), and mammography (Karayurt *et al*, 2008). CBE and mammography require hospital visit and specialized equipment and expertise whereas SBE is an inexpensive tool that can be carried out by women themselves (Karayurt *et al*, 2008). Even though SBE is a simple, quick, and cost-free procedure, the practice of SBE is low and varies in different countries. Several reasons like lack of time, lack of self confidence in their ability to perform the technique correctly, fear of possible discovery of a lump, and embarrassment associated with manipulation of the breast have been cited as reasons for not practicing SBE (Karayurt *et al*, 2008).

The barriers which prevent women from screening against cervical cancer in urban and rural areas within counties are: the view that cancer is a death sentence, the stigmatization of people with cancer, and inadequate knowledge regarding cervical cancer (Katz *et al*, 2007). Barriers to screening generally also included cost, lack of insurance, transportation problems, fear, embarrassment, and privacy issues (Katz *et al*, 2007).

1.1 Statement of the Problem

Cancer is now becoming a burden on the health system and the economy as a whole (Ogunbode *et al*, 2013). Women of all races and ethnicities are at risk of breast and cervical cancers. These two types of cancers have remained a major public health issue across the world (American Cancer Society, 2013). Breast and cervical cancers are the twin malignant tumours that are dealing a

severe blow to Nigerian women (Adebimpe & Oladimeji, 2014). Nigerian women ages of 15 years and above are at risk of developing breast and cervical cancers (Okobia *et al*,2006) and about 8, 240 die from the disease in Nigeria (Nigeria Human Papilloma Virus summary report, 2015). These two tumours, in addition to death associated with pregnancy and childbirth and those resulting from the new scourge of HIV/AIDS were reckoned to account for more than two-thirds of all death occurring in Nigerian women (Oguntayo *et al*, 2015).

Globally, the devastation that befalls women diagnosed of breast cancer remains inestimable (Olowokere *et al*, 2012).Breast cancer ranks second in cancer incidence and is still the second principal cause of cancer mortality among women worldwide including Nigeria (Okobia *et al*, 2006). The incidence of breast cancer is increasing worldwide, but more rapidly in societies that hitherto enjoyed a low incidence of the disease such as most African countries (Khatibo & Modjtabai, 2006). Breast cancer is a public health importance and significant health problem for women worldwide (Khatib & Modjtabai, 2006) because it affects both young and older women and is unfortunately still characterized by late presentation and poor outcome in many developing countries (Misauno *et al*, 2011). This had resulted into high morbidity and mortality which can be decreased by early detection and prompt treatment (Misauno *et al*, 2011). The high mortality rate among young women is mainly due to lack of breast cancer awareness (Anders *et al*, 2008) and this awareness is to be able to recognize symptoms of breast cancer early (Basseyy *et al*, 2011). Cervical cancer is the third most common cancer in women, accounting for 9% of all female cancers. It is the seventh most common cancer in the world, and is more common in less developed countries, where it accounts for more than 85% of the global burden of cancer (GLOBOCAN 2012).