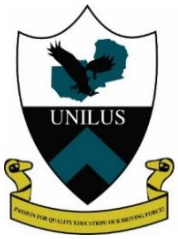

UNIVERSITY OF LUSAKA

SCHOOL OF MEDICINE AND HEALTH SCIENCES

DEPARTMENT OF PUBLIC HEALTH

FACTORS THAT CAUSE LATE DETECTION OF BREAST AND CERVICAL CANCER AMONG WOMEN IN ZAMBIA,

AN INVESTIGATIVE CROSS-SECTIONAL STUDY CONDUCTED AT THE CANCER DISEASES HOSPITAL

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A research proposal submitted to the University of Lusaka in partial fulfilment of the requirements for the award of the Bachelor of Science degree in Public Health

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ABSTRACT

INTRODUCTION: Malignant growth is without a doubt one of the most widely recognized happening and driving non-transferable sicknesses. It dates as far back as 3000 BC when the primary malignant growth like illness was first announced in antiquated Egypt. In the year 2020, it was accounted for by the World Health Organization that an expected number of 2.3 million ladies were determined to have bosom disease and 685,000 deaths were accounted for universally. As of the year's end 2020, there were 7.8 Million ladies alive who were determined to have bosom disease in the beyond 5 years, making it the most pervasive malignant growth. Worldwide, cervical disease is the fourth most successive malignant growth in ladies with a gauge of 570,000 new cases in 2018 representing 7.5 percent of all female disease deaths. On a worldwide scale, Zambia is assessed to have the second most elevated disease rates on the planet. This is credited to unfortunate admittance to screening administrations, portrayed by high death paces of cervical malignant growth at 58.0 and 36.2 per 100,000 ladies, separately. Thus, bosom and cervical disease has turned into a worldwide weight and one of the main source of deaths among ladies in the sub Saharan Africa

METHODS: This study employed the qualitative approach method and used an investigative cross sectional study design to analyze a data saturation sample of 33 respondents. The respondents were selected through a purposive sampling procedure of data saturation method, the data was collected through interview using an interview guide and the data was analyzed using thematic analysis table.

RESULTS: In this study, it was found that low levels of awareness and knowledge was the leading cause of late detection of cervical cancer and cancer of the breast among women in Zambia as the majority of the participants stated that they had little or knowledge on breast and/or cervical cancer. Source of information to be a contributing factor to women presenting with late presentation of cancer. In addition, it was also found from the majority that the perception and alternative medical preference by women are among the contributing factors causing women to present with late staged cancer when they go to the health facilities.

CONCLUSION: In general, the inadequacy of knowledge and low awareness, cultural factors, socio economic status among others have continued to be important measures to determining the late detection of both cervical and breast cancer.

DECLARATION

I **Victoria Maambo Maleya**, hereby declare that this thesis report titled **"factors that cause the late detection of cancer of the cervix and breast among women in Zambia"** was submitted to the **University Of Lusaka**, Zambia as a partial fulfillment of requirements for the award of the degree of Bachelor of Science degree in Public Health is a record of the original work done by me under the supervision of **Mr. Kelly Mwayengo.**

STUDENT ID: BSPH18213800

DATE: _____ _____ _____

SIGNATURE: _____ _____ _____

SUPERVISOR SIGNATURE: _____ _____

ACKNOWLEDGEMENT

At the outset, from beneath my heart, I thank the ALMIGHTY for the blessings showered on me in throughout this journey of my undergraduate.

I stand indebted in gratitude to our beloved founder/ Vice Chancellor Professor Pinalo Chifwanakeni for all the facilities provided at our institution. I would like to thank Prof Kasonde Bowa the dean in the School of Medicine and Health Sciences department and Mr. Kevin Chiluba Chungu the Head of Department in the School of Medicine and Health Sciences.

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DEDICATION

A special dedication of this dissertation is dedicated to my late father Mr. Stephen Maambo Maleya for always been supportive. My mother Mrs. Patricia Wamunyima Mukongolwa Maleya and my amazing and lovely elder siblings Bryan Lubasi, Mary Goretti Maambo, Bright, Chilao, Muletambo, Nchimunya and Martha Mwangala for the great and continued moral and financial support they have rendered throughout my studies. I wish you God's blessings and mercies.

LIST OF ACRONYMS

BC: BREAST CANCER

CDH: CANCER DISEASES HOSPITAL

HIV: HUMAN IMMUNODEFICIENCY VIRUS

HPV: HUMAN PAPILLOMAVIRUS

WHO: WORLD HEALTH ORGANIZATION

LIST OF TABLES

CHAPTER ONE

OVERVIEW

This chapter will introduce available information on the subject of cancer, breast and cervical cancer to be specific for better understanding of the subject. It will give the specific objectives that the researcher had for carrying out this study. The background to the problem as well as the justification of the study and the research questions.

1.0 INTRODUCTION

Non communicable diseases have become noticeably one of the leading causes of mortality globally in the recent past. Cancer is undoubtedly one of the most common occurring and leading non-communicable diseases. It dates as far back as 3000 BC when the first cancer like disease was first reported in ancient Egypt (Lindstrand, 2015). The disease was first called cancer by the Greek physician Hippocrates (460-370 BC). Hippocrates used the terms carcinoma and carcinos to describe non-ulcer forming and ulcer formers (Jacobsen, 2014). Cancer is simply the abnormal growth of the body cells which multiply and form a tumor (tumors) **(**Galalmbos et al., 2014). It is estimated that over 7 million people in the world die of different cancer each year (WHO, 2007). Approximately over 50 million have been treated for cancer and about 10 million new cancer cases are recorded each year. Cancer accounts for 25% of all deaths in high income countries and 10% estimated in low and middle income countries.

Cancer occurs when abnormal cells begin to reproduce and spread to other parts of the body. Normal cells are stable genetically, and if there is any type of damage or mutation cannot be repaired, the cells will go through a process called apoptosis which is programmed cell death. Cancer cells on the other hand, are not genetically not stable and they undergo "unlimited reproductive cycle." The cancer cells stimulate angiogenesis, which is the formation of new blood vessels that aid in the nourishing of the tumors, and cells metastasize, breaking away from the primary site and form new tumors in other body parts. It would be a little deceptive to refer to cancer as though it were one disease, because there are many different forms of cancer that exist. "Cancers are name for the part of the body where the cancer cells originate and for the specific type cell that has become cancerous. Cancer cells are also classified based on whether the cancer

cells are noninvasive and local, if they have spread to regional lymph nodes, or if they have spread to distant parts of the body." (Jacobsen, 2014)

There are many risk factors associated with a specific type of cancer for example, the human papilloma virus is an infection that increases the risk of cancer of the cervix in women. Age is an important risk factor for most cancers, smoking of tobacco and consumption of alcohol, physical inactivity and an unhealthy diets are also major risk factors of many types of cancers, and they can be modified. Some cancers occur due to mutations of which some are inherited, people may be diagnosed with cancer but do not have a history of any types of cancer in their families.

For women globally, the most prevalent cancers are cancers of the breast, cervix, colon, stomach and lungs, and breast and cervical cancer are the most leading causes of death among the existing forms cancer among women worldwide. In the year 2020, it was reported by the WHO that an estimated number of 2.3 million women were detected with breast cancer and 685,000 deaths were reported worldwide in that year (WHO, 2020). By the end of the year 2020, there was a total number of 7.8 Million women who lived with breast cancer and was detected in the past 5 years, making it the most prevalent cancer among women (WHO, 2020). Globally, cervical cancer is said to be the fourth most frequent cancer in women with an estimate of 570,000 new cases in 2018 which represented 7.5 percent of all female cancer deaths (WHO, 2021). Approximately, more than 311,000 deaths from cervical cancer each year. At least 85% of the deaths occur in low and middle income countries. The World Health Organization in its reports indicate that women living with HIV are at risk of getting cervical cancer by six times compared to HIV negative women and approximately 5% of all cervical cancer cases are attributable to HIV (WHO, 2018).

Despite being one of the biggest challenges in public health, there has been a continued increase in the late detection of these two types of cancers, this is a current challenge being faced in Zambia. Therefore, this study will endeavor to explore the factors that are leading to late detection of breast and cervical cancer among women in Zambia.

1.1 Statement of the Problem.

On a global scale, Zambia is one of the leading nationals and is estimated to have the second highest cancer rates in the world (Banda, et al., 2019). This is attributed to poor access to screening services, characterized by high mortality rates of BC and cervical cancer standing at 58.0 and 36.2

per 100,000 women, respectively (McCracken, 2012). As a result, cancer has become a global burden and one of the major leading causes of deaths in sub Saharan Africa (Azubuike, 2018). In Zambia, Cancer of the cervix is the most common cancer recorded at the CDH, which represents 35% of all cancers managed at the CDH and there has been growing evidence that cervical cancer has posed a huge reproductive health problem for women (Banda, et al., 2019). Cancer of the cervix can easily be detected, prevent and cured in its earliest stages but lack of awareness, knowledge and poor health seeking, and limited screening programs results in the a lot of women presenting with cancer at late stage when it is actively invasive and advanced disease which becomes very difficult and expensive to treat (Parkin, 2020).

Only second to cancer of the cervix in Zambia, breast cancer has an incident rate of 22.4 per 100,000 women. An estimation of 400 mortalities occur due to breast cancer among women every year in Africa (Banda, et al., 2019). The Cancer Diseases Hospital data indicates that breast cancer cases make up to 9 percent of cases reported annually. In Zambia and most of the sub Saharan Africa breast cancer is characterized by low but rapid increase disease incidents, as it is common in women that live in low-income and Middle-income countries where opportunities for prevention, early detection or both are very few. Breast cancer amount for 14.1% cases of cancers recorded per year (Jacklyn, et al., 2018).

Despite being one of the biggest challenges in public health, there has been a continued increase in the late detection of these two types of cancers, this is a current challenge being faced in Zambia.

1.2 Justification of the Study

The late detection of both cervical and breast cancer has the affected families and nations of the Sub Saharan Africa. Every country is concerned about the best possible way of reducing cancer mortalities and morbidities especially that of cancer of the cervix and cancer of the breast. Many countries are shifting to preventative and early detection methods of both types of cancers. This study assessed the factors that influence the late detection of both breast and cervical cancer among women in Zambia and it can be of great significance to the families, the general public, health sector in Zambia, sub Saharan Africa and the world at large. This study can help the health sector identify the factors that lead women to present with late staged cancer. Also, the study through the examination of cancer screening service provisions by the local health facilities, which can enable the health sector judge the performance of the cancer screening services.

It is further expected that the study has provided the needed evidence to the health sector and the nation to further strengthen their interventions. The results of this study have provided evidence to improve the performance of the health sector and service delivery which are a mechanism towards provision of satisfactory and improved health care.

To end with, the study might add knowledge to the existing literature in the areas of breast cancer and cervical cancer, and the service delivery in the Zambian health sector

1.3 General Objective

The aim of this study was to identify factors that influence late diagnosis for cervical and breast cancer among women in Zambia.

1.4 Specific Objectives

To assess factors that influence late detection of breast cancer in women in Zambia

To examine the knowledge that women have on the breast cancer self-examination and cervical cancer.

To investigate factors that lead to late detection of cervical cancer and breast among women in Zambia.

To estimate how often women in Zambia test for the two types of cancer.

1.5 **Research Questions**

Based on the research objectives, the study tested the following questions**:**

1. What factors influence late detection of breast cancer in women in Zambia?
2. How knowledgeable are the women in Zambia about breast cancer self-examination?
3. What factors lead to late detection of cervical cancer among women in Zambia?
4. How often do women in Zambia get tested for the two types?

CHAPTER TWO

2.0 LITERATURE REVIEW

2.0.1 INTRODUCTION

The second chapter of this report presents a review of previous studies related to the present study. The chapter continues with the examination of studies related to late diagnosis of cervical and breast cancer in Zambia.

2.0.2 CONCEPTUAL DEFINITION

Breast cancer diagnostic delay is defined as "the interval between the dates that the patients noticed the first symptom attributable to the disease until the date that histological diagnosis made." (Dianatinasab, et al., 2012)

Ali Montazeri, (2003) defines delay in breast cancer as "the patient delay (the interval between the first detection of symptom and first medical consultation) and system delay (the first interval between first presentation to a medical professional and initial treatment)."

Prolonged delay defined as "the intervals greater than 12 weeks." (Montazeri, et al., 2003)

Breast cancer and cervical cancer are the most easily treatable cancer especially when they are detected early with greater accessibility to screening test like mammogram and Pap smear, which are easy, safe and affordable. Early detection of breast and cervical cancer has been improving so why then are many women in Zambia still been diagnosed with late breast and cervical cancer, and what are the concerns that women have to get themselves checked for these two types of cancer. According to registry report between 2010 and 2015 almost half of breast and cervical cancer cases among women in Zambia are detected in stages II, III and IV and that about 71 percent. We still seeing a significant number of women being diagnosed late compared to other countries in the region (Asombang, et al., 2018).

Breast cancer is essentially divided into four stages, we have the early staged cancer which is stage I and stage II, stage I being the disease being primarily confined to the breast. Stage II the disease spreads to the regional lymph nodes, and usually when it is said to have advanced is said it is staged III where upfront surgery may not be possible, and some form of new treatment is required

to shrink the disease while surgery is enabled. Stage IV unfortunately is when the disease has spread beyond the primary site, here we are looking into distant sites such as the liver, lungs and bones. In Zambia, we are still seeing that there is an increase in stage II, III and IV of breast cancer compared to other countries in the world, we have higher number comprising of stage II, III and stage IV, when we compare the data to other countries. We actually seeing a different range or rate there almost 80 percent are diagnosed at an early stage, which is I and II and this is attributed by the fact that there are opportunistic and mammogram screening (Majeed, et al., 2014). Through the years, campaign awareness of breast and cervical cancer through social media they have increased significantly. There is still much effort need and hopefully the shift will be seeing at early stages.

In developed countries, programs have been put in place which enable girls to be vaccinated against the Human Papilloma Virus and regular screening of women, which allows for pre-cancerous lesion to be detected at their early stages for easier treatment **(**Almonte, et al., 2011). There are limitations when it comes to accessing these preventative measures and cancer of the cervix is often not identified until it has further advanced. “Factors contributing to the high cancer burden are many and include among others, increased contact with infectious agents such as HPV (which causes cervical cancer), environmental factors such as exposure to chemical and toxins, social factors such as tobacco use, alcohol abuse, sedentary lifestyle, poor diet and others” (Ntekim, 2012).

However, it is important to note that there is a huge difference of incidence and prevalence of cancer between countries and regions. An example, cancer of the cervix remains one of the most leading cause of death among women low-income countries compared to their counterparts in the high income countries, this is attributed largely to the routine us of pap smears which increase the rate of early detection of cancerous cells and lesion the use of human papilloma virus vaccines, which prevents the immunized women to become infected with some strains of human papilloma virus that are associated with an increased risk of cancer of the cervix.

GLOBAL

Globally, the health disparities cause an increase in the late diagnosis and an increase in the mortality rates of the breast cancer and cancer of the cervix (Torre, et al. 2017). Cancer has the ability to affect all population groups globally. But there are groups that are more vulnerable

compared to other groups. Such groups have high cancer morbidity rates and cancer mortality rated and related complications arising in the one group compared to the other (de Oliveira, 2020). Literature records have shown that there have been a number of factors that are associated with the late diagnosis of both breast and cervical cancer such as health disparities, lower income, low education, age, public hospitals use, and geographic location among others (de Oliveira, 2020).

In countries where they have a lot of different ethnic groupings such as the United State of America. The health inequalities are seeing in these different groups (Fields, 2020). For example, the cancer mortalities between white and black women, the rate of mortality per 100,000 deaths was lower in whites 20.6% compared 28.9 % which meant that women from the black race are 41% more likely to die out of cancer compared to white women, which is a very significant difference (Fields, 2020).

A study carried out in Pakistan by Khan (2015), shows that education helps in reducing the delays in the detection of cancer significantly. The less educated women generally tend to be ignorant about their health and do not access the health facilities for any screening until they have severe symptoms of a disease, the cannot seem to decide on their health issues in good time for early diagnosis and this applies to the late detection both types of cancers (Parkin, 2020). A research carried out in Iran by Montazeri (2003), showed strong evidence on the diagnosis of breast and cervical cancer and lack of knowledge.

In another study carried out by Dunyo (2018), he points out that unmarried women are more likely to be detected with cervical and breast cancer at its early stages compared to married women. This is attributed fear of divorce among married women as the consider cancer to be a contagious disease, Dunyo stated. This results in married women shunning to pursue medical services that can help in the early diagnosis even if they have symptoms of breast cancer or cervical cancer. However, Berraho, of Kingdom of Morocco argues this point, in his research he indicates that divorced and widowed women have higher chances of presenting with late staged cancer. He states "one might argue that this could be explained by the fact that widowed and divorced women do not have enough motivation to seek help or care about themselves and lack support" (Berraho, 2012). Perhaps this point is up for debate, but most studies show that married women have a higher risk of late diagnosis, marital status was seen to be a significant predictor for the delay. In comparison to a studies conducted by Khan, Berraho, and Montazeri, Mustafa (2016), in his

research also argues that, single women are more likely to present with late stage breast cancer and cervical cancer in comparison to those who are married, this is attributed to cultural barriers which include being ashamed cervical and breast examination. This reduces the possibilities of lumps being detected compared to married women.

REGIONAL

Inability to access screening services, the inability to access the screening services due to limited services in many developing countries especially those in the Sub Saharan Africa, the access to some of these services are not offered on a daily basis due to lack of equipment only offered by specialized hospitals which makes it hard for women to access the said servicers (Asombang, 2018). Mammograms and Pap smear tests are not the cheapest so to say and that they are said to be the gold standard tests for the two types of cancers (Adami, et al, 2020). Studies show that access to the screening test reduces on the late diagnosis of cancer because there is a chance of diagnosing breast and cervical at their early stages (Azubuike, 2018). Illiterate women in the sub Saharan countries present with late staged cancer because they are of the idea of cancer being incurable and the unavailable treatment makes life shorter for cancer victims (Ntekim, 2012). This illiteracy and ignorance has led to the significant increase of the delayed diagnosis of both cancers of the breast and cancer of the cervix. Awareness needs to raise for people to have knowledge on testing of cancer and need to make these services affordable to all people of every socioeconomic and demographic status.

"Cervical cytology, however, is not a feasible method of screening in many African countries given the required level of medical and laboratory infrastructure and trained personnel, multiple return visits with poor patient tracking strategies, and availability of such services often limited to capital cities. The proportion of women in sub Saharan Africa reporting a pelvic exam and pap test in the previous three years is very low (1.0 % in Ethiopia to 23.2 % in South Africa), with 40 % of women in Tunisia to 94 % of women in Malawi having never received a pelvic exam." (Finocchario-Kessler et al. 2016)

Another factor that influences the late detection of cancer of the cervix and cancer of the breast is age in the Sub Sahara. In breast cancer older women are more likely to procrastinate early diagnosis which results in advanced disease. Many elderly women are unaware of the fact of them having greater risk compared to younger women. Other research studies have examined the history

of benign mastophy as a determinant of late detection, this is due to procrastination in seeking medical care maybe due to previous experience where they had episodes of similar breast cancer alteration that were thought to be benign tissues by their gynecologists. But Memon, argues to say that age does not have any influence on breast cancer late detection he suggests that there is no enough evidence to prove this fact.

"Women having abnormal vaginal bleeding such as post-coital bleeding, intermenstrual bleeding or post-menopausal bleeding as early symptom were less likely to have late diagnosis, compared to women with foul smelling vaginal discharge. Also women who didn't share their problem immediately after onset i.e. ignored their symptoms and who shared their problem with other persons than their husbands or family members were at elevated risk of late diagnosis. The result indicates that the nature of the early gynecological symptoms may determine the health seeking behavior of women." (Gyenwali. et al, 2013)

Awareness, most women in Africa do not know symptoms of either breast cancer or cancer of the cervix. In order to detect breast cancer early every woman needs to know her breasts and should able to carry out a self-examination on their breast (Black, 2019). A study that was conduct by Norsa'adah, Claims that women who knew how to conduct self-examination on their breast consulted a physician compared to those that did not and this has led to early diagnosis of breast cancer. Their findings were found to be consistence with the results from other studies that were earlier stated at the global level, it is important to create awareness among women of all ages to have knowledge of breast self-examination.

LOCAL

Breast cancer and cervical cancer are the most easily treatable cancers especially when they are detected early and with greater accessibility to screening test like mammogram and pap smear, which are easily performed. Safe and affordable early detection of breast and cervical cancer has been improving so why then are many women in Zambia still been diagnosed with late breast and cervical cancer, and what are the concerns that women have to get themselves checked for these two types of cancer. According to registry report between 2010 and 2015 almost half of breast and cervical cancer cases among women in Zambia were detected in stages II, III and IV at the rate of about 71 percent (Banda. et al., 2019). We are still seeing a significant number of women being diagnosed late compared to other countries in the region.

The Zambian health care system is not strong enough to support the patients from the grass root level, because in an instance where you want to ensure that there is early detection of the disease there is need to start from the grass roots. In most sub-Saharan countries access to health services is limited due to lack of finances. They do not have adequate resources to enable them to seek for cervical cancer services in time.

RESEARCH GAP

This study was set to investigate the factors that are influencing the late diagnosis of breast and cervical cancer. The study differs methodologically with the study conducted by Mostafa (2016), who looked at the impact of social and clinical factors on diagnostic delay of breast cancer which focused more on factors which are socio economic and other structural factors in nature and omitted some of the determinant. Most of these studies where carried out using a quantitative approach, however this study took the qualitative approach and was narrowed down to the Zambian context.

Therefore, the paramount of this study should not be overstated because it aimed to investigate the influencing factors that have were stated in the review of literature have on the delayed diagnosis of both breast and cervical cancer, in case of Zambia using a cross sectional study and the sample size that will be made available the next chapter.

2.1 THEORETICAL REVIEW

The process of identifying factors that could influence the late detection of cancer of the cervix and breast cancer has been studied for the past few decades and one of the most adaption models are the health belief model and the social change, a theory from health promotion. The health belief model was developed in 1950, it postulates that “the health behavior is a function of individual’s socio-demographic characteristics, knowledge and attitudes.” According to this model a person must affirm certain beliefs in order for them to change their behavior. This actively demonstrates that promoting action to change a particular behavior includes changing the personal beliefs (Abraham, 2015).

“To bring about changes in the physical social and economic environment which will have the effect of promoting health, making the health choice the easier choice and need to change cost, availability and or accessibility of the healthier choice.” (Mostafa, 2016). These theories are

important to this study as it covers every part of the factors that have been considered to be influential in the delay of diagnosing breast and cervical cancer.

2.2. A CANCER LATE DETECTION CONCEPTUAL FRAMEWORK

For Zambia to reduce the rates of late staged cancer, to be on the same level as those that are in developed countries will take years. With the use of the social change approach this dream can be realized by making changes in the social, economic and physical environment and making a health choice the easier choice by making policies that make it easy for women to access medical and screening services to ensure that there is early detection of breast and cervical cancer. For those in rural areas the government needs to come up with programs that would make it affordable and access to those services and improve on the factors that cause late detection in Zambia. Below is figure 2.1 which shows how these factors interact with each other to cause late detection of both breast and cervical cancer. This research investigated the socio economic factors and other factors from this conceptual framework to assess factors that cause late detection of breast and cervical cancer.

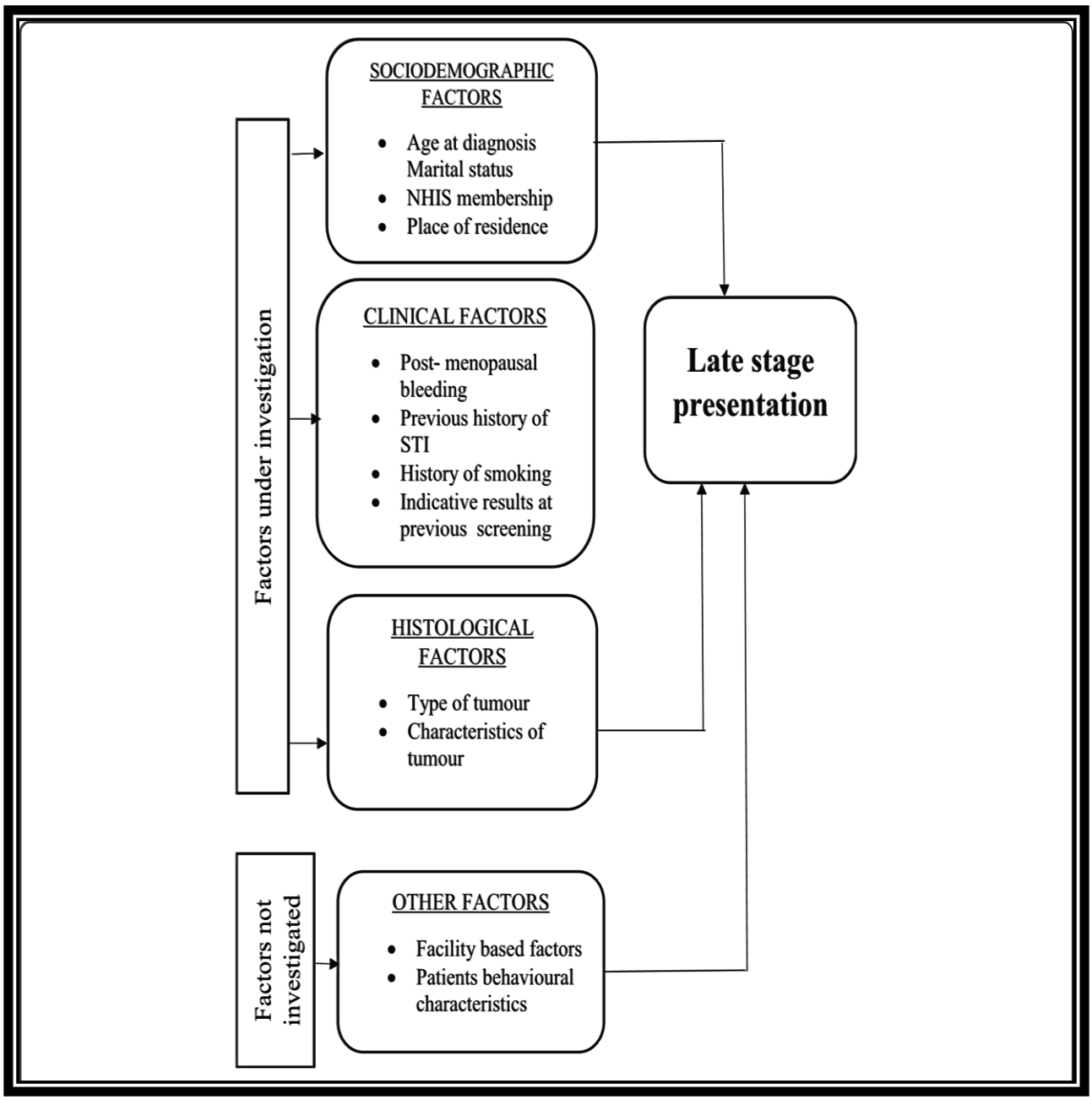

Figure 1 Adapted from Dunyo et al. BMC Public Health (2018) 18:1156 https://doi.org/10.1186/s12889-018-6065-6.

CHAPTER THREE

METHODOLOGY

This chapter will go through the methodological processes of the research study and outlines the different methodological approaches that were employed when carrying out this study as well as tools that were used to gain information about the particular subject. This particular chapter was divided into seven parts: study approach, study design, study population, sample procedure and sample size, data collection method, data analysis method and the ethical consideration.

3.1 STUDY APPROACH

This research was carried out using the qualitative approach to assess the knowledge of patients, the caregivers and the health workers.

3.2 STUDY DESIGN

A descriptive cross sectional study was carried out. The cross sectional study was used to assess the currently existing control measures that are currently in place and compare them to the current exposure to levels. This was done so as to acquire more information from the subjects.

3.3 STUDY POPULATION

This research population was cancer disease patients at the Cancer Diseases Hospitals (CDH) specifically those who had cases of breast and cervical cancer.

i) INCLUSION CRITERIA

All women who have been diagnosed with cervical and breast cancer.

ii) EXCLUSION CRITERIA

All women who have been diagnosed with the cancer but were not willing to participate in the research.

3.4 SAMPLING PROCEDURE AND SAMPLE SIZE

Sample size was obtained by considering the following:

Saturation point, it refers to point in research process when no new information is being obtained. This is a sample size determination that is used in data collection for qualitative research to get information. For this survey the saturation point was reached at 33 respondents.

Sample procedure; the sampling procedure that was purposive sampling method. This as sample procedure that allows for data collection from key subjects who are considered as key informants about the topic through interviews and focus group discussion.

3.5 DATA COLLECTION METHOD

Questionnaires and interview guides were conducted and sent to the participants of this study by the researcher. This was because questionnaires were more efficient in obtaining data from the participant and in-depth interviews was conducted in order to get more details from the respondents.

3.6 DATA ANALYSIS

The data was analyzed using Thematic Analysis for the analysis of results obtained from the data that was collected. This was because the of the study approach that was used which was Qualitative approach. Data presentation was involved in the discussion for better understanding and interpretation.

3.7 ETHICAL CONSIDERATION

The study was conducted with permission and approval from the University of Lusaka, Research Ethical Committee, and the head of institution (Cancer Diseases Hospital), health workers, and patients who were enrolled to participate in this research. A written consent was availed to those who were included in the research study. All the information that was gathered in this study was treated as confidential by the researcher and was sorely used for research purpose. All the respondents that agreed to this study were given a written informed consent and confidentiality was maintained. Ethical issues that might arise are beneficence this principle entails that physicians are obligated to make choices that benefit the patient. Non maleficence means minimizing the risk of harm which could be physical, social or psychological, autonomy this is a principle that allows for making their own decisions and justice by insuring fairness to the participants and the researcher. These were maintained by strictly adhering to the ethical principles.

CHAPTE FOUR

4.0 RESULTS

INTRODUCTION

This chapter presents all the results that were obtained for this research. This research employed a qualitative approach, the data was presented and was analyzed using themes. The analysis of this data was in line with the objectives and aims that were set for the study. The research was carried out using an interview guide and the interviews were recorded. This chapter provides details of key findings of this study. This was achieved by focusing on the theme that were identified in the literature review, data analysis provides a clear basis on the knowledge and perceptions women have on cervical and cervical cancer in Zambia.

This study involved women that had breast cancer and those that had cervical cancer. There were more cervical cancer respondents as compared to breast cancer. Out of 33 respondents representing 100%, 54.5% were patients of cervical cancer and 45.5% were patients of breast cancer. In addition, all participants were Christian representing a 100%. On top of that, concerning the education level attained by the respondent the majority of the respondents had stated that they had gone as far as primary school representing 48.5%, 27.3% represented those that did not have any formal education, while 18.2% of the participants had reached secondary school and 9.1% had attained a higher education qualification from a University or College. There was a significant difference between the educated and uneducated participants. This shows that there is a close association between education and delayed diagnosis of breast cancer and cervical cancer.

Furthermore, for the purpose of this study and based on its context the area of residence was recorded as follows, 27.3% of the respondents lived in urban areas, 33.3% resided in peri-urban areas and 39.4% resided in rural areas. These results show that there is a high association between the area of residence and delayed medical attention. Concerning the ages of the respondents there was nothing recorded for those below 30 years. Between the age of 31 and 35 there was one respondent representing 3%, between 36 to 40 years there were 5 respondents representing 15.2%, 41 to 45 years there were 9 respondents representing 27.3%, 46 to 50 years there 6 respondent representing 18.2% and above 50 had recorded the majority with 12 respondents representing 36.4%. The results obtained indicated that age played a significant role in accessing health

services. In terms of occupation 6 respondents were employed representing a percentage of 18.2, 2 were retired accounting for 6.1%, 30.3% were retired that 10 out of 33, and the majority were not employed representing 45.5% of the total 33 participants, this shows how significant occupation and income are to accessing health services on time.

VARIABLES	FREQUENCY (N)	PERCENTAGE (%)
Patients		
Cervical cancer	18	54.5%
Breast cancer	15	45.5%
TOTAL	**33**	**100%**
Age		
31-35 years	1	3%
36-40 years	5	15.2%
41-45 years	9	27.3%
46-50 years	6	18.2%
50 and above	12	36.4%
Marital Status		
Single	6	18.2%
Married	14	42.4%
Divorced	6	18.2%
Widowed	7	21.2%
Residential Area		
Urban area	9	27.3%
Peri urban area	11	33.3%

Rural area	13	39.4%
Occupation		
Employed	6	18.2%
Self-employed	10	30.3%
Retired	2	6.1%
Unemployed	15	45.5%
Education Level		
Never been	9	27.3%
Primary school	16	48.5%
Secondary school	6	18.2%
University	3	9.1%

Table 4.1: *Socio demographic characteristics of the research participants*

AWARENESS AND KNOWLEDGE ON BREAST AND CERVICAL CANCER

Majority of the participants had little or no knowledge on the causes, signs and symptoms, early diagnosis methods and treatment methods of breast and cervical cancer. The participants had little or no knowledge on the screening tests that are used to detect the growing tumors and how they are done especially with the self-examination of the breast and lacked details of the benefits that come with taking screening tests and what age to start taking those test. Those that had attained some form of higher learning qualification had a bit of knowledge on issues relating to breast and cervical cancer, indicating that knowledge and awareness has is a contributing factor on the late presentation of both cervical and breast cancer. In comparison to other studies carried out in the past, Common Knowledge and Awareness of Cervical and breast Cancer. only a few people claimed to having heard of cervical and breast cancer, while the majority of participants said they had never heard of it. Some of the participants provided the following responses on cervical cancer: "We don't know about it; I have only heard of breast cancer; this is the first I've heard about cervix cancer." Only a few ladies acknowledged hearing about it and provided the following information:

"I heard it ruins the mouth of the womb, making it impossible for a woman to deliver a baby and eventually forcing the womb to be evacuated. I heard it is a worsening sickness, occasionally resulting in the death of some newborns.The statements from those that have heard showed that they did not have accurate information about the disease.

SOURCES OF INFORMATION

Some of the participants who had heard about breast or cervical cancer, stated that they came to know about the information through health workers at health facilities in their locality and on media platforms such as the radio, television and various social media platforms. In addition, a few others stated that they were told by their peers and these responses mainly came from urban area residents. This shows that source of information does have a contribution to how women perceive cervical and breast cancer and their medical seeking behavior. Studies reported that, most women received Breast Cancer information mainly from television (31%), clinics (31%) and health professionals (21%). Other sources of information were from elders, friends and neighbors who serve as a source of support in seeking advice, knowledge and encouragement about health issues. One study reported elders, friends and neighbors as the main source of Breast Cancer information among Nigerian rural women in Ibadan (Asoogo, 2015). Other studies conducted in Nigeria revealed television sources as the main platform for assessing BC information among respondents in a semi urban community. This disparity might be attributed to the different socioeconomic status within these two communities. Women from semi urban communities are more likely to afford television whereas those in the rural areas may rely on opinion leaders such as to elders in the community, friends and neighbors for the same information. This phenomenon results in late acquisition of BC information and late presentation at the facility since women are likely to do so when symptoms are presented. The more knowledgeable an opinion member on risk factors and causes of BC, the more likely for them to influence audience to see a physician.

PERCEPTIONS ABOUT CERVICAL AND BREAST CANCER

A lot of responses indicated that cancer kills faster. The immediate thought that comes to mind when they hear about cancer is death and that it cannot be cured by any treatment, some believed that mastectomy was the only treatment for breast cancer. There is also a belief that was pointed out by the respondents cervical and breast cancer rarely occurs in African women but mainly

affects the Caucasian women. The perception about breast and cervical has been found to be among the contributing factors causing women to present with late staged cancer when they go to the health facilities (Fort, et al., 2011 and Birhanu, et al., 2012).

POOR HEALTH SEEKING HABITS

The respondents generally showed that they had poor attitudes towards seeking health services this was mainly attributed to socio-economic or cultural factors. Many feared that they will be diagnosed with cervical cancer and breast cancer and die eventually. Many attributed to stigma that comes with knowing that you have breast or cervical cancer, even stigmatization coming from their family members which makes many delay to seek medical attention. Fear was also found to be a factor, women generally having fear and anxiety to get screened by the physicians, the cost involved and stigma. Poor health seeking behavior has also been found to be among the contributing factors causing women to present with late staged cancer when they go to the health facilities. In a study carried out in Ethiopia most of the participants emphasized that early treatment seeking was very limited, particularly in rural areas (Gebremariam, 2019). They stated that most women with Cervical Cancer and breast cancer symptoms only seek treatment after the disease reached an advanced stage with the women suffering intolerable pain. A participant from Addis Ababa said, “in our community there is a habit of going to health institutions when it reaches a stage where they are unable to tolerate the pain.”On the other hand, in another study carried out several participants thought that treatment for Cervical Cancer and breast cancer was accessible in contemporary healthcare facilities, and that women go to in order to get help. significant problem Some attendees noted that, in spite of some early modern medical care for women, the disease is not identified because there wasn't enough diagnostic capability at the most all of the participants were in a health facilities not aware that any level of the healthcare system has a screening facility (Muhamad, et al., 2012). The paucity of hospital beds to offer the required inpatient care was one of the other contributing elements to the health system.

ALTERNATIVE TREATMENT PREFERENCE

Some of the research participants believed in traditional medicines from the shamans (herbalists and traditional healers) and exorcism or power of healing by the prophets. They stated that they prefer to use traditional medicine before seeking conventional medicine form health professionals.

This is also subject to the level of education and exposure showing a close association between levels of education and delayed seeking medical services, this is a major contributing factor to the late detection of both types of cancers. Conventional healers give individuals trust and treat patients as somebody who can be relieved. This feeling of trust and the possibility of help contribute towards the patient's improvement. Added other than cheerfulness, seeing a healer may likewise give a feeling of control to the person. Further, conventional healers will quite often offer patients and their families a more private and close connection that most prepared specialists and clinic staff can't offer.

MAJOR THEME	MAIN OUTCOMES
Knowledge on Breast or Cervical cancer	• The majority of the respondents stated that, they did not have any knowledge prior to their diagnosis and they did not have any knowledge on the symptoms or signs of breast. • Low awareness among participants. They had heard about cancer in general, but did not know of the types and the stages. • Unaware of risk factors that could lead to breast or cervical cancer. • Most breast cancer patients did not know of self-breast examination and other screening methods that can be used. • Had not being screened for either breast or cervical cancer before. Inciting low awareness on screening. • When asked if anyone had suffered from cancer in their family the majority said they were the first ones that had cancer with an exception of a few who stated that “they had other family

	members that have had the particular type of cancer in question before them."
Socio-Economic factors	• Most of the respondents live in rural and peri urban areas and these are far flanked areas, with an estimation of not less than 3 kilometers to reach the nearest health facility. When asked about transportation to the health facilities, the respondents mentioned to say that, "they have difficulties to reach the health facilities due to the mode of transport available and able to afford, in order for them to seek medical services." • With majority being from the rural and the peri urban areas and not employed, mainly surviving on hand-to-mouth and agriculture (seasonal cropping).
Cultural factors	• Some participants had a spiritual approach toward cancer. They believed spirituality brings healing. One cervical cancer patient respondent stated "ndaaka cheelwa kuunka ku ciibadela kuyopimwa nkambo ka kuyeyela kuti nda kaalogwa, elyo musamu wabaantu bashiya kuzya kuba ng'anga gunga wabeleka kusilika malwazi aya ngegisi olo kuunka kuli bama profita bo." That translated from Tonga to English the respondent said that, "they delayed seeking medical attention because they believed that they were bewitched, and only tradition medicine from the Shaman or going to the prophets for prayers."

	• Most of the elderly did not find it comfortable to be screened by for breast and cervical cancer by male health workers and young health workers. • Misconceptions about the causes and treatment of both cancers • Fear of being divorced by the husbands if found with cancer.
Other Structural Factors	• For many health facilities in rural and peri urban areas, there are a few health practitioners that have a high ratio of health worker to patients. • Numbered specialists or no specialists at all to attend to them in their districts • The screening services not being offered at local health posts only at the district level and upwards. When asked if at all there are times when the qualified and specialized health workers visited their health post or community for screening of both cervical cancer the responses ranged from one to three times annually. • Generally poor health seeking behaviors

Table 4.2: *Themed major findings*

CHAPTER FIVE

5.1 DISCUSSION

INTRODUCTION

This chapter deals with the discussion of the results of the data collected by comparing the significant findings to other studies carried out around the world concerning subject at hand. The goal is to highlight useful information, suggestion of conclusive evidence and support decision making and as such the findings were subjected to a literature review on studies that were similar to this one carried out from different parts of the world to add insight and support the findings.

This study sought to examine knowledge, assessing factors that lead to the late detection of breast cancer and cervical cancer and estimating how often women screen for cervical cancer and breast cancer in Zambia. Knowledge gap was identified as an important contributing factor for late presentation and early detection measures (Akbari, et al., 2010). Knowledge and awareness happens to be an important determinant health and this indicates close relationship established from previous studies. The existing discrepancies in knowledge and awareness between urban and rural residencies, whereas urban middle-income women identified stress, sedentary behavior, and dietary factors as possible risk factors for breast cancer, rural women identified remnants of milk retained in the breast, keeping money or a mobile phone inside their breasts, witchcraft, evil spirits, and divine punishment as factors contributing to breast and cervical cancer (Birhanu, et al., 2012, Ndikom, and Ofi, 2012).

There is a higher probability that the women living in urban areas are likely to attain higher education than those living in rural areas. This could account for the differences in the levels of awareness and knowledge. This is so because women in urban areas have credible sources of information to healthcare and diseases such as cervical cancer and breast cancer. Two studies

found higher level of education to have a significant association with high knowledge in cervical and breast among participants (Fort, et al., 2011 and Birhanu, et al., 2012). This is consistent with previous evidence that showed a significant association between education and increased awareness about seeking health services early especially in the case of breast cancer and cancer of the cervix (Birhanu, et al., 2012). From this research there is evidence that low levels of awareness and knowledge on early detection of breast cancer and cervical cancer, which appears to affect their individual practices and involvement because educated women were more inclined to seek medical services early and be able to detect cancer of the breast and cancer of the cervix early. A study by Maree & Holtslander (2021), showed that the combined effect of very low awareness of early detection measures and low health literacy had been identified as influencing the disease in some developed countries. In as much as educational campaigns may be challenging to conduct in rural areas of Zambia, the main out comes of this literature review revealed proof of successful education strategies having a significant effect on the amount of women attending screening services (Benemariya, 2018). Cervical and breast cancer preventive and management programs in Zambia need to integrate educational elements in order to promote uptake.

A study carried out in San Francisco by Jones (2015), on delay in comparison to help seeking for cancer of the breast and cervix symptoms found that women did not realize the significance of breast cancer symptoms, despite women knowing how serious and burdening cervical and breast cancer were. The availability of accurate information in developing countries especially those of the Sub Saharan Africa is of much concern. How accurate the information is, is determined by the source of that information and creates beliefs and perceptions on how cervical cancer and breast cancer are viewed, causes, screening and preventive practices (Gebremariam, 2019). In a studies that were taken in the United States of America in the state in Chicago and India, New Delhi report a lot of misbeliefs and misperceptions with regards to cervical and breast cancer, these studies revealed that "majority of the patients believed that cancer is caused by God's curse (59%), evil eye (60%) and past or present sins (37%). About 27.4% of the patients indicated that cancer is infectious and about 57% of them revealed close contact with infected cancer patient were the cause of their illness" (McCracken, et al., 2012 and Abdullah, 2013). These results are similar to those recorded in this study, were some participants stated that the cause of cancer might be the acts of witchcraft and curses. In this study also the majority of the respondents indicated that cancer killed faster. They further stated that the immediate thought that came to mind when they heard

about cancer was death and that it could not be cured by any treatment. Some respondents believed that mastectomy was the only treatment for breast cancer which is consistent with the findings of Fort, et al., (2011) in his study.

Studies depict that, most women received breast cancer, cervical cancer and other forms of cancer information mainly from their televisions and other media platforms (31%), health facilities (31%) and health professionals (21%). "Other sources of breast and cervical information were from elders, friends and neighbors who served as a source of support in seeking advice, knowledge and encouragement about health issues" (Asoogo, 2015). One study carried out in Nigeria reported that elders such as village headmen and chiefs, church elders, friends and neighbors were cited among the main sources of cervical and breast cancer information among Nigerian rural women in Ibadan (Akuoko, 2017). These finding are similar to the results that were obtained in this study, the majority of the respondents lived in rural areas were they barely had access to television and other media platforms other than radio due to socioeconomic disparities. They revealed that they got their information from the health professionals when they visited a health facility. Furthermore, they stated that they received health information from head of the villages or area and leaders of the church in conjunction with health facilitators that go to these areas for health promotion and education services, traditional leaders and religious leaders are chosen because of the influence they have on their subjects and followers.

Medical seeking behavior was found to be one of the factors that increased the chance of late presentation of cancer. This is as a result of preference to alternative forms of medicines by women. A study reported that "only 29% indicated their preparedness to seek medical attention upon identifying such signs and symptoms, whereas others preferred traditional treatment (46%) for breast cancer and cancer of the cervix care. Women in rural settings are even more likely to seek help from traditional healers due to deficit in healthcare facilities in rural areas. Previous evidence suggests that women who seek alternative treatment mostly present late with severe clinical stages and sometimes with 8 to 10 months duration of symptoms." (Ndikom, & Ofi, 2012).

Cultural factors such as influence from the husband and being attended to by male physicians or younger physicians were important determining factors of late presentation of both types of cancers (Lamyian, 2007). In addition, socioeconomic factors have influence on access to healthcare this is evident throughout this study that the socio economic factors listed earlier in the

results section have a huge impact on medical seeking behavior of individuals. This study outcome is consistent with findings from major studies that were carried out previously, and these pose as huge barriers to detect these types of cancers on time.

Living in rural areas and peri urban areas poses as a huge hindrance to access of medical care, this is as a result of long distances that are covered to find a nearest health facility, transportation mode and limited number of health personnel. It is costly for people in rural areas to move from their respective homes to the health facilities because of the distance that has to be covered (Muhamad, et al., 2012). One of the major findings from this study was limited availability of health personnel to perform the screening tests in rural areas. For many health facilities in rural and peri urban areas, there are a few health practitioners that have a high ratio of health worker to patients. Numbered specialists or no specialists at all to attend to them in their districts the screening services not being offered at local health posts only at the district level and upwards. The results have indicated that there were times when the qualified and specialized health workers visited their health post or community for screening of both cervical and breast cancers. The responses ranged from one to three times annually this led to women not getting screened regularly and those from far to reach areas not getting screened at all. This affected women significantly and it was a determining factor to late presentation of cancer of the cervix and cancer of the breast.

The strength in this study weighs up on numerous themes that were identified and shows consistence with other reports on studies from other countries especially developed countries within the same field of study. The inability to include studies from Zambia sample size and time frame might affect the evidence of this study. However, it can be stated that these results identified are credible and compelling and show consistent patterns on the factors that lead to the late detection of breast and cervical cancer among women in Zambia.

CHAPTER SIX

6.0 CONCLUSION

In general, the inadequacy of knowledge and low awareness, cultural factors, socio economic status among others have continued to be important measures to determining the late detection of both cervical and breast cancer. Understanding of cancer screening and awareness that women have on breast cancer and cervical cancer is relatively low across most studies and the amount of times women go for screening for both types of cancer is quite low. Information sources, awareness, socioeconomic and cultural factors play an important role in women seeking medical attention early. The findings in this research were in a manner which was as objective as possible. The findings in this study and conclusions were investigated by the author. In most errands to the cervical cancer and breast cancer patients at the Cancer Diseases Hospitals, most in ward patients who were available and open to interviews were interviewed although some were not willing to share information. The analysis was and still is according to the prevailing circumstances at the time of research and the findings of this research will help bring about awareness-raising campaigns among women in the country and amplify the knowledge on cervical and breast cancer.

6.1 RECOMMENDATION

1. Intensify awareness campaigns on the importance of screening for both types of cancers in all parts of the country, with much importance to rural areas were information is hard to reach. Government, organization, faith-based or private sponsored commercials on breast cancer and cervical cancer should be regularly aired on national, private and local medias
2. Training of health professionals to specialize in cervical cancer and breast cancer to reduce on the limited number of specialized health personnel available in the country
3. Standard guidelines for screening should be made available at treatment centers which should be aided with the required logistics at every health facility in the country or those centrally located in rural areas.

4. When diagnosed with cancer, women should be provided with easy access to health care facilities. Women who are economically disadvantaged due to age and location of where they live should be helped by government to access medical care.

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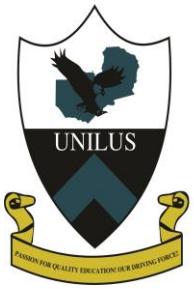
APPENDIX A: BUDGET

SERIAL NO.	DESCRIPTION	QUANTITY	AMOUNT
1	Transport		K500
2	Launch		K250
3	Ream of paper	2	K300
4	Pens	2	K5
5	Flash disk	1	K90
6	Printing of and photocopy of questionnaires	60	K200
7	Printing and binding of the final report	1	K250
8	Ethical letter fee		K500
	TOTAL		K2,095

APPENDIX B: TIMEFRAME

PLAN ACTIVITY	August 2021	September 2021	October 2021	November 2021	February 2022	March 2022	April 2022	May 2022	June 2022
Chapter 1	✓								
Chapter 2 Literature review		✓							
Chapter 3 methodology			✓						
Submission of the proposal				✓					
Data collection					✓	✓	✓		
Data analysis and discussion								✓	
Report Writing								✓	
Final submission								✓	

APPENDIX C: CONSENT SHEET



UNIVERSITY OF LUSAKA

SCHOOL OF MEDICINE AND HEALTH SCIENCE

DEPARTMENT OF PUBLIC HEALTH

TITLE OF RESEARCH: FACTORS THAT CAUSE THE LATE DETECTION OF BREAST AND CERVICAL CANCER AMONG WOMEN IN ZAMBIA CROSS-SECTIONAL STUDY

Dear participants, I am a student from the University of Lusaka. I am here to carry out a study on **factors that cause the late detection of cancer of the cervix and breast among women in Zambia**.

In order to carry out this research study, I will need your participation in answering the questions in the questionnaire on the factors that you may consider to have contributed to you having been diagnosed with late staged breast cancer and cervical cancer. Some questions may be sensitive you may choose not to answer them.

Please note that:

1. Participation in this research is on voluntary basis only.
2. You may withdraw at any particular point if you feel uncomfortable with the research that is being conducted
3. If there is any need of recording, your permission is required.
4. The information gathered will be kept confidential and used for research purposes only.
5. You may choose not to answer some questions, that you prefer not answering.

APPENDIX D: CONSENT FORM

I have read (or have had explained to me) the information about this research as contained in the Participant Information Sheet. I have had the opportunity to ask questions about it and any questions I have asked have been answered to my satisfaction. I now consent voluntarily to be a participant in this project and understand that I have the right to end the interview at any time, and to choose not to answer particular questions that are asked in the study. My signature below says that I am willing to participate in this research:

Participant's name….....……....
Participant's signature: …… Date: ……

Researcher Conducting Informed Consent……. Signature of Researcher: ……..……Date:
……Signature of parent/guardian:
……. Date:
……..

Student's contact details

University of Lusaka

School of medicine and Health Sciences, Public health Department,

P.O Box 36711, Lusaka

If you have any questions, concerns and clarifications you may contact:

The University of Lusaka,

Research Ethics Committee.

APPENDIX E: INTERVIEW GUIDES

INTERVIEW GUIDE FOR BREAST CANCER

SECITON A: SOCIO DEMOGRAPIC FACTORS OF RESPONDENTS

1. How old are you?.....
2. Where do you live

   Urban area ☐

   Peri urban ☐

   Rural area ☐
3. What is your occupation?

   Employed ☐

   Unemployed ☐

   Self employed ☐
4. What is your marital status?

   Married ☐

   Single ☐

   Divorced ☐

   Widowed ☐
5. What is religion?

   Christian ☐

   Muslim ☐

   Hindu ☐

   Others

   (specify)…….
6. Have you attended school?

Yes ☐

No ☐

7. What is the highest level of education that have you attained?

Never been to school ☐

Primary school ☐

Secondary school ☐

University ☐

SECTION B

8. Do you have any specific reasons why you decided to seek medical services at that particular period?

…….

9. What are the benefits of seeking screening services early?.....
.....
...

10. Do you have a family history of breast cancer?.....
.....

11. Where did you receive information about the importance of cancer screening?

Health worker ☐

Radio/ TV ☐

Community health worker ☐

Relatives ☐

Socio media ☐

Others

(specify)……..

12. Have you smoked before?.....
    .....
13. Do you consume alcohol?.....
    .....
14. Have you been diagnosed with a chronic disease that could increase chances of having breast/cervical

    cancer?.....
    .....
15. How far is the nearest health facility from your residence? .....
    .....
16. What mode of transport do you use to reach the health facility? .....
    .....
17. Now I would like to ask you about problems you have encounter after you have being with cancer late staged cancer?

    …….
18. Finally,

Could you share with me some of the challenges you have faced that you think can discourage women to seek cancer screening services……
……

B). Now I would like to ask you about your knowledge on breast cancer

19. Prior to your diagnosis, did you have any knowledge about breast cancer?.....
    .....

20. What techniques do you know that can be used in breast cancer screening?.....
.....
21. Do you have any history of breast cancer in your family?.....
.....
22. Do you have any knowledge on the signs and symptoms of cancer of the breast?
.....
.....
23. Have you ever practiced self-breast examination?
.....
.....
24. Have you taken oral contraceptives in the past?
……
……
25. What other screening methods are used to screen the breast for cancerous cells?
.....
.....
26. How comfortable are you to do the mammogram test?
.....
.....
27. How often do you get screened for breast cancer?
.....
.....
28. Do you pay for screening services?
……
……
29. How often are the screening services offered at the health center near you?
.....
.....

INTERVIEW GUIDE FOR CERVICAL CANCER

SECITON A: SOCIO DEMOGRAPIC FACTORS OF RESPONDENTS

1. How old are you?

   Below 25 ☐

   Between 26-30 ☐

   Between 36-40 ☐

   Above 40 ☐

2. Where do you live?

   Urban area ☐

   Peri urban ☐

   Rural area ☐

3. What is your occupation?

   Employed ☐

   Unemployed ☐

   Self employed ☐

4. What is your marital status?

   Married ☐

   Single ☐

   Divorced ☐

   Widowed ☐

5. What is religion?

   Christian ☐

   Muslim ☐

   Hindu ☐

   Others

   (specify)……

6. Have you attended school?

   Yes ☐

   No ☐

7. What is the highest level of education that have you attained?

   Never been to school ☐

   Primary school ☐

   Secondary school ☐

   University ☐

SECTION B

8. Do you have any specific reasons why you decided to seek medical services at that particular period?

……

9. What are the benefits of seeking screening services early?.....
   .....
   ...

10. Do you have a family history of cervical cancer?.....
    .....

11. Where did you receive information about the importance of cancer screening?

    Health worker ☐

    Radio/ TV ☐

    Community health worker ☐

    Relatives ☐

    Socio media ☐

Others

(specify)……..

12. Have you smoked before?.....
    .....
13. Do you consume alcohol?.....
    .....
14. Have you been diagnosed with a chronic disease that could increase chances of having cervical

    cancer?.....
    .....
15. How far is the nearest health facility?
    .....
    .....
16. What mode of transport do you use to reach the health facility?
    .....
    .....
17. Now I would like to ask you about problems you have encounter after you have being with cancer late staged cancer?

    …….
18. Finally,

Could you share with me some of the challenges you have faced that you think can discourage women to seek cancer screening services……
……

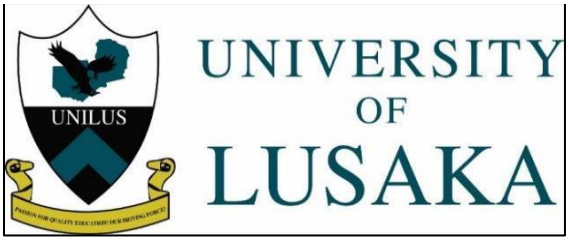
B). Now I would like to ask you about your knowledge on cervical cancer

19. Do you have any knowledge about cervical cancer?
    ……
    ……

20. Prior to your diagnosis, did you have knowledge of signs and symptoms of cervical cancer……
……
21. If yes, give three symptoms of cervical cancer?
……
……
22. Have you ever had any sexually transmitted infections?
……
……
23. How many sexual partners have you had in the past?
……
……
24. Do you have protected sex during your sexual intercourse?
……
……
25. Have you ever been infected with the human papilloma virus (HPV)?
……
……
26. Have you been vaccinated against the human papilloma virus (HPV)?
……
……
27. How many children do you have?
……
……
28. Do you used or in the past did you oral contraceptives?
……
……
29. Did you ever had a pap smear test before your diagnosis?
……
……

30. Do you pay for the screening services?
    ……
    ……
31. How often is the cervical cancer screening services offered at the health facility closest to you?
    ……
    ……
32. Have you had cervical cancer before?
    ……
    ……

V. Permission Letter



RE: Permission to Conduct Research Study

Dear Sir/Madam,

My name is Victoria Maleya and I am writing to request permission to conduct a research study at your institution. I am currently enrolled in the BSc. in Public at the University of Lusaka, and am in the process of writing my Bachelor's Thesis. The study is entitled **factors that cause the late detection of cancer of the cervix and breast among women in Zambia**.

I hope that your administration will allow me to recruit participants in you institution and patients who volunteer to participate will be given a consent form to be signed (copy enclosed) and returned to the primary researcher at the beginning of the survey.

If approval is granted, all participants will be interviewed and the interviews will be recorded. Completing the survey should take no longer than 15 minutes for each participant. The survey results will be pooled for the thesis project and individual results of this study will remain absolutely confidential and anonymous. No costs will be incurred by either your institution or the individual participants.

Your approval to conduct this study will be greatly appreciated. If you have any questions, I would be happy to answer any questions or concerns that you may have. You may contact me at my email

address: **maleyavictoria@gmail.com**

If you agree, kindly sign below and return the signed form in the enclosed self-addressed envelope. Alternatively, kindly submit a signed letter of permission on your institution's letterhead acknowledging your consent and permission for me to conduct this survey/study at your institution.

Sincerely,

VICTORIA MALEYA, University Of Lusaka

Phone: +260978000898/ +260953430432

Approved by:

_____ _____ _____

Print your name and title here Signature, Date

_____ _____ _____

UNIVERSITY OF LUSAKA

SCHOOL OF MEDICINE AND HEALTH SCIENCES LEOPARDS HILL CAMPUS

Plot No. 37413, Off Alick Nkhata Mass Media. P. O Box 36711, Lusaka.
Phone: +260211258505, 258409 Fax +260211233409; Cell +260976075850,961917862,
E-mail:unilus@zamnet.zm,ictar@zamnet.zm

SCHOOL OF MEDICINE AND HEALTH SCIENCES RESEARCH ETHICS COMMITTEE

Ref no: IORG0010092-2022/008

Date: 17th January, 2022

VICTORIA MAAMBO MALEYA– BSPH18213800

Re: Research Title – FACTORS CAUSING THE LATE DETECTION OF BREAST AND CERVICAL CANCER AMONG WOMEN IN ZAMBIA, A CROSS-SECTIONAL STUDY

The above research was submitted to the research ethics committee for review. The study has no major ethical problems and is approved subject to the following:

1. The study cannot be changed without express permission of the UNILUS Research ethics committee
2. Approval from the Lusaka District health Management or equivalent health authorities should be sought.
3. The study tools should be added.
4. An informed consent form should be attached and filled by all study participants (If dealing with primary data)
5. The risks and benefits should be included in the consent form.

Congratulations and the committee wishes you success in your work.

Prof Kasonde Bowa
MSc(Glasgow),M.Med(UNZA),FRCS(Glasgow),FACS,FCS,DPH(LSTMH),MPH(UCL)
Chairman- UNILUS REC
Professor of Urology and Consultant Urologist
Executive Dean

University of Lusaka and University Teaching Hospital School of Medicine and Health Sciences.

SCHOOL OF MEDICINE AND HEALTH SCIENCES LEOPARDS HILL CAMPUS

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Phone: +260211258505, 258409 Fax +260211233409; Cell +260976075850, 961917862,

E-mail:unilus@zamnet.zm,ictar@zamnet.zm Date: 17th January, 2022

……

……..

……..

PERMISSION FOR **VICTORIA MAAMBO MALEYA No. BSPH18213800**
TO CONDUCT A RESEARCH STUDY AT YOUR FACILITY/ INSTITUTION/ ORGANIZATION

Reference is made to the above subject matter

The University of Lusaka, School of Medicine and Health Sciences here by requests for permission for **Victoria Maambo Maleya** a Public Health Student to conduct research at your facility/ institution/ organization, entitled**; FACTORS CAUSING THE LATE DETECTION OF BREAST AND CERVICAL CANCER AMONG WOMEN IN ZAMBIA, A CROSS-SECTIONAL STUDY.**

The research is in partial fulfillment of the requirements for the degree of Bachelor of Science Public Health. This is purely for academic purposes and information gained in such a way will not be used in the public domain without prior authorization from the institutions/ organizations involved.

The research topic has been cleared by the University of Lusaka, School of Medicine and Health Sciences Research Ethics Committee as per the attached copy. Data collection is expected to be done from **1st February, 2022 to 29th April, 2022**.

The University of Lusaka avails itself of this opportunity to review to your office the assurances of its highest considerations and looks forward to your timely and favorable response.

Prof Kasonde Bowa
MSc(Glasgow),M.Med(UNZA),FRCS(Glasgow),FACS,FCS,DPH(LSTMH),MPH(UCL)
Chairman- UNILUS REC
Professor of Urology and Consultant Urologist
Executive Dean University of Lusaka and University Teaching Hospital School of Medicine and Health Sciences.