Evaluation of the implementation of the national cancer control strategy 2013-2022: a case of the cervical cancer screening at national and district levels

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EVALUATION OF THE IMPLEMENTATION OF THE NATIONAL CANCER CONTROL STRATEGY 2013-2022: A CASE OF THE CERVICAL CANCER SCREENING AT NATIONAL AND DISTRICT LEVELS

By

Sarah Alfred Kapanga

A Dissertation Submitted in (Partial) Fulfillment of Requirements for the Degree of Project Management, Monitoring and Evaluation in Health (PMMEH) of Muhimbili University of Health and Allied Sciences

November, 2020.

CERTIFICATION

The undersigned certify that he has read and hereby recommend for acceptance by the Muhimbili University of Health and Allied Sciences (MUHAS), a dissertation entitled **"Evaluation of the Implementation of the National Cancer Control Strategy 2013-2022: A Case of the Cervical Cancer Screening at National and District Levels"** in (partial) fulfillment of the requirements for award of the degree of Master of Science Project Management, Monitoring and Evaluation in Health (PMMEH) of Muhimbili University of Health and Allied Sciences (MUHAS).

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Prof. Gasto Frumence

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Date

_____

Mr. Pankras Luoga

(Co-Supervisor)

_____

Date

DECLARATION AND COPYRIGHT

I, Sarah Alfred Kapanga declare that this **dissertation** is my own original work and it has never been presented and will not be presented to any other University for a similar or any other degree award.

Signature…….……. Date…….

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This study would not be successful if not for the permission of Dar es salaam regional commissioner's office, Ilala district commissioner's office, Ilala Municipal Director's office, Institute Academics, Research Publications and Ethics Committee from Ocean Road Cancer Institute and Ministry of Health Community Development Gender Elderly and Children.

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DEDICATION

This work is dedicated to my loving husband Charles Modest Mwesiga, my children Victor C. Modest and Nancy C. Modest. I also dedicate this work to parents Alfred Kapanga – father, Margaret Chrispin Kambi – mother and Medardina Muzihyo – mother in law who enabled me to accomplish my study through their endurance and assistance.

ABSTRACT

Background: Worldwide, cervical cancer is the fourth most commonly occurring cancer in women with an estimated 570,000 new cases in 2018 representing 6.6 % of all female cancers. Approximately 90% of deaths from cervical cancer occurred in low and middle – income countries. In Tanzania it is estimated that 40,000 new cases of cancer reported of which 80% of those victims die every year and the number is reported to increase. In response to that the Government of Tanzania through Ministry of Health Community Development, Gender, Elderly and Children established National Cancer Control Strategy 2013-2022 with the aim of combating cancer through several key interventions including cervical cancer screening program. This study was carried out to explore the achievement, facilitating factors and barriers for the implementation of the National Cancer Control Strategy using the case of cervical cancer screening services. The study answered the following main research question: What are the achievements, facilitating factors and barriers of the implementation of the National Cancer Control strategy in Tanzania?

Objective: To evaluate the achievements, facilitating factors and barriers for the implementation of National Cancer Control Strategy at national and district levels.

Methods and materials:A cross sectional study design was conducted where qualitative and quantitative methods of data collection were used. Qualitative data were collected by using in depth interview guide while the document review was done to collect quantitative data. Purposive sampling method was used to select participants in this study. The sample size was 12 key informants from Ministry of Health Community, Development, Gender, Elderly and Children, Ocean Road Cancer Institute and District Medical Officer office of Ilala Municipality. The thematic analysis approach was used to analyze qualitative data.

Results: The implementation of the National Cancer Control Strategy at national and district levels has recorded a number of achievements including increasing the number of trained health providers, increasing number of health facilities providing cervical cancer screening and the number of women undertaking cervical cancer screening. The findings have revealed that these achievements were facilitated by numbers of factors, including availability of services, government commitment and presence of guidelines. However,

there are a few barriers affecting implementation of strategy**,** including inadequate of funds and donor dependency, shortage of human resources, and shortage of instruments/tools for cervical cancer screening.

Conclusion: Based on the findings of this study, it can be concluded that the achievements of the implementation of the National Cancer Control Strategy at national and district levels depends much on the capitalization of the existing facilitating factors such as government commitment, availability of guidelines, affordability of services and high demand of cervical cancer screening services. However, the government through the ministry of health and other stakeholders should address the existing barriers, including inadequate funding and donor dependency and the shortage of human resources for health in order to effectively and efficiently achieve the desired goals and objective of the National Cancer Control Strategy in the country.

Recommendations: The government and other stakeholders should find reliable sources of funding for the implementation of cervical cancer screening and deploy HRH and provision of trainings.

TABLE OF CONTENTS

CERTIFICATION i
DECLARATION AND COPYRIGHT ii
DEDICATION iv
ABSTRACT v
LIST OF TABLES x
LIST OF FIGURES xi
ABBREVIATIONS & ACRONYMS xii
DEFINITIONS OF TERMS xiii
CHAPTER ONE 1
1.0 INTRODUCTION 1
1.1 Background 1
1.2 Statement of the Problem 4
1.3 Conceptual Framework 6
1.4 Rationale 8
1.5 Evaluation Questions 8
1.5.1 Overall evaluation question: 8
1.5.2 Evaluation questions: 8
1.6 Evaluation Objective 8
1.6.1 Broad Objective 8
1.6.2 Specific Evaluation Objectives 9
CHAPTER TWO 10
2.0 LITERATURE REVIEW 10
2.1 The achievements of the implementation of cervical cancer screening program 10
2.2 Facilitating factors of the implementation of cervical cancer screening program Organizational factors. 12
2.3 Barriers for the implementation of cervical cancer screening program 15
CHAPTER THREE 19
3.0 METHODOLOGY 19

3.1 Study area: 19
3.2 Study design: 19
3.3 Study population: 20
3.4 Sample size and characteristics of partcipants: 20
3.5 Data collection methods: 21
3.6 Sampling methods: 21
3.7 Data Collection tools: 21
3.9 Data analysis: 22
3.10 Ethical Consideration: 22
3.11 Study limitations and Mitigation: 22
CHAPTER FOUR 25
4.0 STUDY FINDINGS 25
4.1 Achievements of the implementation of the National Cancer Control Strategy from 2013 to 2019 on cervical cancer screening. 25
4.1.1 Rise of awareness of cervical cancer 25
4.1.2 Increased cervical cancer screening uptake 26
4.1.3 Establishment of cervical cancer screening training program for health care providers. 28
4.1.4 Increased number of health facilities providing cervical cancer screening services 28
4.2 Facilitating factors of the implementation of National Cancer Control Strategy from 2013 to 2019 on cervical cancer screening 29
4.3 Barriers of the implementation of National Cancer Control Strategy from 2013 to 2019 on cervical cancer screening 32
4.3.1 Organizational barriers 33
4.3.2 Inadequate of tools and instruments 33
4.3.3 Resource allocation barriers 33
4.3.4 Social -cultural barriers 34
4.3.5 Individual barriers 35

CHAPTER FIVE 37
5.0 DISCUSSION 37
5.1 Achievements of the implementation of National Cancer Control Strategy on cervical cancer screening 37
5.2 Facilitating factors of the implementation of National Cancer Control Strategy on cervical cancer screening 38
5.3 Barriers to the implementation of the National Cancer Control Strategy on cervical cancer screening 39
CHAPTER SIX 42
6.0 CONCLUSION 42
6.1 RECOMMENDATIONS 42
REFERENCES 44
APPENDECES 49
Appendix I: Interview guide for health service providers 49
Appendix II: Interview guide for Director, DMO, Coordinator RCH and Officials dealing with cervical cancer services. 51
Appendix III: Interview guide for Ministry of Health, Community Development, Gender, Elderly and Children (MoHCDGEC) 53
Appendix IV: Checklist to be used for document review 55
Appendix V: Consent form in English Version 56
Appendix VI: Fomu ya ridhaa, Kiswahili version 58
Appendix VII: Ethical clearance letter 60
Appendix VIII: Permission to conduct study 61
Appendix IX: Research permit District Administrative Secretary 62
Appendix X: Research permit Regional Administration Secretary 63
Appendix XI: Institute Academics, Publications and Etics Commitee(IARPEC) 64

LIST OF TABLES

Table 4.2 number of women screened from 2013 to 2019.....27
Table 4.3 Number of health facilities providing cervical cancer screening services in Tanzania.....29

LIST OF FIGURES

Figure 1: conceptual frame work 7
Figure 3.1 number of women screened from 2014 to 2019.....27

ABBREVIATIONS & ACRONYMS

AMPATH	Academic Model Providing Access to Healthcare
CECAP	Cervical Cancer Prevention Program
CHW	Community Health Workers
DMO	District Medical Officer
HIV	Human Immunodeficiency Virus
HPV	Human Papiloma Virus
HRH	Human Resource for Health
IARC	International Agency for Research on Cancer
JHPIEGO	Johns Hopkins Program for Education in Gynecology and Obstetrics
LEEP	Loop Electrosurgical Excision Procedure
MOH	Ministry Of Health
MoHCDGEC	Ministry of Health Community Development Gender Elderly and Children
Msc	Master of Science
MUHAS	Muhimbili University of Health and Allied Sciences
NCCS	National Cancer Control Strategy
ORCI	Ocean Road Cancer Institute
PATH	Program for Appropriate Technology in Health
PMMEH	Project Management Monitoring and Evaluation in Health
RCH	Reproductive and Child Health
UK	United Kingdom
USA	United States of America
WHO	World Health Organization

DEFINITIONS OF TERMS

Cervical cancer	Is a type of cancer that occurs in the cells of the cervix
Cervix	Is the lower part of the uterus that connects to the vagina
Early Detection	Refers to measures that can be taken to diagnose cancer as early as possible when the disease is easiest to treat
Evaluation	Is making a comparative assessment of a value of the evaluated or intervention using systematically collected and analyzed data in order to decide how to act.
Implementation	Is the carrying out, execution, or practice of a plan, a method or any design, idea, model, specification, standard or policy for doing something.
Monitoring	Is the systematic and routine collection of information about the program or project activities.
Screening	Presumptive identification of unrecognized disease in apparently healthy, asymptomatic population by means of tests, examinations or other procedures that can be applied rapidly and easily to target population.

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CHAPTER ONE

1.0 INTRODUCTION

1.1 Background

Cervical cancer is a type of cancer that occurs in the cells of the cervix – the lower part of the uterus that connects to a vagina. Various strains of Human papilloma virus (HPV), play a role in causing the cervical cancer. When exposed to HPV, the body's immune system typically prevents the virus from doing harm. In a small percentage of people however, the virus survives for years, contributing to the process that cause some cervical cells to become cancer cells.

Worldwide, cervical cancer is the fourth most commonly occurring cancer in women with an estimated 570,000 new cases in 2018 representing 6.6 % of all female cancers. Approximately 90% of deaths from cervical cancer occurred in low and middle – income countries.

In Africa, World Health Organization (WHO) estimates HPV infections cause approximately 68,000 cases of cervical cancer each year. However, these figures most likely represent a conservative estimate due to health challenges in health information systems and cancer registries in the Region.

Although cervical cancer is a preventable disease, but it is still the most common cause of cancer in Africa Region where it accounts for 22% of all female cancers and 12% of all newly diagnosed cancer in both men and women every year. This figure compares with seven out of 100,000 women being diagnosed with cervical cancer and three out of every 100,000 women dying of the disease every year in North America. In Africa, most of these women are diagnosed at advanced stages of cancer, which is associated with poor outcomes. (WHO, 2018).

In recent years, addressing the cervical cancer, the problem has become a priority in Tanzania; The government of Tanzania through the MoHCDGEC established a National Cancer Control Strategy (NCCS) of 2013-2022.The national cancer control strategy is a roadmap toward the development and implementation of the comprehensive and coordinated national response to cancer in Tanzania. The NCCS sets the principles and

goals to guide existing and future action to control cancer.

The overall objective of the strategy is to cover the entire continuum of cancer prevention; it specifically aims to promote cancer prevention and early detection and improve diagnosis and treatment including palliative care. The strategy also aims to promote cancer surveillance, registration and research. The strategy aims to integrate cancer control into existing health care delivery system, to reduce the incidence and impact of cancer, enhance quality of life for those with cancer as well as to reduce inequalities with respect to access cancer care (United Republic of Tanzania, MoHCDGEC, 2013.).

In order to achieve success the strategy has set numbers of goals to be attained. The goals of this strategy include (i) Primary prevention: reduce the incidence of cancer through primary prevention (ii) Early detection: ensure effective screening, early detection and diagnosis (iii) Treatment: ensure effective treatment of cancer to reduce morbidity and mortality (iv) Palliative care: Improve quality of life for those living with, recovering from and dying of cancer and their families through support, rehabilitation and palliative care (v) Cancer registration and surveillance: improve collection and analysis of information across the cancer control continuum through effective cancer registration, surveillance, monitoring and evaluation (vi) Training, education and research: improve effectiveness of cancer through training, education and research(vii) Human resource development: instill appropriate knowledge and skills to strategic staff in all areas of cancer control in Tanzania, (viii)Tanzania cancer society: establish cancer society that will advocate for effectively participate in sustainable cancer control initiatives.

Furthermore, NCCS (2013) reveals the following strategies set by the program to control cancer including reduction of number of people developing nutrition related cancers (i) Reduction of number of people developing infectious disease related cancer, (ii) reduction of number of people developing occupational related cancer (iii)provide at national level systematic approach to cancer screening and early detection to ensure quality, acceptability and effectiveness (iv) educate healthcare providers about strategies to encourage patients about the importance of yearly physical examination (v)establish a process to assess the value of early detection of cancer other than that obtained through organized screening, (vi) Adopt available/international cancer screening programs to create a national cancer

screening program for early detection of cancers for which treatment exists and (vii) Collaborate with employers to promote cancer early detection, screening and treatment among their employees (United Republic of Tanzania, MoHCDGEC, 2013).

Moreover, the strategy has several indicators which are used to assess the progress of the program through various interventions. From the intervention of early detection (screening and diagnosis) the indicators include number of Tanzanians who are aware of cancer screening, number of cancer specific screening guidelines, number of hospitals with teams for basic cancer screening, detection and diagnostic services in place, number of Tanzanians screened for cervical cancer, number of health workers with trained/with skills on early detection of cervical cancer, incidence of cervical cancer, percentage of patients with early stage presentation, number of cancer screening training courses on cervical cancers as well as number of regional hospitals with histopathology services.

The NCCS is operated at three levels-national, regional and district in an overlapping fashion. The government through the Prime Minister's Office, MoHCDGEC and ORCI coordinate to combat the increasing incidence of cancer in the country. The implementation of the strategy is being conducted by Prime Minister's Office, MoHCDGEC, ORCI, Zonal Referral Hospitals, Regional referral Hospitals, District Hospital, civil society, organizations, private sectors and associations of people living with cancer as well at community level.

Conclusively; the National cancer control strategy of 2013-2022 is very important strategy for implementation of cervical cancer prevention program in Tanzania however little information is documented on the achievements that have been realized since the implementation of this strategy started, its facilitating factors as well as the barriers facing its implementation. This study intends to use cervical cancer screening program (Goal no 2: Early detection to ensure effective screening, early detection and diagnosis) as a proxy for implementation for NCCS at National and District levels in Tanzania.

1.2 Statement of the Problem

Cervical cancer is the most common cancer and kills more women than any other form of cancer disease in the country. Nearly 7,000 women in Tanzania die each year of this disease. There are various factors that contribute to increase in this disease which includes risk factors such as HPV infection, immune system deficiency, age, herpes, smoking, social economic factors and oral contraceptives.

In recent years, addressing the cervical cancer, the problem has become a priority, therefore the government of Tanzania through the MoHCDGEC established a National Cancer Control Strategy (NCCS) of 2013-2022 and action plan for the purpose of reducing the incidence of cancer and improving the quality of life of those who develop cancer especially the most vulnerable, and integrating cancer control services and intervention in the existing health care services (United Republic of Tanzania, MoHCDGEC, 2013).

Since its establishment, NCCS had set principles and goals to guide existing and future actions to control cancer including cervical cancer. The key purposes of the strategy are to integrate cancer control into existing healthcare delivery system, reduce the incidence and impact of cancer, enhance quality of life for those with cancer and reduce inequalities with respect to access to cancer care.

In order to fulfill its purpose, the NCCS had developed several key interventions/goals and one of the interventions is early detection (screening and Diagnosis) of cancer. In this intervention, the government aim to conduct early cancer screening before it has spread to other parts of the body. Other interventions/goals that the strategy aims to implement to combat cancer in the country are: Primary Prevention, Treatment, Palliative care, Cancer Registration and surveillance, Training, Education and Research, Human Resources development, Establish Cancer Society and Integration of cancer control into existing health system. Despite this crucial goal as well as other goals, the number of cervical cancer cases is still increasing. Furthermore, studies show that there are few people who visit the health facilities for cancer screening and majority of those who visit health facilities for cervical cancer screening, reach there at the late stage of the disease. (Katabalo et al, 2018, Bruni et al, 2019).

Despite the fact that the government of Tanzania has introduced and implemented a number

of cervical cancer control strategies, it has been reported that the cervical cancer screening test has not achieved tremendous success as compared to industrialized countries through public health program. Since the establishment of the NCCS in Tanzania in 2013, there was no an evaluation study that has been done to assess its implementation by exploring the success, failures and barriers of the program. The study was used the cervical cancer screening program as a proxy to assess implementation of the NCCS focusing on the on early detection (screening and diagnosis) as one among nine goals of the strategy to address cervical cancer screening program. Therefore, this study was an attempt to fill this gap using a case of cervical cancer screening programme at National and district level.

1.3 Conceptual Framework

The implementation of National Cancer Control Strategy on cervical cancer screening in Tanzania has brought numbers of achievements including reduction of incidence of cervical cancer, raise awareness among the women on cervical cancer, Integration of cancer services into existing health care delivery system and increase in number of regional referral hospitals for cervical cancer screening and establishment of cancer education and training program. Such achievements have been influenced by numbers of factors including availability of funds from government's budget or development partners which facilitate the smooth running of the program, presence of adequate and skilled health providers who play a great role on providing services and encouraging people to go for cervical cancer checkup. Accessibility of services has contributed much to number of women to access screening services. Furthermore, despite the facilitating factors to influence the implementation of the program, the program encounters the number of barriers including poor perception among women, lack of fund and shortage of health providers, poor beliefs between women on cervical cancer screening and lack of education among the women. All these achievements, facilitating factors and barriers together or separately form the frameworks for contractual and organizational arrangements.

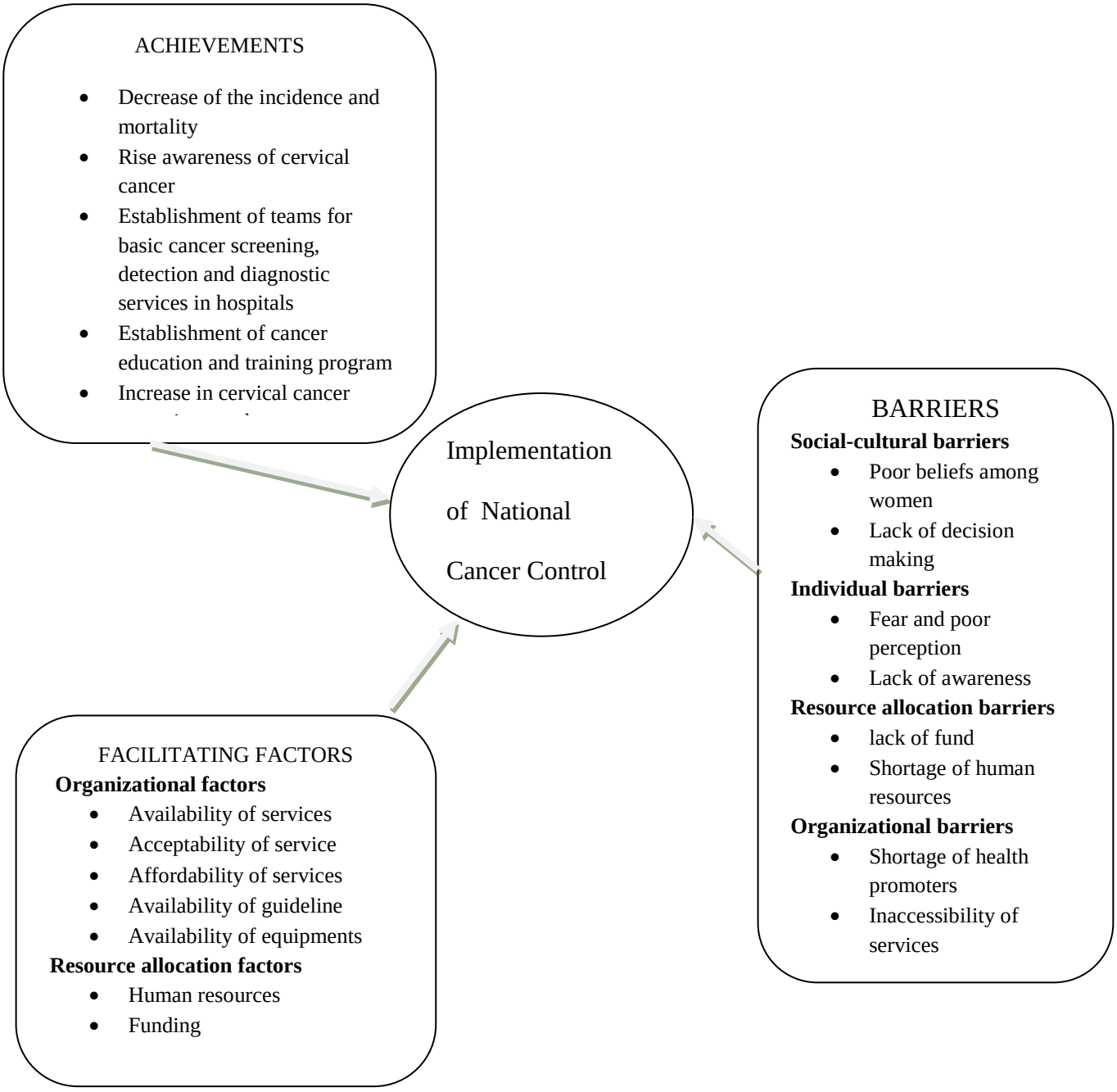


Figure 1: conceptual frame work

Source: field data 2020

1.4 Rationale

Considering that combating cancer of cervix needs various interventions such as prevention, screening, early diagnosis, treatment and palliative care, it is important to put more effort on effective screening intervention because this is greatly known to reduce the burden of cancers and improve outcomes.

The results of this study will help service providers working in cervical cancer screening program to address gap in their screening procedures and thus improve the health of the clients. Furthermore, knowledge gained will help managers at facilities, policy makers in the health sector and other cervical cancer stakeholders to initiate or improve different interventions relating to cervical as well as other carcinomas.

1.5 Evaluation Questions

1.5.1 Overall evaluation question:

What are the achievements, facilitating factors and barriers of the implementation of National Cancer Control Strategy?

1.5.2 Evaluation questions:

1. What are the achievements of the implementation of National Cancer Control Strategy from 2013 to 2019 on the cervical cancer screening services?
2. What are the facilitating factors for the implementation of National Cancer Control Strategy on the cervical cancer screening services**?**
3. What are the barriers for the implementation of National Cancer Control Strategy on the cervical cancer screening services?

1.6 Evaluation Objective

1.6.1 Broad Objective

To evaluate the achievements, facilitating factors and barriers for the implementation of National Cancer Control Strategy on the cervical cancer screening services

1.6.2 Specific Evaluation Objectives

1. To find out the achievements of the implementation of National Cancer Control Strategy on the cervical cancer screening services.

2. To explore the facilitating factors for the implementation of National Cancer Control Strategy on the cervical cancer screening services.

3. To explore the barriers for the implementation of National Cancer Control Strategy on the cervical cancer screening services.

CHAPTER TWO

2.0 LITERATURE REVIEW

The national cancer control strategy is a roadmap toward the development and implementation of the comprehensive and coordinated national response to cancer in Tanzania. The successful development of the national cancer control strategy and action plan involved long consultative meetings of the national steering committee for cancer control and valued input from a wide range of individuals, groups, organizations and members during a stakeholder's workshop(United Republic of Tanzania, MoHCDGEC, 2013.).

The NCCS sets principles and goals to guide existing and future action to control cancer including cervical cancer. The key purpose of the strategy is to integrate cancer control into existing healthcare delivery system, reduce the incidence and impact of the cancer, enhance quality of life for those with cancer and reduce inequalities with respect to access to cancer care. The overall objective of the program is to cover the entire continuum of cancer prevention; it specifically aims to promote cancer prevention and early detection and improve diagnosis and treatment including palliative care the strategy also aims to promote cancer surveillance, registration and research (United Republic of Tanzania, MoHCDGEC, 2013.).

2.1 The achievements of the implementation of cervical cancer screening program

A study done by IARC Working Group (2005) reports that cervical cancer screening in developed countries through cytology has shown to be effective in reducing the incidence and mortality from cervical cancer in developed countries. The same study reports that in many high-income countries, cervical cancer rates declined substantially after the widespread introduction of the Papanicolaou smear in the mid-20th century (IARC Working Group, 2005).

For example, USA has achieved significant decreases in cervical cancer burden since the introduction of Pap smear-based programs in the 1960s. Another study reports that The incidence of cervical cancer has fallen by 75 percent over last 40 years and the mortality from cervical cancer in the UK has been reduced by 40% between 1979 and 1995.This

success is explained as the attribution to the increased uptake of women participating in the cervical screening program as a result of increased awareness amongst women from health education and the media, reduced anxiety around having a smear taken, and the financial incentives to general practitioners for achieving higher coverage targets within their populations (Barton-Smith, 2009).

Another study conducted in developed countries reported that the implementation of the organized screening program in several years ago had experienced a better Pap smear coverage with reduced cervical cancer mortality. Organized screening program is a systematic population-based screening program which incorporates a call-recall system, established as one of the best ways to ensure success in increasing Pap smear screening test coverage as noted in the United Kingdom, Australia, Italy, Sweden and others (Eaker et al., 2004; Sepu´lveda and Prado, 2005; Ronco et al., 2005.). Another study has found organized screening program is more effective and have greater coverage than opportunistic screening program (Nygard et al., 2002.).

A study done in developing countries reports that Cervical cancer screening program in developing countries, Cytology-based screening program for cervical cancer have been introduced in some developing countries, particularly in South and Central America, over the last 30 years, but generally have achieved very limited success (Sankaranarayanan, et al, 2001.). Another study done by Goldie et al (2005) reported that in developing countries, a one-time screening at around age 35 has been shown to reduce a women's lifetime risk of cervical cancer by 25% to 36%.

A study done in Mozambique shows that the number of women undertaken cervical cancer screening in Mozambique in 2010 to 2011 was more than doubled the annual screening goal established by MISAU for the first year of program implementation. Therefore, the introduction of cervical cancer screening in Mozambique has led to increase number of women who undertake screening (Moon et al, 2012.).

Another study conducted in Malawi reported that from the period 2011–2015, the number of women screened and coverage per annum increased from 75–130. A total of 145,015 women was screened for at least once. Cervical cancer screening, even when done once,

reduces the burden of cervical cancer mortality. It is estimated that in countries with the high burden of cervical cancer, one-time cervical cancer screening prevents one death for every 202 women screened. Based on this estimate, at least 718 deaths due to cervical cancer were therefore averted. (Msyamboza et al, 2016.).

Another study conducted in Kenya reported that the results from the first 2 years of the implementation of the Academic Model Providing Access to Healthcare (AMPATH) program in Kenya for a short period of time, the program has screened a large number of women in rural areas including many infected with HIV who are vulnerable to the development of cervical cancer. Some of the programmatic successes, however, cannot be directly tabulated from the data. For example, the program has successfully utilized routine MOH services using local nursing and medical staff, expanded its locations, trained numerous MOH nurses, provided logistic and supply chain support, increased community awareness, and improved regional expertise in cervical cancer screening and treatment (Khozaim et al, 2014.).

In Tanzania, study done by Lyimo and Beran (2012) reported that cervical cancer screening is currently recognized as the most effective approach for cervical cancer control, and it is associated with reduced incidence and mortality from the disease.

2.2 Facilitating factors of the implementation of cervical cancer screening program

Organizational factors.

A study conducted in France reported that cervical screening is opportunistic but the widespread availability of services combined with cultural factors has led to good coverage of the target population. Furthermore, the same study reported that accessibility, availability cancer screening services had influenced large number of women to undertake cervical cancer screening in France. (Sacho, 2013.).

Another study done by Akbari (2010) reported that Health care providers' encouragement for Doing Pap test plays a great role in developed countries for the implementation of cervical cancer screening. Doctors play a role in their Pap test knowledge acquisition and the decision to have a Pap smear.

Another study shows that the role of mass media such television, radio, newspapers, and magazines, play a crucial role in the construction of the public beliefs about Cervical cancer screening program to the community hence promotes number of women to attend for cervical cancer screening (Rasul, VH,2015.).

A study conducted at El Salvador reported that the use of health promoters in the implementation of screening program is a sustainable strategy over time, especially in the context of El Salvador has contributed much number of women to undertake cervical cancer screening. The study has shown that the benefit of using the educational program to increase screening rates, and this study further reinforces the role of health promoters in achieving this public health goal (2012; Pirzadeh, 2012).

The presence of guidelines and legal agreements such as managerial Guidelines of National Cancer Control Program by WHO has facilitated many countries to implement cervical cancer screening program.

A study done in Kenya reported that formulation of guideline (Kenya National Cancer Screening Guidelines) concerning cervical cancer screening services has facilitated to recommend screening tests for cervical cancer screening in Kenya i.e., Pap smear test and visual screening test. The visual screening approaches are relatively simple and low-cost, and rely on little infrastructure. Health providers can perform the procedures comfortably at the local settings, provided that they receive adequate training. The target population for cervical cancer screening is women aged 25 to 49 years (Munoru, Gitonga and Muraya, 2019.).

A study conducted in South Africa reported that presence of Guidelines for cervical cancer screening in South Africa provides procedures for screening. Screening aims to detect women with an unsuspected cancer risk by testing asymptomatic women. It is recommended that all South African women should initiate cervical screening at the age of 25 years (earliest) or at the time of diagnosis of HIV seropositivity. Cervical cytology and HPV testing are both considered suitable for screening in South Africa and screening practitioners or facilities should choose the most appropriate test for their setting (Jordaan et al., 2017.).

Resources allocation,

The study done in 2010 reported that most of the developing countries funds for conducting

cervical cancer screening come from aids and grants from local and international donors (Dodd & Lane, 2010). Both aids and grants from donors in developed countries and local organizations and private sectors have influenced much on implementing cervical cancer screening in Developing countries.

Another study conducted in Ethiopia reported that Cervical cancer screening program was started in different sites in Ethiopia with support from donors in 2013.Pink Ribbon Red Ribbon (PRRR), an innovative partnership that works to expand the availability of vital cervical cancer screening, treatment and breast care education especially for women living with HIV in Ethiopia funded US $ 7.8 million to prevent, screen for and treat cervical cancer at 33 sites across the country(Tarekegn, Mengistu and Mirach, 2019).

Another study done in Mozambique reported that an estimated 25 donors cover about 70% of Mozambique's health budget through basket funding, with some of these donors providing direct financial assistance to the Ministry of Health and others to specific disease areas such as cancer. MD Anderson Cancer Center researchers, together with collaborators from Mozambique, Brazil and the U.S., have been awarded a $5.1 million grant to evaluate innovative approaches to increase screening and prevention of cervical cancers in Mozambique, which has some of the highest rates of cervical cancer in the world. (Maltos & Beran, 2012)

In Tanzania the presence of policies, program, guidelines and legal agreements such Health Policy of 2007, the national cancer control strategy of 2013-2023, all these factors facilitate for the implementation of cervical cancer screening program in Tanzania.

Furthermore, the MoHCDGEC reported that presence of other stakeholder in different parts of Tanzania such as private organizations and individuals since 2009 has contributed much on the implementation of cervical cancer screening in Tanzania. These organizations include JHPIEGO IN Morogoro particularly at Ifakara, Ground for Health in Kigoma region and PATH in Geita region. These clinics are supported by these International organizations. There are other individual-based screening conducted by cancer specialists in government as well as private clinics on cervical cancer (MoHCDGEC, 2018.).

2.3 Barriers for the implementation of cervical cancer screening program

Globally, a study done by in 2010 in Bulgaria reported that there was no national program for cancer prevention; however, there are ongoing efforts to develop one. There were some local initiatives for free of charge preventive check-ups that are undertaken unsystematically and results are not reported in public. There is no screening registry, no call-recall system, no clear instructions for health providers. Additionally, the number of tests performed in the private and in the public sector is unknown. There are no available data on the number of women, tested per year (Arbyn et al, 2010.).

The study conducted in Cyprus reported that there are inequalities in cervical cancer screening in the city of Nicosia, despite the subsidized costs of cervical cancer screening. The same study reported that utilizing cervical cancer screening in Cyprus faces numbers of barriers such as low education among women on cervical cancer screening especially old women, social taboos, lack of information and lack of transportation to service sites (Papapetrou et al., 2016.).

Another study conducted in Latvia reported that cervical cancer screening faces number of obstacles such as lack of reliable information on the numbers of trained cytology lab specialists in Latvia and non-existence of guidelines on screening methodology for cytological testing and ensuring and maintenance of quality controls(Viberga, Engele and Baili, 2010.).

Socio-cultural barriers

The study done by Binka et al (2019) reported that some women in developing countries do not want to be associated with cervical cancer screening program because of the belief that the disease was caused by a promiscuous lifestyle. Another study reported that that some women thought cervical cancer was a punishment from their Gods for an offense. For this reason, they prefer to go for divine intervention instead of going for screening or treatment at the hospital (Darj et al, 2019.).

Another study shows that women who live in a male-dominated society may lack decision making power and feel restricted about talking and expressing their feelings. As a consequence, their health may be neglected and since they are dependent upon decisions

about their health being made by their husbands or in-laws, they may be prevented from attending a screening clinic (Binka et al, 2019.).

Resource allocation barriers:

A study done by Denny and Anorlu (2012) shows that lack of funds has hindered the health facility to purchase the expensive and sophisticated machines that will assist in detecting and even removing cervical cancer pre-cancerous cells like LEEP machines: most of the government's funds come from aids and grants from local and international donors, and the allocation of resources by donors is not always consistent.

Moreover, another study reported that the issue of donor dependency had caused the implementation of the existing cervical cancer prevention strategies to suffer from lack of long-term sustainability (Mugassa and Frumence, 2018). The same study reveals that lack of subsidy or funding for the cost of screening and treatment by the government is also a challenge to screening uptake. Daley (2011) also identified funding as one of the factors constraining screening and treatment of the disease.

Another study done by Lim and Ojo (2016) reported that lack of money is considered a major barrier to women's attendance at screening clinics. The same study shows that women are aware of the cost of screening procedures, but they are concerned about incurring unexpected costs if additional investigations were necessary. Some women are not attending for screening after finding their test results were negative, as they considered future screening would be a waste of money.

Geographical barriers:

A study done by Darj et al (2019) reported that most of health facilities such as hospital is allocated in urban areas hence it very difficult for health providers who are doing cancer screening to reach remote areas for screening due to poor infrastructure. Those who lived in rural areas were less likely to access screening services because many village health posts lacked screening facilities. Furthermore, the nearest health post providing a cervical cancer screening service could be a long distance from their homes and they would need to walk though physically challenging conditions on slippery roads in hilly districts (Darj et al, 2019.).

Organizational barriers:

Human resource shortages, or so-called "brain drain" of medical practitioners, and a lack of basic medical support staff contribute to generally poor outcomes in cancer screening. Moreover, various studies find that institutional-level barriers constrain the screening of cervical cancer. Attitude of health personnel and the issue of confidentiality with medical information and privacy are found to be some of the factors militating against screening for the disease (Fort et al, 2011 and Mutyaba et al, 2006.). The same studies reveal that inability to maintain the confidentiality of test results, rude behaviour of some health personnel, and concerns about privacy during screening serve as barriers to the uptake of screening services.

A study done by Fort et al (2011) reported that some women consider the unfriendly attitude of some health personnel and concerns about medical information privacy as crucial factors in determining whether or not they would go for cervical cancer screening and treatment. Lack of trust in health care providers due to experiences of inappropriate behavior by some of them: service provider's negligence or incompetence would cause their health to deteriorate and cause complications. For example, they assumed that some doctors were not sufficiently competent to diagnose gynecological conditions (Fort et al, 2011 and Mutyaba et al, 2006.) , hence such situations has led to poor participation of women in cervical cancer screening.

Individual barriers:

A study done by Ezem (2007) reported that the uptake of cervical cancer screening among the women is constrained by the low level of knowledge about the availability of cervical cancer screening services and where to get them. Studies in Nigeria and Malaysia reported that lack of adequate awareness and clear knowledge on the benefits of cervical cancer screening have led to a low uptake of cervical cancer screening services among Nigerian and Malaysian women (Ezem, 2007; Hyacinth et al, 2012; Mingo et al., 2012; Okobia et al, 2006; Wong et al, 2009).

Furthermore, another study shows that the fear of screening itself, screening outcomes, diagnostic procedures and treatment played a major role in preventing women from cervical

cancer screening (Basu, 2006). From their experiences, some women feared misdiagnosis of the disease and these experiences act as factors militating against screening for the disease.

A study done in Tanzania (Nyamhanga, et al, 2014.) reported that both national and district level policy and decision makers lack political will in giving priorities to the prevention and health promotion activities and their main target has been curative health services. The study further provided an example of the budget allocated for prevention activities at the community level which ranges between 2% and 5% of the annual district council health budget. The rest of the budget goes to the curative services.

In summary; many researchers have reported on barriers, facilitating factors and achievements of cervical cancer screening in various countries. However, there has been no attempt to evaluate the NCCS in Tanzania on cervical cancer screening.

The gap; Since the establishment of the NCCS in Tanzania in 2013, there has been no an evaluation study that has been done to assess its implementation National Cancer Control Strategies by exploring the success, failures and barriers of the program. Therefore, this study is an attempt to fill this gap using a case of cervical cancer screening program at national and district levels.

CHAPTER THREE

3.0 METHODOLOGY

3.1 Study area:

The study was conducted in Ilala Municipality where its *geographical* coordinates are 6° 50' 0" South, 39° 16' 0" East, Ocean Road Cancer Institute with *geographical coordinates* of 6°48'39.0"S, 39°17'47.0"E (Latitude:-6.810833; Longitude:39.296389) in the Dar Es Salaam region and MoHCDGEC which is found in Dodoma region where geographically is located at south of the equator between latitudes 6° 57' and 3° 82'. This study setting has been selected because Dar Es Salaam is a leading region with high prevalence rates of cervical cancer in the country in spite of the region has a comparative advantage of the availability of national referral hospitals including the biggest cervical cancer screening facility (The Ocean Road Cancer Institute) in the country. Despite the fact that most of the government initiatives to control and prevent cervical cancer are implemented in the Dar Es Salaam region, the uptake of cervical cancer screening services is very low (Mugassa and Frumence, 2019). The reason for selecting Ilala municipality is that; it is one of the municipalities with high prevalence of cervical cancer in Tanzania. A study done on the use of cervical cancer screening services among primary school teachers in Ilala Municipality, Dar Es Salaam, Tanzania reported that only 108 (21%) out of 512 female primary school teachers reported to ever used cervical cancer screening (Kileo et al 2015). The reason for selecting Ocean Road Cancer Institute is that it is the only specialized government institution dealing with cancer and leading organization in implementing the National Cancer Control Strategy in Tanzania.

3.2 Study design:

A cross-sectional study design was used in this study. The design was selected because data about the phenomena were obtained at one moment in time.

The process evaluation was used because the duration of the implementation of the strategy has not yet finished, therefore the study wanted to know if the objectives set to meet the aim of the strategy of ensuring effective cervical cancer screening, early detection and diagnosis to reduce the incidence of cancer and mortality have been implemented as intended.

3.3 Study population:

Qualitative part

At the national level: the study involved Assistant Director of RCH and two focal persons of cancer services.

From the municipal level: the study interviewed the Director of RCH and two other officials dealing with cervical cancer services.

While from the Ocean Road Cancer Institute the following were interviewed: Director of Preventive services, Head of cervical cancer services and health care providers from cancer screening program.

Quantitative part

Cancer screening registers were reviewed in order to generate the information on the number of:

- Staff who have attended Cancer screening training courses.
- Available Health workers with trained/ skills on early detection of cervical cancer in regional hospitals
- Women screened for cervical cancer
- Hospitals with teams for basic cancer screening detection and diagnostic services

3.4 Sample size and characteristics of partcipants:

The sample size were 12 key informants, including 1 Director of RCH from MoHCDGEC , 2 focal persons for cervical cancer services from MoHCDGEC, 1 Director of RCH from Ilala Municipality, 1 focal persons for cervical cancer services from Ilala Municipality, 1 Coordinator of RCH from Ilala Municipality, 1 Director of RCH from ORCI, 1 Manager for cancer services from ORCI and 4 health care providers from cervical cancer screening program from ORCI. The sample size used in this study was based on saturation level of information These key informants were purposely selected for this study because they are responsible for implementing national cancer control strategy in their respective organizations.

Among the 12 participants, females were 9 and males were 3. With 33years was 1 and between 35 to 45 years were 11. All 12 participants have college/ university education level.

1 of the participants has work experience of 3 years and the other 11 they have work experience of 5 years and above.

3.5 Data collection methods:

Both qualitative and quantitative methods were used**,** however qualitative was the main approach in this study. Qualitative part involved in depth interview with the members responsible for the implementation of cervical cancer screening program from MoHCDGEC, ORCI and Ilala Municipality. Quantitative part involved documentary review from MoHCDGEC**.**

3.6 Sampling methods:

Purposive sampling was used to select officials from Reproductive Health – Cancer unit from MoHCDGEC, Officials from ORCI, health care providers from cervical cancer screening programme at ORCI and Officials dealing with cancer services from the office of DMO in Ilala Municipal because of their roles in implementing the National Cancer Control Strategy 2013-2022 on cancer screening programme

3.7 Data Collection tools:

Interview guide was used to collect qualitative data, and a checklist was used for document review.

3.8 Data management:

Data generated from the in-depth interviews was daily cleaned, verified and checked for quality and consistency, sorted, transcribed and organized carefully. The interview guides were labeled to identify code amount of interviewee identification numbers. The tape recorder was used in collecting data and other collected data were kept in a safe box accessed by the principal investigator alone. The recorded information was transcribed by principal investigator using the F 4 transcription software. The computer files were given serial numbers and location based on the dates of interviews. This was done to ensure that all information from the interview are recorded and documented effectively. Management of data was at a high level of confidentiality.

3.9 Data analysis:

Qualitative data were analyzed using thematic analysis, whereas data from audios was transcribed into text, broken down into meaning units that contain aspects related into evaluation aim. Each identified, meaning unit was labeled with a code based on to facilitate identification of a concept in relation to evaluation content. Extended meaning units were condensed to reduce the number of words without losing the content. Subcategories were identified from meaning units and then sorted into broader categories. Themes were derived from categories.

Quantitative data were collected manually and entered into excelling sheets, data were cleaned and validated and all descriptive data were analyzed using SPSS program.

3.10 Ethical Consideration:

The proposal was submitted for ethical clearance to Muhimbili University of Health and Allied Sciences (MUHAS) Ethical Review Committee. All ethical issues were adhered to and addressed accordingly. Written consent was obtained from the participants before the interview. Participants can decline to be interviewed and those interviewed were free to end the interview at any point. Participants were not given any incentives for taking part in the study. Confidentiality was observed throughout the study, no participant identifying information was recorded.

3.11 Study limitations and Mitigation:

Risk of bias: Since the study includes directors who are responsible for the implementation of cervical cancer screening program from ORCI, RCH in the MoHCDGEC and DMO's office from Ilala Municipality there was a risk of information bias from participants when giving their perception of issues rather than actual facts; to mitigate this bias first researcher clearly explained to them the importance and objectives of this study so that they understand and provide actual facts. The study was also interviewing other respondents from different levels, such as service providers from ORCI and Ilala Municipality to counter the bias derived by one-sided story.

The quality of data for this study may be affected by the accuracy of the findings. Therefore,

this qualitative study ensured data trustworthiness. The trustworthiness of the findings is the key fact delivered from the data to make the findings valuable. The purpose of trustworthiness in qualitative research is to support the argument that the inquiry findings are worth to be paid significant attention to. As Guba and other researchers suggest that in ensuring trustworthiness in qualitative studies the following four concepts are used:-
Usage of credibility is preferred to internal validity; transferability in preference to external validity; dependability is in preference to reliability and conformability is preferred to objectivity. All these were ensured as explained below: -

Credibility refers to how congruent the findings of this study were with reality. In this study in-depth interview was used because it is an appropriate and well recognized research method for exploring of information from the study participants. Triangulation was also being done using data collection methods, by combining two main methods of data collection: in-depth interviews/key informant interviews and document review; involving different types of participants from MoHCDGEC, Ilala Municipal and ORCI.

Transferability is concerned with the extent to which the findings of this study can be applied to other situations. For this study to be transferable detailed background data to establish context of study in question was done.
Dependability means if this study is to be repeated, in the same context, with the same method and with the same participants, similar results was obtained. In order for this study to be a dependable in-depth methodological description of the study was done for enabling a future researcher to repeat the work.

Conformability is the degree of neutrality or objectivity in the findings of qualitative studies. It means that the findings obtained from the study are based on participants' responses and not any potential bias or personal motivations of the researcher. In order for this study to be conformable, triangulation was used to reduce effect of investigator bias. Triangulation involved method of data collection and study. Also, the usage of research assistants reduced

researcher's bias. The reasons for favoring one approach over the others will be explained, and weaknesses in the techniques employed were admitted.

CHAPTER FOUR

4.0 STUDY FINDINGS

The analysis of qualitative data generated three main themes and several sub-themes. The results are presented in three main themes which is: first theme on the achievements of the implementation of the National Cancer Control Strategy. The second theme is in the facilitating factors of the implementation of the National Cancer Control Strategy on cervical cancer screening. The third theme is on the barriers to the implementation of the National Cancer Control Strategy.

4.1 Achievements of the implementation of the National Cancer Control Strategy from 2013 to 2019 on cervical cancer screening.

The participants were asked about the achievement of the implementation of the National Cancer Control Strategy from 2013 to 2019 on cervical cancer screening**.** Analysis of the findings revealed the following sub themes: rise of awareness of cervical cancer, increase in cervical cancer screening uptake, establishment of cervical cancer screening, training program for health care providers and increased number of health facilities for cervical cancer screening.

4.1.1 Rise of awareness of cervical cancer

The Majority of the interviewed participants involved in an interview reported that during the implementation of national cervical cancer strategy, provision of education was one of the interventions that has led to an increased awareness on cervical cancer screening among women in the country.

As one participant from ORCI reported that;

> *"Number of women in Tanzania who are aware of the cervical cancer screening has dramatically risen up due to provided education on cervical cancer screening through different communication means. Moreover, it is approximated that 3 million of women have been already given cervical cancer screening education. This education is being delivered through community outreach or mass media as well as at facility to all women who attend for clinics"* **(KI No 7, ORCI).**

Another participant from ORCI cemented that;

> *"Women who attend clinics with their relatives who escort them at ORCI have been always given cervical cancer screening, education by our trained health care providers especially nurses before starting screening or any treatment. We are always using almost 30 to 40 minutes per day from Monday to Thursday in the provision of education to women who attend for clinics"* **(KI No 9, ORCI).**

4.1.2 Increased cervical cancer screening uptake

The interviewed study participants reported that the number of women participating in cervical cancer screening in Tanzania from 2013 to 2019 has increased after the implementation of the National cancer control strategy.

As one participant from MoHCDGEC reported that

> *"Number of women screened for cervical cancer from 2013 to 2019 is 1,412,611"* **(KI No 3, MoHCDGEC)**

The participant from ORCI reported that;

> *"Number of women undertaking cervical cancer screening at ORCI has increased, it ranges from 30 to 40 women per day after the introduction and implementation of strategy compared to previous years whereby the number of women who were attending for screening were 5 to 6 women per day. The increase in the number of women for screening has been influenced much by education given to women at the facility level and community level".* **(KI No 12, ORCI).**

The reviewed records from Ilala Municipality also reveals such increase as shown on the table below

Table 4.2 number of women screened from 2013 to 2019

Year	Number of women screened	Annual Increment
2013	No data	
2014	2040	0
2015	6549	4509
2016	14525	7976
2017	14993	468
2018	13479	-1514
2019	9431	-4048

Source: *Ilala DMO Office July 2020*



Figure 3.1 number of women screened from 2014 to 2019

The trend of women who were undertaking cervical cancer screening at Ilala Municipal were increasing from 2014 to 2017 but the trend started to decrease in 2018 and 2019 in

Ilala due to expansion of the services to other areas and at low level of health facilities in Tanzania compared to previous years that the services were being offered by national hospital, ORCI and regional hospitals**.**

4.1.3 Establishment of cervical cancer screening training program for health care providers.

Most of the participants from Ilala Municipal, MoHCDGEC and ORCI responded that the introduction of National cancer control strategy has contributed much in the provision of trainings to health care providers including nurses and doctors on cervical cancer screening services.

As participant from MoHCDGEC reported that;

> *"A number of health providers who have been given cervical cancer screening, training in the country have increased. Numbers of Health Care Workers trained in cervical cancer screening services from 2013 to 2019 are estimated to be 1,724. Moreover, the number of trainings on cervical cancer provided to health care providers is estimated to 115 from 2013 to 2019.* **(KI No 2, MoHCDGEC).**

At municipal level, study participant reported that;

> *"From 2013 to 2019 we have already provided, cervical cancer trainings to 80 health care providers in Ilala Municipal. Moreover, these trainings are offered to health providers twice per year through outreach or a mentorship programme. Sometimes these trainings are being sponsored or supported by donors such as ICAP, CCP and JHEPGO"* **(KI No 5, Municipal council).**

4.1.4 Increased number of health facilities providing cervical cancer screening services

The interviewed study participants reported that cervical cancer screening services has been extended from tertiary level up to dispensary level. This has contributed to increase the number of health facilities offering cervical cancer screening services in Tanzania.

The participant from MoHCDGEC reported that;

> *"Number of health facilities offering cervical cancer screening services in Tanzania has increased compared to previous time. Currently in Tanzania, we have 624 health facilities which offer cervical cancer screening. These include all zonal referral*

hospitals, regional referral hospitals; district hospital and some of the health centers and dispensaries" **(KI No 1, MoHCDGEC).**

Table 4.3 Number of health facilities providing cervical cancer screening services in Tanzania.

Health facilities	***Number Health facilities from 2013 to 2019 that provide CECAP***	***Total number of health facilities in Tanzania***	***Percentage of health facilities that provide CECAP (%)***
Hospitals providing CECAP services	*212*	*294*	*72.1%*
Health centres providing CECAP services	*287*	*910*	*31.5%*
Dispensaries providing CECAP services	*125*	*7242*	*1.7%*

Source: MOHCDGEC July 2020

Another participant *from Ilala Municipal cemented that;*

"Currently at Ilala Municipal, we have 29 health facilities providing cervical cancer screening services including National Hospital, regional referral hospitals, health centers and dispensaries" (**KI No 4, Municipal council).**

4.2 Facilitating factors of the implementation of National Cancer Control Strategy from 2013 to 2019 on cervical cancer screening

The participants were asked about factors that facilitate the implementation of the National Cancer Control Strategy on cervical cancer screening. Analysis of the findings generated five sub-themes as described below: - availability of guidelines, availability of services, affordability of services, the role played by mass media and funding.

4.2.1.1 Availability of guidelines

The interviewed study participants reported that the formulation of guideline concerning to cervical cancer screening services has facilitated screening tests for cervical cancer as well as ensuring uniformity to all health care providers in conducting cervical cancer screening through provision of education and trainings. They said that the National guideline for cancer has clearly stated the implementation of cervical cancer screening services. They said through the National guideline every implementer knows his roles and responsibility in cervical cancer services from national up to community level.

The participant from MoHCDGEC reported that;

> *"Guidelines is everything in the implementation of cervical cancer screening, you can't do anything without guidelines. There must be a guiding principle in order to provide a certain service. The presence of these guidelines helps to ensure quality of services, to monitor the implementation of the services. Furthermore, through guideline is where we can determine which technology, we can use on cervical cancer screening, which type of trainings is required for health care providers and who are supposed to provide such services"* **(KI No 2, MoHCDGEC).**

4.3.1.2 Availability of services

The interviewed study participants reported that availability of cervical cancer screening services from National level to dispensary level has facilitated access of services easily. The respondents reported that presence of special rooms for cervical cancer screening has enhanced availability of the services.

As one participant from Ilala Municipal reported that;

> *"Availability of cervical cancer screening services at different level of facilities has contributed much the implementation of the program because in previous days the cervical cancer screening service was being provided by Muhimbili National Hospital, ORCI as well zonal referral hospitals but currently after the introduction of the National Cancer Control Strategy, the services has expanded up to health centers and dispensary levels"* **(KI No 4, Municipal council).**

Another participant insisted that;

> *"Presence of dedicated rooms for cervical cancer screening has facilitated availability of services because without having dedicated room it is difficult to provide the services. The presence of these dedicated rooms implies that there is availability of services as well as it facilitates the improvement of the services. For example, in Nyamagana Hospital there is a special room for cervical cancer screening, Benjamini Mkapa Hospital and Mara regional referral hospital there are special rooms for cervical cancer screening etc. This implies acceptance of the services"* **(KI No 3, MoHCDGEC).**

4.3.1.3 Affordability of services

The interviewed study participants reported that cervical cancer screening services are affordable to all Tanzanians because the services are provided freely to all women. Women who attend to health facilities for screening are not charged any fees for the services.

As one participant reported that;

> *"Cervical cancer screening program is a health service, which is provided free of charge to all women. The government is responsible for all costs concerning screening and provision of education of cervical cancer screening"* **(KI No 10, ORCI**).

4.3.1.4 Role played by mass media

The interviewed study participants reported that mass media such as radio, poster and flyers play a crucial role to awaken women on the significance of cervical cancer screening. Through mass media the community has become aware that the service is being provided freely to all health facilities. Hence it has promoted a number of women to attend for cervical cancer screening.

As one participant *reported that;*

> *"The use of mass media such as television, newspapers, ORCI website, radio such as Clouds FM, ORCI twitter account and Instagram account, posters and flyers have*

contributed much to awaken women to undertake cervical cancer screening" **(KI No 11,**
ORCI).

4.3.1.5 Funding

Most respondents reported that the government and donors such as WHO, CDC and USAID have been the main financier of the cervical cancer screening program since the introduction of National cancer Control strategy from 2013 to 2019. Funds from government and donors have been used to support outreach programs, buying equipment for screening, including disposable spectrum, thus facilitated the implementation of the National Cancer Control Strategy

As one participant from MoHCDGEC reported that;

> *"We depend on the government to get the fund, however there are other sources of funds from the donors such as WHO, especially in the development of the documents, printing and dissemination. Also, we have been implementing partners who get money from donors such as USAID and CDC to support the cervical cancer screening program in Tanzania"* **(KI No 1, MoHCDGEC).**

Another participant insisted that;

> *"Since the introduction and implementation of National cancer control strategy in 2013 to 2019, it is estimated that about 3 billion Tanzania' shilling has been used for the implementation of cervical cancer screening in Tanzania"* **(KI No 1, MoHCDGEC).**

4.3 Barriers of the implementation of National Cancer Control Strategy from 2013 to 2019 on cervical cancer screening

The participants were asked about barriers that affect the implementation of the National Cancer Control Strategy from 2013 to 2019 on cervical cancer screening. Analysis of the findings revealed three sub-themes, namely: - organizational barriers, social-cultural barriers and individual barriers

4.3.1 Organizational barriers.

Participants were asked about the organizational barriers in the implementation of the National Cancer Control Strategy from 2013 to 2019 on cervical cancer screening. Analysis of the findings generated three sub-themes as described below; inadequate of tools and instrument, lack of adequate funding and shortage of human resources for health

4.3.2 Inadequate of tools and instruments

The participants mentioned that there is no enough tools and instrument like spectrum due to lack of adequate funds allocated to provision of cervical cancer screening services.

As one participant reported that;

> *"Another challenge is the availability of equipment for cervical cancer screening and it is a big challenge to access these equipments especially spectrum. Sometimes you can have a large number of women who have decided to undertake cervical cancer screening, but it becomes difficult to conduct screening due to shortage of spectrum" (KI no 6, Municipal council)*

4.3.3 Resource allocation barriers

Participants were asked on the resource allocation related barriers in the implementation of National Cancer Control Strategy from 2013 to 2019 on cervical cancer screening. Analysis of the findings generated two themes as described below; inadequate fund and donor dependency and shortage of health care providers,

4.3.3.1 Inadequate fund and donor dependency

The participants reported that despite the fact that the government and development partners support the implementation of the national cancer strategy by providing funds as discussed in the facilitating factors, yet the funds provided are inadequate. They reported that insufficient funds hindered the health facilities to purchase the equipment/tools for cervical cancer screening, and it has also limited the expansion of services to other facilities which have no this service. Most of the government funds come from donors such WHO, USAID, CDC, and the allocation of resources from donors is not always consistent

As one participant from MoHCDGEC reported that;

"The big results you heard in cervical cancer screening have been contributed much by the donors' support. We do not have a reliable source of fund from the government for our services and this is a big challenge for us to ensure that these services are being implemented well" **(KI No 1, MoHCDGEC).**

4.3.3.2 Shortage of health care providers

As one participant reported that;

"When you talk about health care providers, it is a health sector challenge. It is not only a challenge for cervical cancer screening service but also it is a challenge to all services in health sector such as HIV service, antenatal etc. Recently I have visited one health center in Nachingwea, you can't believe it has only one doctor, one clinical officer and three nurses, but they offer all services required in the health center" so HRH is still a challenge in health sector due to shortage of fund for recruitment new staffs" (**KI No 1, MoHCDGEC).**

Another participant insisted that;

"We are still having few numbers of health care providers who have trained and skills on cervical cancer screening services in our Municipal but we are still providing training and mentorship to increase the number of health care providers to ensure that every health facility has trained health care providers for cervical cancer screening" **(KI No 5, Municipal council).**

4.3.4 Social -cultural barriers

Participants were asked about the social-cultural related barriers in the implementation of the National Cancer Control Strategy from 2013 to 2019 on cervical cancer screening. Analysis of the findings generated one sub-theme as described below; poor belief among women

4.3.4.1 Poor belief among women

It was reported that some women do not want to undertake a cervical cancer screening program because of their belief. Study participants claimed that there are a lot of myths in the society on cervical cancer screening, which have led a lot of poor perception on the

service. For instance, some women believe that if her mother died from cancer, even herself she to die from cancer is the normal situation.

As one participant reported that;

> *"Some women delay for screening services due to their belief on traditional healers. If you ask them, why have you come at a late stage for the screening? I was using traditional medicine from traditional healers but I have decided to come for screening because my neighbor told me the benefit of screening"* **(KI No 11, ORCI).**

Another participant *reported that;*

> *"Some women believe that if you go for screening, they remove the cervix. Some of them believe that if their daughters go for screening will never give birth. Others believe that cancer service to women kills female ovaries. This poor believes, among women and society at large is not only based to uneducated women, but also educated women have such myths"* **(KI No 3, MoHCDGEC).**

4.3.5 Individual barriers

Participants were asked about the individual related barriers in the implementation of the National Cancer Control Strategy on cervical cancer screening. Analysis of the findings generated two sub-themes as described below; fear and poor perception among women and lack of awareness.

4.3.5.1 Fear and poor perception

The interviewed study participants reported that the fear of screening procedures played a major role in preventing women from cervical cancer screening.

As one participant reported that;

> *"Some women fear to uptake cervical cancer screening due to screening procedures. They feel shy to remain naked in front of the health providers. This has been associated with traditions and beliefs of some of the religions in Tanzania"* **(KI No 10, ORCI).**

4.3.5.2 Low level of awareness

The interviewed study participants reported that the uptake of cervical cancer screening is constrained by the low level of knowledge and understanding of cervical cancer screening services to some of the women. The respondent reported that lack of awareness and clear knowledge on the benefits of cervical cancer screening has led to a low uptake of cervical cancer screening services among women.

The participant from ORCI reported that;

> ***"****Low level of understanding between the women is still a challenge in the implementation of the strategy because some women, especially in rural areas do not understand the benefit of cervical cancer screening. Also, low levels of awareness among men hinder some women to abstain from screening"* **(KI No 8, ORCI).**

CHAPTER FIVE

5.0 DISCUSSION

In this section the study findings are interpreted and discussed with a comparison of what was reported by other studies done in developing and developed countries. The section also provides a conclusion and the recommendations of the study. In this study the implementation of the Strategy was assessed on the basis of the achievements of the implementation of the National Cancer Control Strategy on cervical cancer screening, facilitating factors in the implementation of the National Cancer Control Strategy on cervical cancer screening and barriers to the implementation of the National Cancer Control Strategy from 2013 to 2019 on cervical cancer screening.

5.1 Achievements of the implementation of National Cancer Control Strategy on cervical cancer screening

The findings from this study revealed that the implementation of the National Cancer Control Strategy has achieved to increase awareness among women in Tanzania through provision of education. A study done in UK reported that the increased uptake of women participating in the cervical cancer screening program as a result of increased awareness amongst women from health education and the media, reduced anxiety around having a smear taken, and the financial incentives to general practitioners for achieving higher coverage targets within their populations (Barton-Smith, 2009).

The study also revealed that there is an increase in cervical cancer screening uptake among the women in Tanzania after the introduction of the strategy. The increase in the number of women for screening has been influenced much by education given to women at the facility level and community level as well through mass media. The study conducted in Mozambique shows that the number of women undertaken cervical cancer screening in Mozambique in 2010 to 2011 was more than doubled the annual screening goal for the first year of program implementation. Therefore, the introduction of cervical cancer screening in Mozambique has led to increase the number of women who undertake screening (Moon et al, 2012.).

In addition, the findings from this study revealed that the strategy has contributed to establishment of cervical cancer screening training program for health care providers including nurses and doctors. These findings were contrary, with studies conducted in Rwanda which reported that health facilities had few doctors and nurses who also had minimal training to provide effective treatment of cervical cancer (Mukakalisa, Bindler, Allen, & Dotson, 2014).

Moreover, the findings from this study revealed that the number of health facilities for cervical cancer screening has increased compared to previous time. These include all zonal referral hospitals, regional referral hospitals; district hospitals, and some health centers and dispensaries. The study conducted in France reported that the widespread availability of services combined with cultural factors has led to good coverage of the target population (Sacho, 2013.).

5.2 Facilitating factors of the implementation of National Cancer Control Strategy on cervical cancer screening

The study revealed the availability of guidelines such as cervical cancer screening guideline has facilitated much the implementation of the cervical cancer screening services. A study done in Kenya reported that the formulation of guideline (Kenya National Cancer Screening Guidelines) concerning cervical cancer screening services has facilitated to recommend screening tests for cervical cancer screening in Kenya i.e., Pap smear test and visual screening test. Health providers can perform the procedures comfortably in the local settings, provided that they receive adequate training. (Munoru, Gitonga and Muraya, 2019).

The findings from this study revealed further that government of Tanzania has been collaborating much with donors such as WHO, CDC and USAID to get funds and other resources to implement a cervical cancer screening program since the introduction of National cancer Control strategy from 2013 to 2019. The study done in Switzerland 2010 reported that most of the developing countries funds for conducting cervical cancer screening come from aids and grants from local and international donors (Dodd & Lane, 2010). Both aids and grants from donors in developed countries and local organizations and private sectors have influenced many of the implementing the cervical cancer screening services in Developing countries.

The finding from this study found that availability of cervical cancer screening services from the national level to dispensary level has facilitated access of services easily. The study conducted in France reported that availability of cancer screening services had influenced a large number of women to undertake cervical cancer screening in France (Sacho, 2013).

The findings from this study show that cervical cancer screening services are affordable to all women because the services are provided freely to all women. This has facilitated women to afford the service at large extent. The study conducted in France reported that affordability of cancer screening services had influenced a large number of women to undertake cervical cancer screening in France (Sacho, 2013).

5.3 Barriers to the implementation of the National Cancer Control Strategy on cervical cancer screening

This study found out that inadequate funds and donor dependency hinder the implementation of the strategy to a large extent, because although the government has been providing funds for the implementation of the strategy, but still not sufficient enough to cover all amounts that are required to fully support the implementation of the strategy.

There is no reliable source of fund from the government for cervical cancer screening and this is a big challenge to ensure that the program is being implemented well. Most of the government funds come from donors such as WHO and USAID, CDC, and the allocation of resources from donors is not always consistent. The study done in Mozambique reported that an estimated 25 donors cover about 70% of Mozambique's health budget through basket funding, with some of these donors providing direct financial assistance to the Ministry of Health and others to specific disease areas such as cancer (Maltos & Beran, 2012). A study done in Tanzania (Nyamhanga, et al, 2014.) reported that the budget allocated for prevention activities at the community level, which ranges between 2% and 5% of the annual district council health budget. The rest of the budget goes to the curative services. Donor dependency has caused the implementation of the existing cervical cancer prevention strategies to suffer from lack of long-term sustainability.

The study finding revealed that Shortage of health care providers is not only a challenge for cervical cancer screening service but also it is a challenge to all services in health sector

such as, HIV service, antenatal etc. shortage of health care providers has led to delay in provision of cervical cancer screening services as well as low coverage of the services. Similar findings in Rwanda revealed that the health facilities had few doctors and nurses who also had minimal training to provide effective treatment of cervical cancer (Mukakalisa, Bindler, Allen, & Dotson, 2014). Generally limited budget was reported as common challenges in many developing countries which negatively affect the training and distribution of skilled health professionals to support the screening of cervical cancer (Denny et al., 2006).

The finding also revealed that that as a consequence of inadequate funding, tools and instrument like spectrum are not adequate. It is very difficult to conduct cervical cancer screening due to shortage of this important tool and instrument. The study done in Tanzania reported similar findings indicating that there is no enough quality tools and instrument like those for Pap smears and VIA, for testing and detecting lesions because of lack of adequate funds allocated for provision of cervical cancer screening services. The lack of funds has hindered the health facility to purchase the expensive and sophisticated machines that could assist in detecting and even removing cervical cancer pre-cancerous cells like LEEP machines (Mugassa and Frumence, 2019).

The findings from this study revealed that that coverage of cervical cancer screening for women is still low compared to number women in Tanzania. A Number of health facilities providing this service are still low because from 2013 to 2019 there are only 624 health facilities offering this service. Through these facilities only 1,412,611 women have already screenedThis indicates that a large number of the women have not been screened. A study done by Darj et al (2019) reported that most of health facilities such as hospitals are allocated in urban areas, hence it’s very difficult for health providers who are doing cancer screening to reach remote areas for screening due to poor infrastructure. Those who lived in rural areas were less likely to access screening services because many village health posts lacked screening facilities.

Moreover, the finding revealed that some women do not want to undertake cervical cancer screening program because of their beliefs. There is a lot of myth in the society which hinder cervical cancer screening, which has created a poor perception on the service. The study done in Ghana by Binka et al (2019) reported that some women in developing countries do not want to be associated with cervical cancer screening program because of the belief that the disease was caused by a promiscuous lifestyle. Another study reported that for this reason, they prefer to go for divine intervention instead of going for screening or treatment at the hospital (Darj et al, 2019).

The finding from this study revealed that the uptake of cervical cancer screening among the women is constrained by the low level of knowledge and understanding cervical cancer screening services. Lack of adequate awareness and clear knowledge on the benefits of cervical cancer screening has led to a low uptake of cervical cancer screening services among women. The study done in India by Basu (2006) reported that the fear of screening itself, screening outcomes, diagnostic procedures and treatment played a major role in preventing women from cervical cancer screening. From their experiences, some women feared misdiagnosis of the disease and these experiences act as factors militating against screening for the disease

CHAPTER SIX

6.0 CONCLUSION

In this study we described the achievements, facilitating factors and barriers for the implementation of the national cancer control strategy on cervical cancer screening services. The achievements include raising awareness among women in Tanzania, increasing the number of trained health providers, increasing number of health facilities providing cervical cancer in Tanzania and a number of women undertaking cervical cancer screening. Furthermore; the successful implementation of National Cancer Control Strategy on cervical cancer screening have been facilitated by numbers of factors including availability of services, presence of guideline, availability of trained health care provider on cervical cancer as well as affordability of the services. However, there are a few barriers affecting smooth implementation of strategy. These include inadequate of funds and donor dependency, shortage of human resources, and shortage of instruments/tools for cervical cancer screening, low level of awareness among women, poor belief among women and coverage of still low in Tanzania.

6.1 RECOMMENDATIONS

6.1.1 National level

- Diversify the sources of financing the implementation of cervical cancer screening**.** Cervical cancer screening program depends much on WHO, USAID, CDC Fund, which is donor dependency. The government through MoHCDGEC should find additional, reliable and sustainable sources to fund the implementation of cervical cancer screening program

- Deploy HRH as well as provision of trainings**.** MoHCDGEC should make sure that adequate Human Resources for Health are deployed to reduce the shortage of health care providers.

6.1.2 Municipal level

The municipality should emphasize the use community health workers (CHW) who are part a parcel of their community for the purpose of supporting health care providers from health facilities who do not meet the current demand to providing cervical cancer screening education among the women in their community. The use of CHW can help to determine reluctant women in their community who are not ready for the uptake cervical cancer screening due to beliefs and poor perception and then reports to health care providers for more assistance

6.1.3 Ocean Road Cancer Institute

The institute as a specialized institute for cancer should emphasize on capacity building through utilizing the present health care providers on the institute to train more health care providers on cervical cancer screening to overcome shortage of health care providers**.**

6.1.4 Areas for further evaluation

In the future, it would be reasonable to conduct research, which includes more districts to provide more comprehensive information on the National Cancer Control Strategy on cervical cancer screening.

Furthermore, it would be reasonable to conduct research, which includes Civil Society Organizations, Private Sector, and Associations of People Living with Cancer in order to get their perspectives and experiences about achievement, facilitating factors and barriers on the implementation of the National Cancer Control Strategy on cervical cancer screening

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APPENDECES

Appendix I: Interview guide for health service providers

Greet the participant and introduce yourself.

I want to thank you for taking the time to meet with me today. My name is.....And I would like to talk to you about your experiences in cervical cancer screening program (strategy) from 2013 to 2019. Specifically, some of the objectives in this study are to find out the achievements of the implementation of cervical cancer screening program (strategy) from 2013 to 2022; to explore the facilitating factors for the implementation of cervical cancer screening program at ORCI as well as to explore the barriers for the implementation of cervical cancer screening program at ORCI. Provide consent form to the participant and allow him/her to read it.

Ask the participant if he/she has question or if there is anything need to be clarified before sign the consent form. Respond to the question or clarify the matter. Allow him/her to sign the consent form if she/he agrees to participate. Say a word of thanks for him/her to agree to participate. If she/he did not agree, give him a word of thanking and proceed to the next participant.

Title…….

Years served in this position.....

Age……..

Sex……..

Education……

1. How is a cervical cancer screening service is conducted in this facility?
2. In your views, what are the achievements of cervical cancer screening program in this facility?
3. Probe on the factors facilitating the implementation of cervical cancer screening program?

i. To what extent the availability of services influences the implementation of cervical cancer screening?

ii. To what extent accessibility of services influence the implementation of cervical cancer

screening?

iii. How acceptability of services facilitates the implementation of cervical cancer screening?

iv. How guidelines facilitate the implementation of cervical cancer screening?

v. To what extent health care providers facilitate the implementation of cervical cancer screening?

vi. How presence fund facilitate the implementation of cervical cancer screening?

vii. How availability of equipment facilitates the implementation of cervical cancer screening?

viii. Probe for any other factors influencing the implementation of cervical screening?

4. What are the barriers, if any; you encountered for the implementation of cervical cancer screening program?

a) Probe for a social – cultural barriers

b) Probe for individuals barriers

c) Probe for organizational barriers (inaccessibility of services, health promoters and unavailability of services)

d) Probe for resources allocation (shortage of human resources, lack of fund)

5. How did/do you overcome the barriers?

6. How do you foresee the future of the implementation of cervical cancer screening program?

7. What recommendation do you have for the future efforts that aiming at the implementation of cervical cancer screening program?

8. Is there anything more you would like to add?

Appendix II: Interview guide for Director, DMO, Coordinator RCH and Officials dealing with cervical cancer services.

Title…….

Age……..

Sex……..

Education…….

Years served in this position.....

1. Tell me how cervical cancer screening services are being implemented.

i. Who provide these services in the different point of care?

ii. In which environment are the services provided?

2. Probe on the achievement of cervical cancer screening

a. Tell me the trend of incidence of cervical cancer from 2013 to 2019.

b. Does cervical cancer screening program reduced incidence or not? How

c. Probe the women have been screened from 2013 to 2019

d. Probe on health providers have been given trainings on cervical cancer from 2013 to 2019

e. Probe on women have been given education on cervical cancer screening from 2013 to 2019

f. Probe on researches have been conducted on cervical cancer screening from 2013 to 2019

g. Probe on qualified cervical cancer specialists at district level/ORCI from 2013 to 2019

h. Probe on women who are aware on cervical cancer screening from your hospital from 2013 to 2019

i. Probe on machines or equipment have been installed for cervical cancer screening at your facility from 2013 to 2019

j. Probe on fund allocated for cervical cancer screening research

k. Probe on the fund allocated for cervical cancer screening at your facility

3. Probe on the factors facilitating the implementation of cervical cancer screening

i. To what extent the availability of services influences the implementation of cervical cancer screening?

ii. To what extent accessibility of services influence the implementation of cervical cancer screening?

iii. How acceptability of services facilitates the implementation of cervical cancer screening?

iv. How guidelines facilitate the implementation of cervical cancer screening?

v. To what extent health care providers facilitate the implementation of cervical cancer screening?

vi. How presence fund facilitate the implementation of cervical cancer screening?

vii. How availability of equipment facilitates the implementation of cervical cancer screening?

viii. Probe for any other factors influencing the implementation of cervical screening?

4. What are the barriers, if any; you encountered for the implementation of cervical cancer screening program?

a. Probe for social-cultural barriers

b. Probe for individual barriers

c. Probe for organizational barriers (inaccessibility of services, incapability of services)

d. Probe for resources allocation (shortage of human resources, lack of fund, equipment)

5. How did/do you overcome the barriers?

6. How do you foresee the future of the implementation of cervical cancer screening program?

7. What recommendation do you have for the future efforts that aiming at the implementation of cervical cancer screening program?

8. Is there anything more you would like to add?

Appendix III: Interview guide for Ministry of Health, Community Development, Gender, Elderly and Children (MoHCDGEC)

Title…….

Age……..

Sex……..

Education…….

Years served in this position.....

1. Tell me how cervical cancer screening services are being implemented.

i. Who provide these services in the different point of care?

ii. In which environment are the services provided?

2. Probe on the achievement of cervical cancer screening

i. Tell me the trend of incidence of cervical cancer from 2013 to 2019.

ii. Does cervical cancer screening program reduced incidence or not? How

iii. Probes on women have been screened from 2013 to 2019.

iv. Probe on health providers have been given trainings on cervical cancer from 2013 to 2019

v. Probe on hospitals with teams for basic cancer screening?Mention some of them.

vi. Probe on regional referral hospitals conducting cervical cancer screening?Mention some of them.

vii. Probe on women have been given education on cervical cancer screening from 2013 to 2019

viii. Probe on researches have been conducted on cervical cancer screening from 2013 to 2019

ix. Probe on qualified cervical cancer specialists at Regional and zonal level from 2013 to 2019

x. Probes on women are aware on cervical cancer screening from your hospital from 2013 to 2019?

xi. Probe on machines or equipment have been installed for cancer screening at your facility from 2013 to 2019

xii. Probe the fund allocated for cervical cancer screening research.

xiii. Probe fund allocated for cervical cancer screening at your facility

3. Probe on the factors facilitating the implementation of cervical cancer screening

a) To what extent the availability of services influences the implementation of cervical cancer screening?

b) To what extent accessibility of services influence the implementation of cervical cancer screening?

c) How acceptability of services facilitates the implementation of cervical cancer screening?

d) How guidelines facilitate the implementation of cervical cancer screening?

e) To what extent health care providers facilitate the implementation of cervical cancer screening?

f) How presence fund facilitate the implementation of cervical cancer screening?

g) How availability of equipment facilitates the implementation of cervical cancer screening?

h) Probe for any other factors influencing the implementation of cervical screening?

4. What are the barriers, if any; you encountered for the implementation of cervical cancer screening program?

a. Probe for social-cultural barriers

b. Probe for individual barriers

c. Probe for organizational barriers (inaccessibility of services,, inavability of services)

d. Probe for resources allocation (shortage of human resources, lack of fund, equipment)

5. How did/do you overcome the barriers?

6. How do you foresee the future of the implementation of cervical cancer screening program?

7. What recommendation do you have for the future efforts that aiming at the implementation of cervical cancer screening program?

8. Is there anything more you would like to add?

Appendix IV: Checklist to be used for document review

Item	**Quantity**
Amount of Funds received from the government to Ocean Road Cancer Institute for Cervical Cancer Screening program	
Amount of Funds received from the donors to Ocean Road Cancer Institute for Cervical Cancer Screening program	
What equipment/service have been brought/bought by the fund received	
How many regional referral hospitals offer cervical cancer screening from 2013-2019?	
How many women have been screened for cervical cancer from 2013 to 2019?	
How many cancer screening training courses have been conducted from 2013 to 2019?	
How many health care providers trained or have the skills on cervical cancer screening from 2013 to 2019?	
How many regional hospitals with teams for basic cancer screening, detection and diagnostic services from 2013 to 2019?	
how many regional hospitals provide histopathology services from 2013 to 2019?	
How many Tanzanians are aware on cervical cancer screening from 2013 to 2019?	

Appendix V: Consent form in English Version

Introduction

Dear Participant,

I am Sarah Alfred Kapanga a student at Muhimbili University of Health and Allied Sciences (MUHAS) pursuing Masters of Science - Project Management, Monitoring and Evaluation in Health. On behalf of MUHAS, I'm the principle investigator in this study that entails to evaluate the Implementation of the National Cancer Control Strategy 2013-2022: A Case of the Cervical Cancer Screening program in your area. Please ask me to stop as we go through the information and I took time to explain. If you have questions, you can ask them and I will clarify.

Title of study:

Evaluation of the Implementation of the National Cancer Control Strategy 2013-2022: A Case of the Cervical Cancer Screening at national and district level.

Purpose of the Study:

The aim of the study is to evaluate the implementation of National Cancer Control Strategy 2013-2022: A Case of the Cervical Cancer Screening. The Information gain will help us to know the current practice of the implementation of cancer screening services. You are kindly being asked to participate in this study because we believe that you have particular information that may be important to the study.

Methods of the study:

As part of the study, In Depth Interview will be done, and an interviewer will record your responses. You will be interviewed once for approximately 30-40 minutes. Data will be collected at a single point that is after this interview with you; we are done with you.

Procedure of the study:

Information is provided for you to decide whether you wish to participate in the present study. You should be aware that you are free to decide not to participate or to withdraw at any time without affecting your relationship researcher.

Do not hesitate to ask any questions about the study either before participating or during the time that you are participating. I would be happy to share our findings with you after the research is completed. However, your name will not be associated with the research findings

in any way, and your identity as a participant will be known only to the researchers. This is for assuring your confidentiality as my informant.

Risk, benefits and confidentiality:

There are no direct benefits for your participation however, information you provide will help the hospital to improve the implementation process of cancer screening programme hence improve service delivery. No harm is expected as a result of participation in the study and you can ask the interviewer questions any time during the study.

Contacts Information:

In case of any question or query concerning this study, please contact the principal investigator Sarah Alfred Kapanga (Msc.PMMEH) on telephone number +255 713467015 from MUHAS, P.O BOX 65001, Dar es Salaam or my supervisor Dr. Frumence Gasto 0787133945. If you have any question about your rights as participants, you may contact Dr, Bruno Sungunya, Chairperson of Research and Publications Committee, MUHAS. P.O Box 65001, Dar es salaam-Tanzania, Tel +2552150302-6.

Statement of Consent:

The purpose and nature of a study have been explained to me, and I understand that my participation in the study is voluntary and no consequences will result if I refuse to participate. I am free to withdraw at any time. I have the right to know the findings of the study. I consent voluntarily to be a participant in this study.

Name of the participant: ..... Signature……. Dates: .....

Name of investigator: ..... Signature: ..... Dates.....

Appendix VI: Fomu ya ridhaa, Kiswahili version

Utambulisho

Ninaitwa Sarah Alfred Kapanga ni mwanafunzi kutoka Chuo Kikuu cha Afya Shirikishi Muhimbili, ninasoma digrii ya pili katika eneo la Usimamizi wa Miradi, Ufuatiliaji na Tathimini katika Afya. Ni Mchunguzi Mkuu katika utafiti huu unaohusu kutathimini utekezaji wa Mkakati wa Taifa wa kuthibiti saratani ya mwaka 2013-2011 katika Nyanja ya uchunguzi wa saratani ya mlango wa kizazi katika eneo lako.

Mada ya utafiti:

Kutathimini utekelezaji wa Mkakati wa Taifa wa kuthibiti saratani ya mwaka 2013-2011 katika Nyanja ya uchunguzi wa saratani ya mlango wa kizazi katika Taasisi ya Saratani ya Ocean Road

Lengo la Utafiti

Lengo la utafiti ni kutathimini utekelezaji wa Mkakati wa Taifa wa kuthibiti saratani ya mwaka 2013-2011 katika Nyanja ya uchunguzi wa saratani ya mlango wa kizazi. Taarifa itakayopatikana itasaidia kujua hali ya sasa ya utekelezaji wa mpango wa uchunguzi wa saratani ya mlango wa kizazi. Unaombwa kushiriki katika Utafiti huuu kwasababu tunaamini uzoefu wako na taarifa zako ni muhimu katika utafiti huu.

Mbinu za Utafiti

Kama sehemu ya utafiti huu tutafanya mahojiano ya kina, mhojaji atanakili kwa kinasa sauti majibu yako.Utahojiwa kwa taktibani dakika 30 hadi 40 kwenye eneo binafsi.

Taratibu za utafiti

Ushiriki wako kwenye utafiti huu ni wa hiari hii inamaanisha kuwa hutakiwi kushiriki ikiwa hutaki kufanya hivyo.waweza kukataa kujibu swali lolote ambalo hujisikii kulijibu na waweza kusitisha mahojiano wakati wowote. Taarifa utakazotoa ni siri na zitatumika kwa ajili ya utafiti pekee. Wanaohusika na utafiti huu ndiyo wanaweza kuizpata taarifa hizi. Jina lako halitaaandikwa kwenye fomu hii na halitahusishwa na taarifa,namba za siri zitatumika kutambulisha taarifa ulizotoa.

Hatari, Faida na Usiri:

Hakuna faida za moja kwa moja utakazopata kwa ushiriki ila taarifa utakazotoa zitasaiadia hospitali katika kuimarisha utekelezaji wa mkaktaba wa ubia na kuboresha utoaji wa huduma. Hakuna hatari zozote zinazoweza kukupata kwa kushiriki kwenye utafiti huu. Waweza kumwuliza mhojaji maswali wakati wote wa utafiti.

Taarifa za mawasiliano:

utahitaji ufafanuzi zaidi juu ya utafiti huu usisite kuwasiliana na mtafiti mkuu Sarah Alfred Kapanga,mwanafunzi wa shahada ya uzamili ya sayansi ya menejimenti, ufuatiliaji na tathimini ya miradi ya Afya(Msc.PMMEH) katika chuo kikuu cha afya na sayansi shirikishi Muhimbili S.L.P 65001,Dar es salaam, kwa namba ya simu ya kiganjani +255 713467015. Kama una swali juu ya haki zako unaweza kuwasiliana na Dk.Bruno Sunguya ambaye ni mwenyekiti wa kamati ya utafiti na Machapisho,S.L.P 65001,chuo kikuu cha Afya na Sayansi shirikishi,Muhimbili S.L.P 65001 Dar es salaam au namba +2552150302-6.

8. Neno la ridhaa:

Lengo na asili ya utafiti huu imeelezwa kwangu na nimeelewa kwamba ushiriki wangu ni wa hiyari na hakuna madhara yoyote endapo nitakataa kushiriki. Nipo huru kujitoa wakati wowote. Nina haki ya kujua matokeo ya utafiti huu. Ninatoa ridhaa ya kuwa mshiriki kwenye utafiti huu.

Jina la Mshiriki ..... Sahihi…….. Tarehe .....

Jina la Mchunguzi: .....Sahihi.....Tarehe.....

Appendix VII: Ethical clearance letter

MUHIMBILI UNIVERSITY OF HEALTH AND ALLIED SCIENCES
OFFICE OF THE DIRECTOR OF POSTGRADUATE STUDIES

P.O. Box 65001
DAR ES SALAAM
TANZANIA
Web: www.muhas.ac.tz

Tel G/Line: +255-22-2150302/6 Ext. 1015
Direct Line: +255-22-2151378
Telefax: +255-22-2150465
E-mail: dpgs@muhas.ac.tz

Ref. No. HD/MUH/T.647/2018 26th May, 2020

IRB#: MUHAS-REC-04-2020-262

Sarah Alfred Kapanga
MSc. Project Management Monitoring and Evaluation,
School of School of Public Health and Social Sciences,
MUHAS.

RE: APPROVAL OF ETHICAL CLEARANCE FOR A STUDY TITLED: " EVALUATION OF IMPLEMENTATION OF THE NATIONAL CANCER CONTROL STRATEGY 2013-2022: A CASE OF CERVICAL CANCER SCREENING AT NATIONAL AND DISTRICT LEVELS."

Reference is made to the above heading.

I am pleased to inform you that, the Chairman has, on behalf of the Senate, approved ethical clearance for the above-mentioned study. Hence you may proceed with the planned study.

The ethical clearance is valid for one year only, from **26th May, 2020 to 25th May, 2021.** In case you do not complete data analysis and dissertation report writing by **25th May 2021,** you will have to apply for renewal of ethical clearance prior to the expiry date.

Dr. Emmanuel Balandya
ACTING: DIRECTOR OF POSTGRADUATE STUDIES

cc: Director of Research and Publications, **MUHAS**
cc: Dean, School of Public Health and Social Sciences, **MUHAS**

Appendix VIII: Permission to conduct study

ILALA MUNICIPAL COUNCIL

ALL COMMUNICATION TO BE ADDRESSED TO THE MUNICIPAL DIRECTOR

PHONE NO: 2128800
2128805
2121486

MUNICIPAL OFFICE
1 MISSION STREET
P.O.BOX 20950
11883 DAR ES SALAAM

09 July, 2020

Ref: IMC/DR.6/V/341

DRCH Co.
ILALA MUNICIPAL COUNCIL

RE: PERMISSION TO CONDUCT A STUDY

Reference is made to the above heading

The bearer of this letter **SARAH KAPINGA** is a candidate at MUHIMBILI UNIVERSITY OF HEALTH AND ALLIED SCIENCES **(MUHAS)** pursuing MSc in project Management Monitoring and Evaluation in Health. She requested permission to conduct a study titled "Evaluation of the implementation of the national cancer control strategy 2013: 2022: A case of the Cervical Cancer Screening at National and district levels"

Permission has then been granted to conduct this study in Ilala Municipal Council – Mnazi Mmoja Hosp from **13/07/2020** to **17 /07/2020**. Subject to the condition that she should bring a study results to the Municipal as feedback. The study will involve interview with Clinical service coordinator, Distict Reproductive Health Coordinator and one provider dealing with cervical cancer screening from Mnazi Mmoja HC.

I kindly request your assistance and support.

Anence Kamasho

For: MMOH –ILALA MUNICIPAL COUNCIL

For: MUNICIPAL MEDICAL OFFICER OF HEALTH
ILALA MUNICIPAL COUNCIL

Appendix IX: Research permit District Administrative Secretary

The United Republic of Tanzania
Prime Ministers' Office
REGIONAL ADMINISTRATION AND LOCAL GOVERNMENT

ILALA DISTRICT
Phone Address:

Phone No: 2203185/2203182

In reply quote: **Ref. No:** AB.60/87/01/

DISTRICT COMMISSIONER'S OFFICE
ILALA DISTRICT
P. O. Box 15486,
DAR ES SALAAM
Date: 10/6/20 20

Municipal Director,
P. O. Box 20950,
Ilala,
DAR ES SALAAM.

RE: RESEARCH PERMIT

Prof./Dr./Mr./Mrs./Ms./Miss: SARAH ALFRED KAPANGA
from the MUHIMBILI UNIVERSITY (MUHAS), she/he has been permitted to undertake a field work research on "IMPLEMENTATION OF THE NATIONAL CANCER CONTROL STRATEGY 2013 –2022: A CASE OF CERVICAL CANCER SCREENING AT NATIONAL AND DISTRICT LEVELS." The case study at Ilala District from 15/06/20 20 to 30/6/ 20 20

Therefore, you are asked to give the said researchers necessary assistance and Cooperation.

District Administrative Secretary
ILALA

Copy: .....
.....
Principal/Vice Chancellor,
MUHAS
.....

Appendix X: Research permit Regional Administration Secretary

THE UNITED REPUBLIC OF TANZANIA
President's Office
REGIONAL ADMINISTRATION AND LOCAL GOVERNMENT

DAR ES SALAAM REGION
Phone Number: 2203158
Fax number: 2203158
email: ras@dsm.go.tz
website: www.dsm.go.tz

In reply please quote:
Ref. No. .....

REGIONAL COMMISSIONER'S OFFICE,
3 RASHID KAWAWA ROAD,
P.O. BOX 5429,
12880 DAR ES SALAAM

10TH JUNE 2020

District Administrative Secretary,
.....ILALA.....,
P. O. Box .....,
DAR ES SALAAM.

RE: RESEARCH PERMIT

Prof/Dr/Mrs./Ms/Miss SARAH ALFRED KAPANGA ..... is student/**Research** from MUHIMBILI UNIVERSITY OF HEALTH AND ALLIED SCIENCES (MUHAS) has been permitted to undertake research on EVALUATION OF THE IMPLEMENTATION OF NATIONAL CANCER CONTROL STRATEGY 2013-2022; A CASE OF CERVICAL CANCER SCREENING AT NATIONAL AND DISTRICT LEVELS
From.....15th JUNE..... 2020 to ....30th OCTOBER.....2020.

I Kindly request your good assistance to enable her/his research.

.....
For; **REGIONAL ADMINISTRATION SECRERTARY**
DAR ES SALAAM

Copy: Municipal Director,
.....ILALA.....
DAR ES SALAAM.

Principal/Vice Chancellor
.....MUHAS.....

Appendix XI: Institute Academics, Publications and Etics Commitee(IARPEC)

ORCI OCEAN ROAD CANCER INSTITUTE

Box 3592, Dar es Salaam, Tanzania
Tel. 2127597, Fax: 255-22-2118704
On Reply Please quote

SERVICE — TREATMENT
RESEARCH — DETECTION
TEACHING — PREVENTION

10/VOL.XX/45A

Date: 14th July, 2020

INSTITUTE ACADEMICS, RESEARCH, PUBLICATIONS AND ETHICS COMMITTEE (IARPEC)

Sara Alfred Kapanga
MSc. Project Management Monitoring and Evaluation in Health
Muhimbili University of Health and Allied Sciences (MUHAS)

Re: Study titled "Evaluation of Implementation of the national cancer control strategy 2013-2022: A case of cervical cancer screening at National and district levels."

This is to let you know that the Institute Academics, Research, Publications and Ethics Committee has granted you an ethical clearance for the implementation of the above mentioned research proposal. You will be allowed to interview 6 people from the ORCI cancer screening unit as per request.
Ethical considerations for the local implementation of the proposal have been carefully taken care of.
Furthermore, you are obliged to submit a copy of the final document of this research project to the IARPEC.
Yours Since[illegible]

OCEAN ROAD CANCER INSTITUTE ACADEMIC UNIT P.O. Box 3592 DAR ES SALAAM

Dr. Ma[illegible]au Ngoma
MD, M[illegible]ED, Clinical Oncology
Academic Supervisor - Research and Consultancy
ORCI