

**ADDIS ABABA UNIVERSITY  
COLLEGE OF HEALTH SCIENCE AND  
SCHOOL OF NURSING AND MIDWIFERY**

**INITIATION OF CANCER REHABILITATION SERVICE IN TIKUR  
ANBESSA SPECIALIZED HOSPITAL: CHALLENGES AND  
OPPORTUNITIES: HEALTH WORKERS PERSPECTIVE**

**PREPARED BY: MESERET GAMENE**

**THESIS SUBMITTED TO SCHOOL OF GRADUATE STUDIES OF ADDIS  
ABABA UNIVERSITY, COLLEGE OF HEALTH SCIENCES, SCHOOL OF  
NURSING AND MIDWIFERY IN PARTIAL FULFILLMENT OF THE  
REQUIREMENTS OF MASTER OF SCIENCE IN ONCOLOGY NURSING**

**JUNE, 2020**

**ADDIS ABABA,  
ETHIOPIA**

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**PREPARED BY: MESERET GAMENE**

**NAME OF ADVISOR(S): MRDANEL MENIGSTU (PHD Fellow)**

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My first gratitude goes to God, for everything he has done for me, for all the people and things in my life, past, present and future. So many people in my life, who have come and gone, in one form or another had underwritten to the person I am today, for that I thank you all. I forward my deepest gratitude to my advisor Daniel Mengistu, Asst Prof, for all the productive comments, support and suggestions throughout this research. Thank you! I am extremely grateful for the health worker who had participated in this study and I commend them for their strength and endurance. Staffs of Oncology unit, thank you for all your support and especially for Dr Wendmagegnhu and S/r Eline for your support.

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I thank you all!

## **LIST OF ABBREVIATIONS**

**GLOBOCAN**

GLOBAL BURDEN OF CANCER STUDY

**HCP**

HEALTH CARE PROVIDER

**TASH**

TIKUR ANBESSA SPECIALIZED HOSPITAL

**US** UNITED STATE

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## Abstract

**Background:** Early diagnosis and improved cancer treatments have increased the number of cancer survivors. Accordingly, cancer rehabilitation has been increasingly recognized as a key factor in the management of cancer survivors. In Ethiopia, the number of cancer cases increases from year to year. TikurAnbessa Specialized Hospital is the only hospital in the country that render a comprehensive cancer therapy receiving patients from all over the country. However, the hospital has no cancer rehabilitation center. This overload can lead to inadequate care and also decrease quality of life and survival rate of the cancer patients. Hence, this study was to explore the initiation of cancer rehabilitation service with its challenges and potential opportunities from the health workers perspectives.

**Methods:** qualitative study was conducted among health workers at TikurAnbessa Specialized Hospital, Addis Ababa, Ethiopia using the purposive sampling that includes eight health workers. Data were collected through in-depth interview. The data analysis was performed using Atlas-ti software version 7.5.16.

**Result:** The result of the analysis led to established under the following three themes and eleven sub-theme which are perspective of participant initiation cancer rehabilitation, Participants perspective of challenges for Cancer Rehabilitation service and participants perspective of existing/potential opportunities for the initiation of cancer rehabilitation. In this study the health worker perceived for initiation of cancer rehabilitation health policy, organizational, health professional, perceived patient and family related challenges and opportunities. A graphic representation of the interaction was created for these categories and how they affect the initiation of rehabilitation services for cancer patients.

**Conclusion:** findings of the study is that the government is not giving adequate attention for cancer as a general and rehabilitation service in particular. This can be seen easily as it drafts any policy or guide line and also did not allocate any budget. The other major finding is that institutional problems like workload, lack of working space and manpower. These findings can inform the government and stakeholders should consider the vitality of rehabilitation service since cancer is spreading dramatically

**Keywords:** *challenges, opportunities, initiation, TikurAnbessa specialized hospital*

# CHAPTER ONE:INTRODUCTION

## 1 Background

An advanced sort of cancer is usually amid significant symptom; decrease quality of life and increases physic social problem (1). the planet Health Organization estimated 8.2 million deaths worldwide thanks to cancer in 2012, and this number was expected to rise to 22 million by the year 2030(2). according to the International Agency for Research on Cancer in Tanzania, cancer incidence is anticipated to nearly dual in only 15 years, from 37,000 new patient cases in 2015 to more than 61,000 in 2030.(1)

Ethiopia is home to a growing population of more than 99 million people and is predictable to become the ninth most populous country in the world by 2050, with an estimated parallel rise in cancer burden(2) and also there is no overall population based cancer registration system. However, data from the Addis Ababa cancer registry and GLOBOCAN 2018 report showed that, the annual incidence of cancer is around 67,573 cases and mortality over 47,954(3)

Cancer treatment isn't only treating the disease it damages the healthy cell ,Cancer treatments namely chemotherapy, radiotherapy, surgery and biotherapy are related to adverse effects like pain, nausea, vomiting, hair loss, joint and muscle pain, peripheral neuropathy then alike of these adverse effects show the necessity for rehabilitation services (4).

Early diagnosis and way better cancer medication have moved forwards the amount of cancers survival.in like manner, cancer rehabilitation has been progressively referred to as key factors within the bolster of cancer survivors. the primary models of cancer rehabilitation were written in 1940's by Dr Howard Rusk with within the us [US] and at an equivalent year give the services for cancer patients at MD Anderson Cancer Center in Texas (5).

The World Health Organization (WHO) defines rehabilitation as: “a process aimed toward enabling persons with disabilities to succeed in and maintain their optimal physical, sensory, intellectual, psychiatric and/or social functional levels (6).

Cancer rehabilitation is patient- centered and involves a multidisciplinary approach to quality look after the cancer survivor (7). The rehabilitation service includes preventive, restorative, supportive and palliative (8). Currently the sector of cancer rehabilitation has grown globally over the past years and included in university curriculum (9).

Delivery of rehabilitation service globally includes (10)

Comprehensive, interdisciplinary rehabilitation services (physiatry, physiotherapy, physical therapy, speech language pathology)

Individualized treatment plans

Pretreatment assessments (if indicated) and patient education

Post-treatment assessment and follow up

Lymphedema (swelling) management services

Exercise and fitness programs

Pain management

Nutrition counseling

Rehabilitation may play a task together approach to maintaining and improving the standard of cancer patients. It takes the psychological and physical aspects into consideration.

## **1.2 Statement of The Problem**

Among the varied pillars of cancer patients, the rehabilitation services remain one among the intervention potentials to significantly reduce the deathrate, in return, that better address and minimize both acute and long-term cancer morbidity in various studies cancer rehabilitation is significant, but frequently underutilized treatment within comprehensive care of the cancer patient. the necessity of suitable referral by physicians new with the concept of rehabilitation was identified as essential challenges to ideal delivery of rehabilitation care (11). consistent with the study within the US Cancer rehabilitation is fundamentally takes put in outpatient settings sparing both wellbeing care costs and improving patient quality of life. However, various obstacles to hinder integration of cancer rehabilitation remain (9).

Other study wiped out South Africa stated that the main structural challenges related to health care are usually policy, or regulative measures that hinder the practice of excellent health (12). With an increasing number of patients treated for or living with cancer, these Consequences became still more apparent.

Unavailability and inaccessibility of services, low prioritization, and Knowledge gap about benefits of rehabilitation service for cancer patients, lack of awareness among oncologists, lack of government support on medical equipment, finance and health policies are among the various obstacles(3).

In Ethiopia, the number of cancer cases increases from year to year TikurAnbessa Specialized Hospital is the only hospital in the country that render a comprehensive cancer therapy receiving patients from all over the country. However, the hospital has no cancer rehabilitation center. This overload can lead to inadequate care and also decrease quality of life of the cancer patients. Cancer treatments namely chemotherapy, radiotherapy, surgery and biotherapy are associated with adverse effects such as pain, nausea, vomiting, hair loss, joint and muscle pain, peripheral neuropathy and so alike all these adverse effects show the need for rehabilitation services (4).

The patient who are relatively near to the hospital able to go hospital and decrease waiting time for their treatment like health education, palliative care and physiotherapy. But thousands of more cancer patient death under reported, those patients living in country often seek treatment from

traditional healers before seeking help from the govt system, thanks to many reasons like waiting time for admission is extremely long, delay their treatment, no enough bed, cost problem and transportation. albeit palliative care exists in tikuranbessa hospital, the likelihood of co exitance of rehabilitation will increase patient's quality of life and survival rate. palliative care is fully support patient envisioned end of life goals such as mobility, independence and reduced burden of care, rehabilitation services are acritical to maintaining patient physical capability to the maximum extent possible(5) If there are opportunities to deliver cancer rehabilitation services as part of cancer care in Ethiopia it may help to achieve the aim of increasing patient's quality of life, lower cost for patients and improve survival rate. So, Cancer rehabilitation should be viewed as an essential service for cancer patient quality of life.

### **1.3 Justification of the study**

There is little knowledge regarding cancer rehabilitation in Ethiopia though a cross-sectional study has been done on rehabilitation for cancer patients at TikurAnbessa specialized hospital in 2014 by TeshagerWorku et al. using A 29-item structured cancer rehabilitation program questionnaire finding the main rehabilitation service to be nutritional and psychological support and unavailability of service, lack of professional, lack of knowledge among family members were found to have a significant association with poor utilization of cancer rehabilitation service (6). Yet still the lived experience of health care worker related to cancer rehabilitation service was not assessed so this study will assess this lived experience of the caregivers using a qualitative approach. Overall, the purpose of this paper to identified the challenges and opportunities for initiation of cancer rehabilitation services.

#### **1.4. Significance of The Study**

- The rationale behind this study is to supply vital information to further enhance the understanding of the of rehabilitation services for cancer patient.
- The main significance of the study is to extend survival rate of cancer patients and improve quality of life.
- Moreover, to spot the challenges that has potential to possess profoundly to hinder for initiation of rehabilitation services for cancer patients.
- The results of this study will provide information to government and other concerned bodies in setting policies, strategies and further investigation for reducing the challenges and giving attention the opportunities to enhance road for the initiation of cancer rehabilitation services

## **CHAPTER TWO: LITRETURE REVIEW**

### **2.INTRODUCTION**

This chapter reviews the works of literature associated with challenges and opportunities related to initiation of cancer rehabilitation services the reviews are classified on different categories

#### **The Role of Oncology Rehabilitation**

“I came in to rehabilitation center a bent-over old man; I’m leaving an upright, middle-aged gentleman.” —Mr. T., cancer survivor

With increasing numbers of cancer survivors and their risk of physical, psychosocial and economic consequences from cancer and its treatment, multidimensional or complex cancer rehabilitation has become a pressing public health issue (15)

#### **2.1. Organizational/ Institutional Factors**

qualitative Study conducted in Ontario during year of 2016 from health professional’s perspective implied that lack of oncology rehabilitation service within the country is thanks to lack of health care professionals with experience in oncology, lack of support from administration, unavailability of space, inaccessible health facilities and equipment at the health centers Lack of your time with each patients and therefore the higher priority of other issues associated with Their own profession. during this study on the opposite hand, Participant reported that the facilitators of the rehabilitation services are institutional supports just like the services needed for a cancer center including a rehabilitation trained professional, housing exercise interventions within the institution and creating content specific education for HCPs (16). Study conducted in Korean between May 2011 and august 2011 from perspective of physiatrist focus conference, unavailability of uniform service modules among professionals hinder the rehabilitation services (17). In another research wiped out Canada poor funding for exercise rehabilitation interventions and professionals’ failure to debate about cancer exercise with their patients also are potential barriers for rehabilitation service.

#### **2.2. Health Management / Policy Factors**

Qualitative study conducted In Saudi Arabia in 2018 among 9 health professionals as stated that each one participants of the research acknowledged inadequate fund is that the root for rehabilitation service barrier. Publicly funded rehabilitation hospitals are limited which causes

very long waiting time for admission (18). Study in Korea between May 2011 and August 2011 also showed that lack of state support on health policies, financial and medical equipment support are barriers for cancer rehabilitation service (17). Qualitative study conducted in Iran between June 2014 to July 2015 among 21 participants noted that in the ministry of health you'll find many offices and departments but nothing considering rehabilitation. This may have an impact on the rehabilitation management system.

### **2.3. Health Care Provider Factors**

Study in Korea between May 2011 and August 2011 also showed that lack of data about benefits of rehabilitation services for cancer patients, lack of awareness of cancer rehabilitation services among oncologists are potential challenges for rehabilitation services. On the opposite hand, participants reported that to increase the connection between oncological and rehabilitation specialties could also be important to coordinate the cancer rehabilitation process (13).

Another study in Saudi Arabia from the health professional's perspective communication difficulties among health care providers were a serious challenge to supply cancer rehabilitation services. Many participants reported that healthcare providers attended use patients as a channel of communication between the first team et al. Within the same study the bulk of medical oncologists and hematologists believed that a scarcity of awareness of rehabilitation services and facilities reduced the use of rehabilitation services for oncology cases. Some also said that inadequate knowledge of the complications and treatment of cancer made it challenging for rehabilitation therapists to set goals and plan interventions. Because the complexity of cancer cases was a serious concern, this challenge required highly trained rehabilitation clinicians in various specialties. However, a number of the rehabilitation physicians were reluctant to simply accept oncology cases, thanks to a scarcity of subspecialty training for cancer rehabilitation and insufficient training to treat cancer patients (18). A study in Canada during the year of 2016 showed that physicians are unaware or reluctant to cancer exercise programs and program coordinators suggest education to physicians (19).

### **2.4. Perceived Patient Related Factors**

Qualitative study conducted in Saudi Arabia in 2018 from 9 health care provider perspectives, the bulk of oncologists and hematologists believed that the side effects of cancer treatment including chemotherapy and radiotherapy, made rehabilitation challenging for both healthcare providers and patients, and health professionals also identified patients' medical condition as a matter

because they refuse to participate in exercise program in rehabilitation center if they're in pain (18)

**Theoretical framework:** Phenomenology as a philosophy gives a theoretical guideline for researchers to study human phenomena at a deeper level of consciousness to understand lived experience (7). Phenomenological method is above all effective at bringing the experiences and perceptions of individuals from their own perspectives.

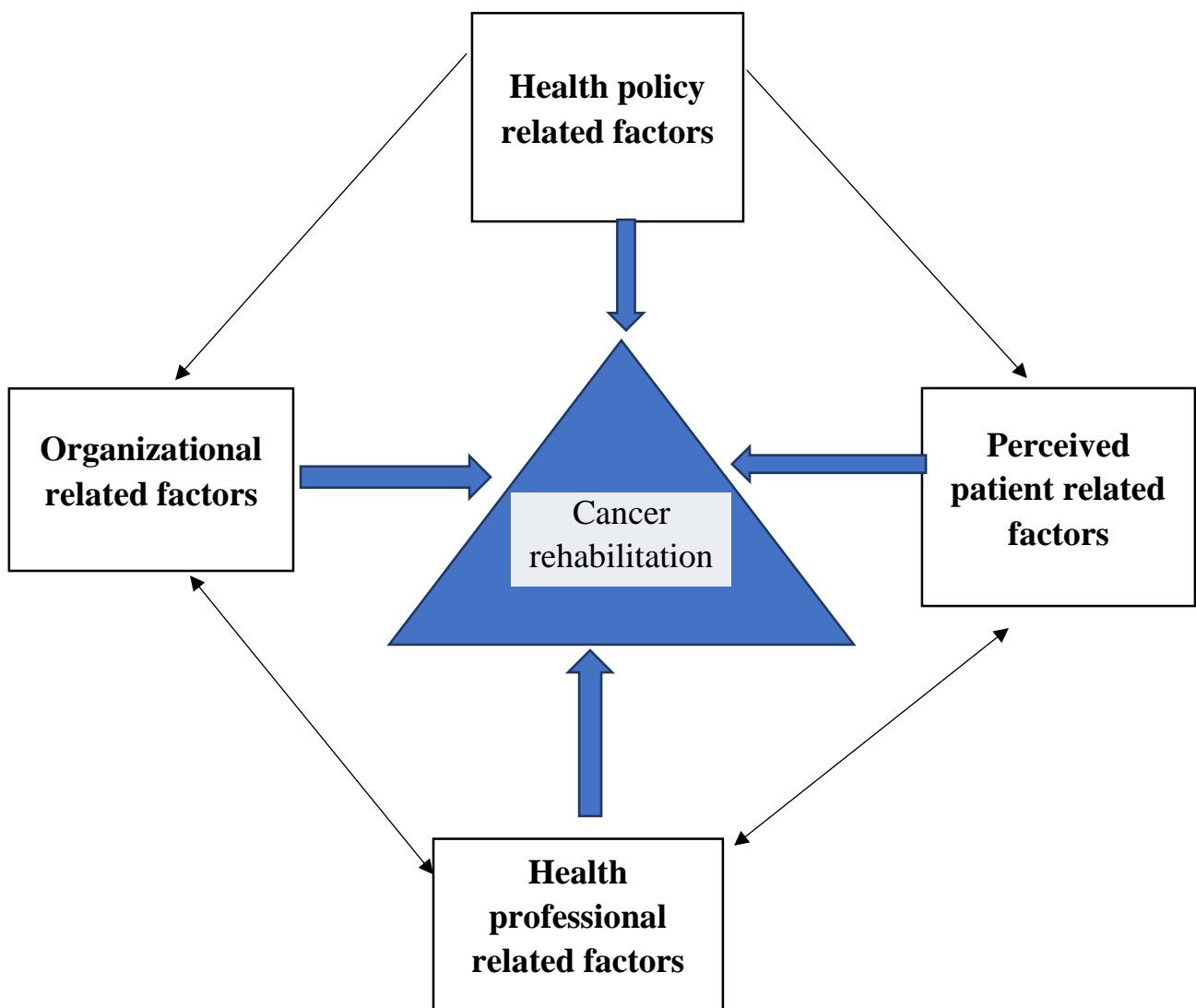


Figure 1 A Conceptual framework developed from (AlJohi 2018, Smith-2016 Yang EJ-2011)

## **CHAPTER THREE: OBGECTIVE OF THE STUDY**

### **3.1 General Objective**

The general objective of the study is to explore the challenges and opportunities associated with the initiation of cancer rehabilitation service from Health worker perspective in TASH Addis Ababa, Ethiopia.

### **3.2 Research Questions**

1. What challenges at TASH to initiate rehabilitation services?
2. What opportunities exist at TASH to initiate cancer rehabilitation services?

## **CHAPTER FOUR: METHODS AND MATERIALS**

### **4.1. Study Area and Period**

The study was conducted in Addis Ababa, which is the capital city of Ethiopia. The city is divided into 10 sub-cities with 116 districts. People from different regions of Ethiopia populate the city; it consists of a total of 93 health facilities including hospitals; out of which 5 hospitals are owned by Addis Ababa Health Bureau, 4 hospitals are owned by Federal MOH (Central), 1 Addis Ababa University, 2 Ministry of Defense, 1 police force, which provide different health services. In addition, there are about 23 health centers, 9 clinics, and 34 health posts. The study was conducted at Tikur Anbessa Specialized Hospital (TASH) and the Ministry of Health. The first Ethiopian hospital was established in 1897, the Ministry of Health in 1948 (8). While TASH was established in the early 1960's and it is under the federal ministry of health, it integrates with Addis Ababa University and is registered as a university hospital, which teaches health professionals.

This hospital has currently 800 beds of which 29 are dedicated for oncology patients according to the registry in the unit more than 10,000 cancer cases are seen in the hospital per year. Source of information, unpublished HMIS data from TASH oncology outpatient and inpatient abstract register book of 2019/20. It is the only available national cancer referral center. It has a number of services specialized in the treatment of cancers such as radiotherapy, medical oncology, anatomic pathology, nuclear medicine, gynecology and surgery. TASH oncology unit has five senior oncologists, two palliative care specialists, nine residents, eight radiotherapists, four medical physicists, 23 oncology nurses and 60 non-oncology nurses.

The most common cancer cases seen in this hospital were breast, cervical, colon and sarcomas. This study was conducted at the oncology unit, Ministry of Health which is one of the specialty units of the facility. The study period was from April 13-28 /2020.

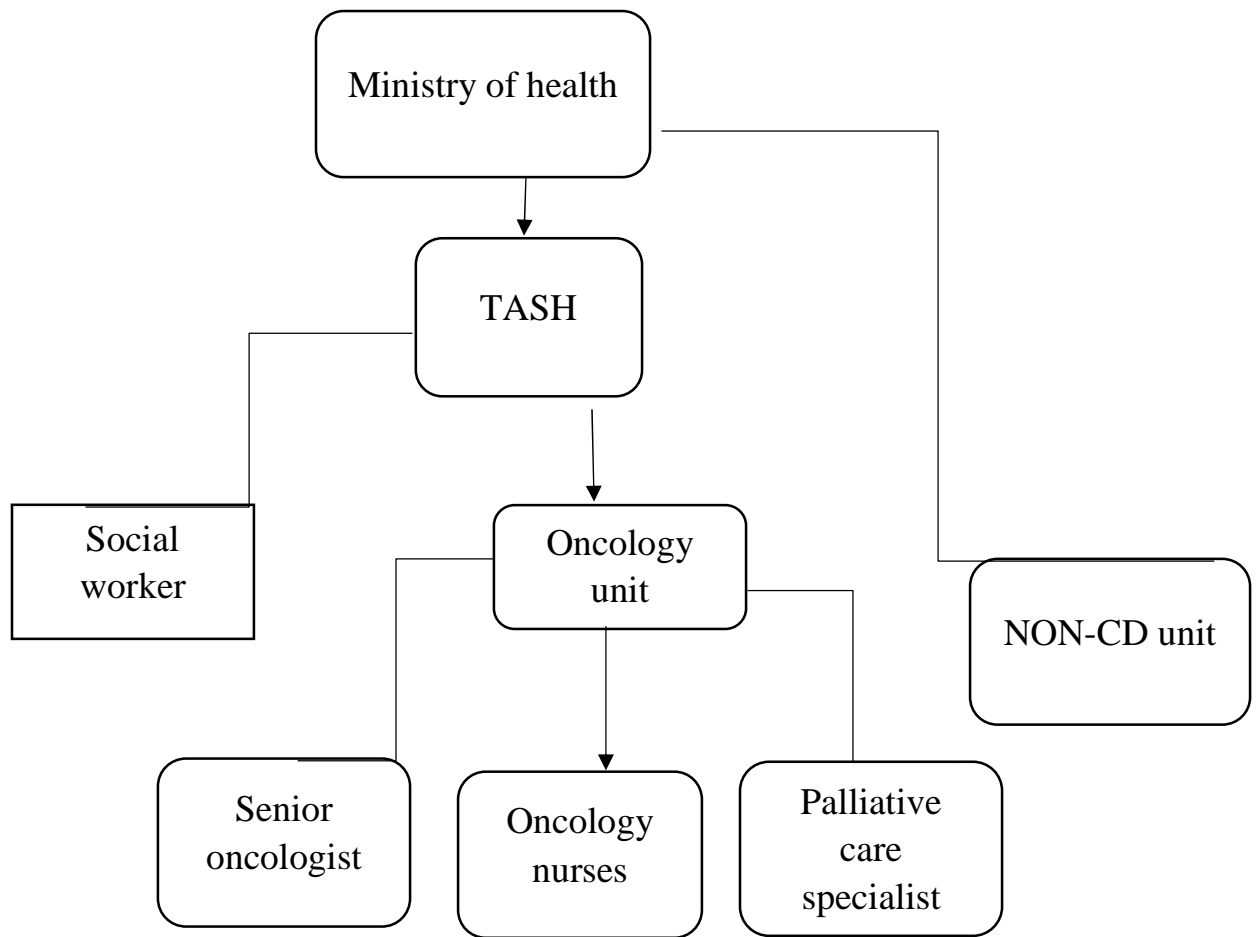


Figure 2 A flow chart showing hierarchy of the organization and the places where the study participants were selected.

## **4.2. Study Design**

Phenomenology is the study of a phenomenon, which can be an event, situation or experience so phenomenology can be termed as a way of describing the lived experience of individuals(9) A descriptive phenomenology will be used to interpret and analysis pure description of the health workers to explore the challenges and opportunities associated with the initiation of cancer rehabilitation services from perspective of health workers. This research explores the lived experience of challenges and opportunities to initiation of cancer rehabilitation services. Phenomenology is the best-suited approach for this study to gain a deeper understanding the health workers and describes their lived experience.

## **4.3. Study population**

All health workers who are working in oncology unit at TASH and from ministry of health Non-CD.

### **4.3.1. Target population**

Health workers who are working at TASH oncology unit and ministry of health who are director of case team on NC-CD during data collection time. were targeted population for this study.

### **4.3.2 Inclusion and Exclusion criteria**

#### **Inclusion**

- Health workers who are working in oncology units with service year of more than three years.
- Ministry of health whom directly works on NON-CD and case team coordinator.

#### **Exclusion**

- The exclusion criteria don't include health students.
- who were on annual leave, maternal leave and extremely ill at the time of the study.
- Whom Joining external training courses off-site during the period of the study and health workers which don't work in oncology units was excluded from the study

### **4.3.3. Recruitment strategy**

Potential participants were branded by department heads, who also gave each participant an information about the study and asked them to consider participating. Those interested were asked to provide their contact details to the researcher

#### **4.4. Sampling technique**

purposive sampling method was used to select the health worker.

#### **4.5. Sample size determination**

The sample size determination was based on until reached a point of data saturation. The nature of qualitative study focused on the quality of information from the participants and different perspectives and opinions of participants. There was no strict rule for sample size determination in qualitative method what matter the sample was the saturation of the information that was obtained. Purposive sampling was used to purposefully recruit health workers. Criterion purposive sampling was used to select the participants. Participants were made heterogenous with regard to their professions. Samples were selected according to the study criteria and selection continues to the point of redundancy so as to maximize the richness of information obtained pertinent to the research question by exploring their lived experiences of the respondents. Data collection stopped at a point where no new emerging data were any more generated and data reached saturation at participants.

#### **4.6. Interview Guide**

The interview guide was containing a list of open-ended questions which have been derived from objectives of the study. The open-ended questions must be balanced, unbiased, and clear.

#### **4.7. Pilot Study:**

To ensure that the interview guide was effective for the study and the researcher proposed to conduct a pilot study with one staff member who fits the inclusion criteria, this person has been omitted from the proposed study. The pilot has been carried out in the same location as the proposed study using the same interview guide. This is qualifying the researcher to test that the audio-recording equipment is working and picking up both voices, the interview guide is applicable and assesses the suitability of the environment the questions were found sufficient to answer the objectives of the study, thus no modification were done on them.

#### **4.8. Probing**

Probing was used by asking the participants neutral questions such as 'Can you mentioned me a potential challenge?' 'Possible Reason, ways or 'Can you mentioned what you mean by saying

...?', or 'Why do you think or say that?' (10) described probing as a verbal or non-verbal prompt that is made by the researcher when participants need to communicate their answer in more detail. Probing can also be useful to get participants back on track, if they begin to wander off the question posed by the researcher. All the interviews were audio recorded and field notes were taken simultaneously to verify the data obtained (10)

#### **4.9.Data collection process and tool**

The researcher has been ensured that all study participants who agree to take part in the interviews were giving the required information regarding the interviews. The purpose of the interview was explained to them before they sign consent forms. The principal investigator and one research assistance having qualitative data collection experience conducted the interviews. During the interviews, a favorable, non-threatening and relaxed environment was created. Participants were encouraged to speak and express their ideas freely and describe their experience related to the topic. the individual interview took place in the private rooms of selected room With the permission of the participants, the individual interviews was audio tape - recorded and notes were taken during the interview in order to capture the original accounts of the participants' responses, this also prevented the researcher from being biased by means of poor notes or memory of the interview. The researcher conducted the interviews in Amharic in a quiet and private room or in their office. Individual interview session lasted for about 30-42 minutes.

#### **4.10. Ethical consideration**

Ethical clearance was obtained from ethical clearance committee of Addis Ababa University, college of health sciences, school of nursing and midwifery (refer 022/20/SNM). I had first contacted the Medical Director of the hospital and explained about the research. The Medical Director then referred me to oncology unit and ministry of health where I had submitted the proposal in two hard copies along with letter from the School of nursing and with my application for permission to conduct the research. After receiving ethical clearance, permission to conduct the research by starting from oncology unit TASH and then non-communicable diseases case team unit at ministry of health. The researcher has been given consent forms to sign indicating their voluntary participation in the study and permission for the audio recording of the interviews. The participation in this study was voluntary; the participants can also withdraw at any time from the study if they feel uncomfortable. To ensure that the participants' rights to anonymity and confidentiality were protected, the researcher has been taken the following measures. The participants were assured that all of the information given by them would be treated in strict confidence and would only be used for the purpose of the study; The researcher has been sure that the collected raw data was kept safe and confidential, locked up in a secure place and the files were password protected, and names of the participants was not written in study records and data has been reported in a manner that doesn't identify or link the participants with the information.

#### **4.11. Dissemination of the study**

The result of this study will be disseminated to ministry of health, Addis Ababa University College of Health Sciences, School of Nursing and Midwifery and to TASH oncology department. Attempts will be made to publish the research findings on reputable journals. The results will also be disseminated through workshops and seminar presentations.

## **CHAPTER FIVE: ANALYSIS AND RESULT**

### **5.1. data analysis**

Data analysis was administered simultaneously with data collection. beat depth interviews were transcribed verbatim directly from audio in to Amharic language transcripts and was translated in to English by the researcher in order that the texts were accurately captured. Interview transcriptions were organized and managed by Atlas ti 7 .5.16 Software, then thematic analysis using editing analysis style was employed by qualitative data analysis software package Atlas ti-7.5.16. After data collection the transcribed data was rereading again to be conversant in the info and check for any errors. then generating initial codes and theme searching among the codes was done. In presenting the info, relevant verbatim quotes were reported to assist the interpretation of the info in each themes and categories. Line by line coding was done to spot themes. From the analytic process three major themes emerged and sub-themes (categories) were identified.

#### **5.1.1 Quality of the Result**

##### **Trustworthiness**

The trustworthiness of a qualitative study is determined by the extent to which it is dependable, confirmable, credible and transferable(11). The researcher adhered to this principle for the study, as stated beneath.

##### **✓ Credibility**

From the perspective of establishing credibility, researchers ensured that those who participated in the research are identified and described accurately. This means participant in the study consider the study results accurate or credible that the study participants find the results of the study true or credible.

### ✓ **Dependability**

It refers to a criterion for evaluating integrity in qualitative studies namely the stability of data over time under different conditions. Credibility cannot be attained in the absence of dependability. The researcher proposes to use an audit trail to enhance the dependability of the

study. The researcher kept a record of all decisions regarding the proposed study with all other information in a locked press.

### ✓ **Conformability**

Refers to the data representing the information participants provided. There should be no biases or subjectivity in the study; the findings must represent the participant's voice. The researcher upheld the principle by clarifying with the participants all the facts.

### ✓ **Transferability**

Transferability refers to the degree to which the results of qualitative research can be generalized or transferred to other similar contexts or settings or groups. In qualitative research, the intention is not to generalize the findings but qualitative researchers have a responsibility to produce sufficient data that is conceptually representative of the people studied within a specific context and they need to account for contextual factors when data is transferred from one situation to another. A thick description of the data will be done to assure the transferability.

Trustworthiness involves establishing the following: credibility, transferability, dependability and conformability.

To assure the trustworthiness of the research and avoid biases the researcher had used different methods. Such as

**Member checking:** Member checking with participants was administered throughout data collection by probing questions, within this, member checking occurred initially by reiterating statements made by participants during initial interview and/or subsequent observations to them for accuracy.

**Audit trail:** The findings of this study was audited and verified by advisors et al. who have experience in qualitative research in order that an outdoor individual can examine the info. Each process was documented and audio records are available for cross-checking.

**Peer-debriefing:** Sessions with researchers and people who have qualitative experience was wont to review and explore various aspects of the inquiry. The researcher discussed data coding, data analysis and interpretation continuously throughout the research process with my peers who also are conducting qualitative researches and with a researcher who is experienced in doing qualitative researches. A peer debriefer (other researcher) reviewed coding of interview data, and to raised understand and describe the connection between categories

to make sure credibility within the present study, notes were written during the interview. Information was probed during interviews until data were saturated. an in-depth summary was written immediately after each interview to clarify the info obtained from participants and confirmation of the info. to determine confidence within the truth of the findings, voice recordings were replayed repeatedly during report writing to make sure that each one information was transcribed. obtain honest and accurate responses from each doctor.

### **Researcher self-reflectivity and bracketing**

The PI may be a nurse in her background that has experience of working in TASH and mentoring health students in their clinical practices. But the researcher had no experience in conducting and analyzing qualitative study. The research advisors involved during this study have a health background and have experience in qualitative data analysis. The context of this study setting differs from the setting at which the PI had worked on before. Therefore, albeit bias is inevitable in any study, the researcher's experience wasn't led to a bias that affects the study findings. Bracketing is that the process of setting aside personal experiences, previous research findings, and preconceived notions about the research topic. during this study, the researcher had a dialogue with fellow researches about personal biases, experiences, and past knowledge about the research topic and wrote things down. Also, on the ultimate report, the researcher has been writing down everything that was bracketed.

### 5.1.2 data visualization

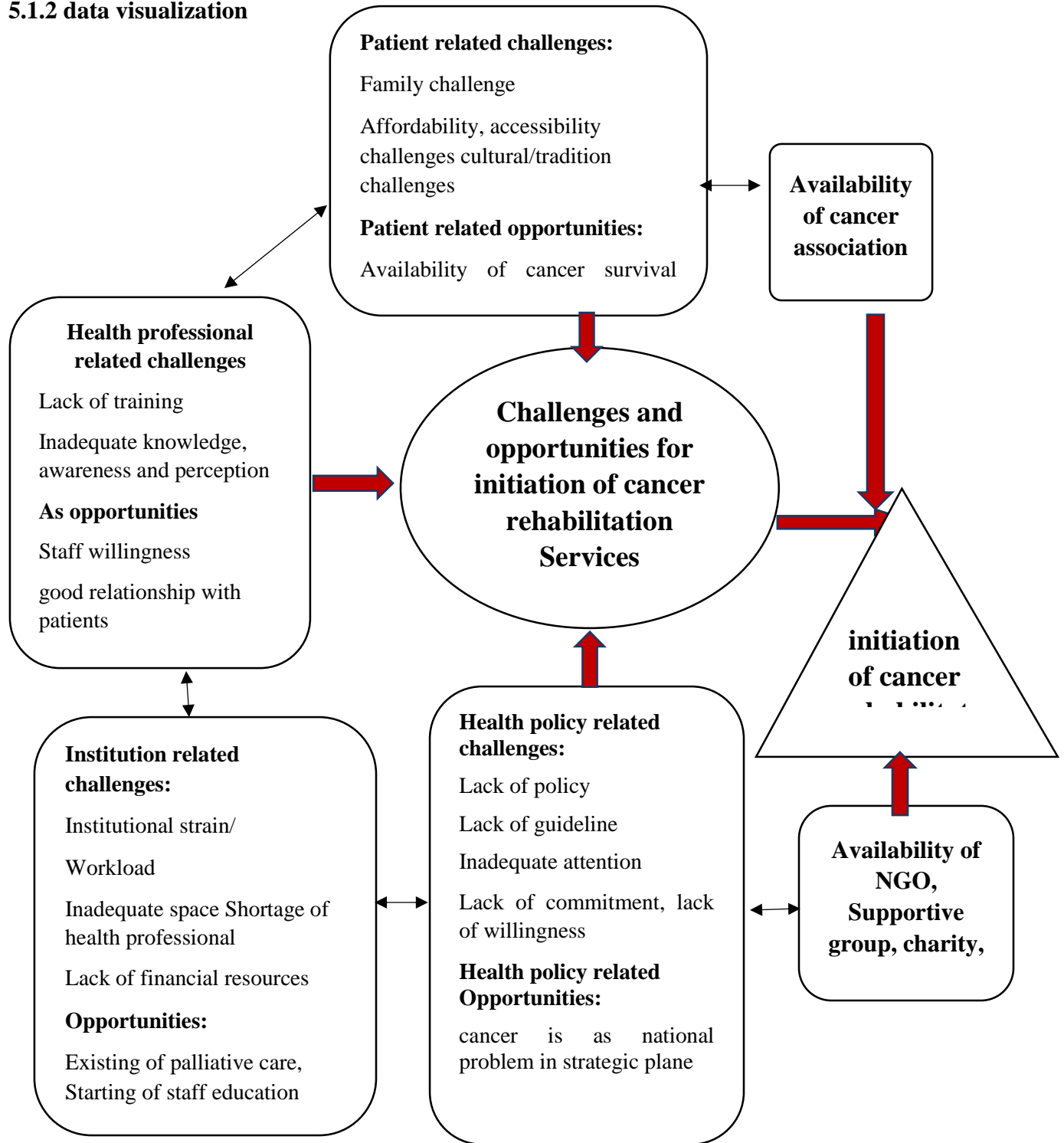


figure 3 data visualization: this view of thematic map indicating the multipart cross-talk interaction among challenges and links between challenges and opportunities for initiation of cancer rehabilitation.

The institution directly impact on health professional should facilitate a good environment for the health professionals by giving training and education. Health professionals also have responsibility of introducing new service for cancer patients through working together with top management. Well dedicated and trained health professionals can influence positively the attitude of the patient about the cancer rehabilitation. The increment of patient burden will create workload on the institution in which the institution will be force to request for the establishment of rehabilitation service for the government.

Increasing rate of cancer patient will push government to establish rehabilitation service. When the government create a policy or become politically committed and implement rehabilitation service the patient's survival rate will increase.

## 5.2. Result

As a result of the interview analysis, three main themes were identified: Perspectives of participants Initiation of Cancer Rehabilitation Service, Participants perspective of challenges for Cancer Rehabilitation service and participants perspective of existing/potential opportunities for the initiation of cancer rehabilitation. corresponding subthemes were explored in (table1)

**TABLE 1 IDENTIFIED THEME AND SUB THEM AMONG PARTICIPANTS INTERVIEW**

Theme	Sub-Theme
<b>Theme 1:</b> Perspectives of participants Initiation of Cancer Rehabilitation Service	<ul style="list-style-type: none"> <li>• Over view Of Participant initiation of rehabilitation</li> <li>• Health worker perception on services Acceptability</li> <li>• Attitude and perception of Health workers on service outcome</li> </ul>
<b>Theme2:</b> Participants perspective of challenges for Cancer Rehabilitation service	<ul style="list-style-type: none"> <li>• Health policy related challenges</li> <li>• institution/facility related challenge</li> <li>• Health professional related challenges</li> <li>• Perceived patient related challenges</li> </ul>
<b>Theme3:</b> participants perspective of existing/potential opportunities for the initiation of cancer rehabilitation	<ul style="list-style-type: none"> <li>• Health policy related opportunities</li> <li>• Facility related opportunities</li> <li>• Availability of NGO and cancer association</li> <li>• Cancer burden</li> </ul>

## Participant description

the study participant was selected from TASH cancer treating center and non-communicable diseases case team coordinator working at Federal Ministry of health. The duration of services year as health workers ranged from 3 to 14 years. Totally, of the respondents were males 75% while the rest were females' shown in (table 2)

**TABLE 2 SOCIO-DEMOGRAPHIC INFORMATION OF PARTICIPANTS (IN-DEPTH INTERVIEW) IN ADDIS ABABA ETHIOPIA**

<b>Participant (P)</b>	<b>Profession/specialization</b>	<b>Age</b>	<b>Sex</b>	<b>Experience related to cancer care</b>
<b>P01</b>	<b>Palliative care oncologist (associated professor)/senior oncologist</b>	<b>52</b>	<b>Male</b>	<b>14 years</b>
<b>P02</b>	<b>Senior oncology nurse</b>	<b>30</b>	<b>Female</b>	<b>7 years</b>
<b>P03</b>	<b>Clinical oncologist(R3)</b>	<b>29</b>	<b>Male</b>	<b>3 years</b>
<b>P04</b>	<b>Clinical Oncologist (R4)</b>	<b>34</b>	<b>Male</b>	<b>4 years</b>
<b>P05</b>	<b>Social worker</b>	<b>35</b>	<b>Male</b>	<b>5 years</b>
<b>P06</b>	<b>Senior oncologist</b>	<b>38</b>	<b>Male</b>	<b>6 years</b>
<b>P07</b>	<b>Non-communicable diseases case team coordinator from ministry of health</b>	<b>33</b>	<b>Female</b>	<b>6 years</b>
<b>P08</b>	<b>Oncology nurse (Head nurse)</b>	<b>39</b>	<b>Female</b>	<b>12years</b>

## 5.2.1 Overview of the Result

### **Theme 1: Perspectives of participants Initiation of Cancer Rehabilitation Service**

As the participants mentioned, the service should not be the responsibility of the government only, it should establish a team of professionals and private volunteers; and prepare draft document and make it open for the professionals because it is time taking. Most of the participant said that they think it will have a good service outcome if the service is available in Ethiopia. almost all participant explained Patients will accept the service due to medical expenses that they incur for treatment and the treatments last for a long time which impose negative impact on them. But some of participant Saied due to lack of fund it won't be successful.

#### **1.1. Over view Of Participant initiation of cancer rehabilitation**

As mentioned by a participant under, willingness matters the most and it is doubtful that the possible establishment of the center. But if it is going to be established it should be one big center which incorporate various departments.

*“There is nothing which can stop us, it is a better thing. The major thing is willingness, but is it going to be implemented? That’s the real question. I think its best thing though. It can be included as one component. It is not only our department need, it’s vital for all departments. So, establishing one center as one college and acting as a big umbrella, I think it’s possible. Our cancer rehabilitation may be one component and other units as the same.” (R3 oncology doctor)*

*“Personally, I don’t think Ethiopia is poor for this service. At least if it is possible to be programmed, understand and accept it as a problem and allocate budget, minimize expense and assign the responsibility for different institutions; I don’t see why it’s not possible because it doesn’t require much. It’s not that much difficult thing starting from physical support, psychological support and medication support. The only thing is understanding the problem and allocating budget properly and making every institution responsible.” (senior palliative care specialist)*

## **1.2. Doctor perception on services Acceptability perceived by participants**

the participant responded thereunder the patients will accept the service thanks to medical expenses that they incur for treatment and therefore the treatments last for an extended time which impose negative impact on them.

*“I don’t doubt that this is what the patients want.... Because the medical expense is not easily attainable, in order to take one cycle chemotherapy in government hospitals the patient is required to pay 300 to 400 ETB and in private hospitals 600 to 800 ETB, this is the first ting. Secondly, it’s not only one-time treatment, oncology therapy; starting from surgery, hormonal therapy, chemo therapy...all these are expensive. In addition to that its six- or eight-months treatment so it will take every penny of the patient which traumatizes the patient psychologically. At least if there is a rehabilitation service it will solve a big problem because most patients who will cease follow up will have supporting group which indirectly contribute to the outcome of the treatment positively.” (senior oncologist).*

The participants under linked it with answering patients various request that they request for. For instance, issues like a place to stay which will be answered through rehabilitation service. So, they will accept it.

*“Most of our patients require rehabilitation service.... They are stage three and four, if you come and see on Saturdays and Sundays you will see them sleeping on the corridor. Rehabilitation is a best thing if they are granted; there is no possible way that they might not accept it.” (R3oncology doctor)*

## **1.3.acceptability of theservice Religious institution**

Almost all participants implied that religion will support or will not be challenge for implementation of rehabilitation service and spiritual leaders should play a role in awareness creation.

*“All religions support helping others so I think they see it positively. Secondly spiritual leaders should help us on this regard since it is a good thought. By the way in South Africa spiritual leaders preach in rehabilitation centers; they pray and educate the patients so it’s a positive thing.” (senior palliative care specialist)*

*“From religion wise I don’t think they have any relation. Patients who passed chemo and radiation don’t complain for services who minimizes their pain.” (senior oncologist)*

#### **1.4 perception of doctors on service outcome perceived by participants**

Most of the participant said that they think it'll have an honest service outcome if the services available.

*“We all understand that rehabilitation service outcome is going to be good. It’s the simplest thing and that we have positive attitude and perception. We all think all the time that if there has been rehabilitation service, it might be better because rehabilitation is that the best.” (R3 oncology doctor)*

The participant explained if the service is implemented the result are going to be excellent but thanks to lack of fund it won’t achieve success.

*“Their understanding isn’t yet mature because most of the patients are very sick and that they think this might have tons of cost, this is often the primary thing. Secondly since the service needs more resource, they're not optimist that it'll achieve success including me. including establishing rehabilitation centers, I don’t believe that much, that the govt will get sufficient fund for the acute cancer patients’ treatment. But if it’s possible, i feel the result are going to be excellent but I don’t think.” (senior palliative care specialist)*

#### **Theme2: Participants perspective of challenges for Cancer Rehabilitation service**

Almost all participants explained that inadequate attention given for cancer by the government and concerned body did not make them understand that unavailability of rehabilitation service as a problem too. Behalf of participants the institution is not considering cancer as a major problem and not showing the willingness to establish rehabilitation service to help the patients. But Almost all participant Due to Treating various patients and crowded space will be challenging to implement cancer rehabilitation service. Also, Unavailability of specialized health professional is

also one of the health systems challenges for implementation of cancer rehabilitation service. There was no training on rehabilitation service.

## **2.1 Health policy /management related challenges**

### **Lack of Guideline and policy**

The study participant mentioned that the challenges related to health management /policy related challenges like Lack of commitment by the government and stake holders lead to poor understanding of cancer as a major problem which hinders responsible body to act accordingly unavailability of specific guideline and policy for cancer rehabilitation.

*“Considering guide line there is no any since the service is not available in Ethiopia at the moment. I don’t think it’s hard to prepare a guide line its simple we can prepare one, butthe only guide line is palliative care guide line which was adopted from American cancer society.”*  
(senior oncologist)

Most health workers are aware that there is a policy with regards to palliative care but the content of the policy was not clear to them. Some did not know that a policy existed at all.

*“In Ministry of Health there is policy for palliative care but I don’t know for rehabilitation service.”* (senior oncologist)

*“There is no policy specifically for rehabilitation service. But if it is decided to be included in a policy, we don’t have a problem with that because the main thing is execution and action.”*  
(Non-CD case team coordinator)

### **Lack of attention, Commitment and willingness**

Almost all participants explained that inadequate attention given for cancer by the government and concerned body did not make them understand that unavailability of rehabilitation service as a problem too.

*“I think the main challenge is lack of attention given for cancer. For example, ministry of health didn’t give much attention for cancer because I don’t think there is an organization which is committed for rehabilitation and hospice care.”(R3oncology doctor)*

According to Health workers, lack of commitment by the government and stake holders lead to poor understanding of cancer as a major problem which hinders responsible body to act accordingly.

*“Considering these things rehabilitation requires more commitment and supplies so we are far behind.” The other thing, Government is not committed that much. I don’t know, relatively our country has more space than any other African countries if we think of outside this institution. Financially we have a lot to do.” (clinical oncologist)*

All participants indicated that willingness is a key in which government lacks willingness in establishment of rehabilitation service.

*“Even though health professionals are willing, the government may not be willing.” (R4 oncology doctor)*

*“the major things are willingness and interest “If there is a will there is away so willingness that matters. If you are willing it’s easy to get support.” (oncology nurse)*

## **2.2 Organizational /institutional related challenges**

### **Lack of institutional responsibility**

All participant mentioned that the main challenge is the institution itself. The institution is not considering cancer as a major problem and not showing the willingness to establish rehabilitation service to help the patients. And another participant also referred the institution is not showing its initiation by allocating budget and assigning professionals.

*“The main challenge is the institution it’s self.... The institution should recognize it as a problem. Once it recognized it as a problem at least in order to solve the problem it should give the chance to the professional.....I don’t think the institution considered cancer as a problem let alone correcting cancer induced community through rehabilitation services. So, the first thing is the institution should recognize the problem as a problem then allocate budget, should assign professional, should prepare future plan consulting professionals, and take responsibility to do this in this year and that in the next year. So, this is the big challenge that the institution didn’t take it as a problem so to request establishment of rehabilitation centers become challenging.”*  
(senior palliative care specialist)

*“in order to start rehabilitation service, initiation is the most important thing. In my opinion I don’t think the hospital managers who are willing to establish rehabilitation center and help patients.”* (R4oncology doctor)

### **institution strain and inadequate space**

Most participants responded that in respect of institutional responsibility, institutions workload/strain, inadequate space, shortage of health professionals and financial resource; the institution is not ready for implementation of rehabilitation service

Participants pointed out that due to work load, and the institution is treating various patients it will be challenging to implement cancer rehabilitation service.

*“I don’t think TASH is ready at the moment because it is not giving treatment only for cancer patients. Different patients come from different places diagnosed with different diseases, all these patients require treatment in the institution so there is a workload. Due to this reason I*

*don't think it is ready. So, an institution should be established for cancer patients outside of TASH just like this which includes rehabilitation center.” (social work)*

Most participants raised that due to crowded space in the institution because of a lot of patient the space is narrow which makes it challenging to implement the rehabilitation service.

*“Most of our patients are locally advanced so they need chemotherapy and radiation. In order to perform chemotherapy and radiation we need more space. The space is crowded we have a lot of patients which makes it hard to fulfill all the required services.....In addition, we have come across shortage of professionals both oncologist and oncology nurses with no adequate space OPD even though we assign these professionals we have no space for them.” (senior oncologist)*

One of the Challenges frequently mentioned by more than half of the participant is that unavailability of specialized health professional which is one of the health systems challenges for implementation of cancer rehabilitation service.

*“lack of professionals and also, I think oncology service by itself is backward. If there were a lot of oncology nurses and oncologists there is a possibility of establishment of rehabilitation center.” (senior oncologist)*

### **Inadequate financial resource**

All participants raised that financial resource will be a major problem even which is not enough for day to day activity and very scarce, this can greatly challenge for initiation of cancer rehabilitation.

*“Budget is the biggest problem. The first thing is the institution should allocate budget. Secondly since we are talking about rehabilitation service, we need to allocate space and then we need to create awareness among the physicians like training them so resource is the main challenge.” (senior palliative care specialist and oncologist)*

In view of the another participants under, resource and man power problem will be a major challenge to give the service at the moment. Financial difficulties and limited resources were

mentioned by different participant in different ways. They expressed the need for more financial support to improve health care facilities, to increase the availability of health professional and equipment, and spaces

*“The major challenges are financial resource and labor force. With the existing space and professionals, it will be challenging to establish and run this service the institution is not ready to give rehabilitation service. Considering management level, I don’t know but we are the front-line professionals who meet the cancer patients, so if we forward for the college what we believe in I think it will accept us. But considering current resource and man power “problem I don’t think the institution is ready but I think they agree on the general idea.” P6(senior oncologist)*  
*“Let alone for rehabilitation, it is not enough for this service.” (oncology nurse)*

### **2.3. Health professional related challenges**

#### **Health care providers’ competencies and knowledge**

Almost all respondents pointed out that attitude and perception will not be that much a problem but some of them mentioned that there is knowledge gap which requires training and one participant said that lack of awareness will be a challenge too:

*“concerning knowledge health professionals need more trainings for this service. But about their attitude I think the staff has positive attitude, the reason I am saying this is because sometimes there are patients who survive from cancer and they suggest these patients to form an association like cancer patient’s survival association. That’s why I said they have positive attitude and perception about rehabilitation services.” (oncology nurse)*

## **Health professional training**

All of the participants responded that there was no training on specifically rehabilitation service but most of them took short time palliative care training which part of rehabilitation service is. And one exceptional respondent has other country experience but he didn't get the chance to share his experience.

*"I was in cape town when I was studying palliative care medicine. I got the chance to visit rehabilitation centers situated there and also, I took some courses but I didn't get the opportunity to give or share those courses here.*

*They are well organized in Cape Town, any physician in the ward whether it is oncology physician or any treating physician, if he believes the patient needs palliative care there are teams to consult and he has contact and the teams will contact him and evaluate him properly. They provide medicine without charge. From that day on periodically they will undertake both home and hospital visit. It is well organized. And also, I got the chance to see the palliative care service in Uganda, more or less they are well organized, atleast they have recognition from government body so fund and administration issues are not a problem." (Senior palliative care specialist)*

## **Technical preparation of the health professional**

as a participant under explained there is variation in preparation among doctors and nurses working in different departments. Which means those who work in the area of oncology understands the problem more which makes them ready, whereas other health professionals are that much into it which requires more training and education on the contrary some participants explained that the health professionals are ready if the services available

*"There are health workers who lean more to oncology. For example, they can be divided into two categories: those who upgraded by education and those who took specific training in oncology, both doctors and nurses, the more they get involved they will start to understand patient's problem which enables them to associate easily. For instance, oncology nurses and clinical nurses are not the same because the one who worked for a long time differs. Oncology nurses are more ready than non-oncology nurses. First of all, clinical nurses who come to*

*oncology unit through round are not that much interested because they think they will be changed to another ward in the near future. Even when you comment them, they are not willing to accept. But oncology nurses since they are assigned for long term, they are ready for what they are told to do and also, they are dedicated for their job. So, they need additional training required for this service.” (oncology nurse)*

Similar to the above respondent, the other participant under stated that since rehabilitation service require starting from understanding the patient, training and awareness creation is vital among health professionals.

*“Ok, for rehabilitation service, they know only the existence of rehabilitation service so giving training is important, more support is required starting from understanding patients. When we say rehabilitation service, we need to understand the patient psychologically, spiritually and “so on as a problem in the first place. So, these things may lag them a bit, so I cannot tell they are ready for sure; so additional training and awareness is required.” (senior palliative care specialist)*

#### **2.4. Perceived Patient related challenges**

Participants perceived that family will not leave patients because of trust issues in which they will not leave their sick patients behind and go home which makes it a challenge. Majority of participants responded that accessibility will be a challenge if the service is centralized since the patients are coming from various cities and sides of the country. Affordability also will be a challenge if the service is not rendered for free and government should generate from private volunteers.

#### **Cultural and Family related factors**

One of the participants mentioned that family will not leave patients because of trust issues in which they will not leave their sick patients behind and go home which makes it a challenge. On the contrary certain participants responded that families will accept it because it is for the better of the patient.

*“Most patients don’t come with only one family member to take care of them. Since they are coming from country side and regional states they come with more than one family member and they need shelter. So, in order to render this service to patients it would be difficult.... A committee should be formed and that committee should prepare drafts and should be able to discuss on it to alleviate this problem..... In developed countries it is simple, for example children can give their sick parents to these centers only with signature. There is no such thing in Ethiopia. No family will have a trust to live the patient with us and go home so they need support. .... So, there are two kinds of rehabilitation services: home delivery and center based. The other thing is family members should give us the patient and we have to be able to treat the patient with fully equipped service.so in our country family will be challenges for such kind of services.” (senior palliative care specialist)*

And in the reverse another participant mentioned some patients cannot stay away from their families and family also need rehabilitation services that lead to challenges to give the service for large family, which will be a challenge on implementation of the service.

*“staying away from family is challenges for patients. They don’t want to stay long time in hospital. Family also need rehabilitation services because rehabilitation services not only for patient but also for the whole family. So, if they are not involved it will not be a complete service but it remains as a big challenge.” (oncology nurse)*

And other participants related it with families which see cancer as a curse will not allow the patients to get the service but if the doctor recommend it, they might accept it.

*“No question about it. Obviously both the patient and family will not accept it. But .....if it is something to be prescribed with cancer care; head and neck surgery radiation, speech therapy, all these are to be started together so since it is an initiative that comes from the professionals but not the patients; I think they will accept it. Through time when they see its benefit, they will like it. Families except transportation and other related issues they will accept it too” (senior oncologist)*

The under mentioned participants replied that there might exist cultural challenge specially with patients of stage four, which requires more awareness creation.

*“Is lack of acceptance due to their tradition, I think we can change this step by step, because inability to accept the fact that a family member is about to die makes it complicated. For instance, there may happen a situation where a patient supposed to take some palliative medications like morphine because he/she is in so much pain, but the family will not allow that because they think the patient will adapt the medicine.” (palliative care specialist)*

### **Accessibility and Affordability**

Majority of participants responded that accessibility will be a challenge if the service is centralized since the patients are coming from various cities and sides of the country. So, decentralization or the service should be rendered in various cities to alleviate the problem according to the respondents noted it.

*“We need to decentralize it. Almost all patients are here waiting for our conclusion and advice but if we are able to create awareness to health management officers that it is possible to render this service anywhere it will be good. In order to start this service, it shouldn't be the responsibility of one institution because most of the patients are coming from country side and regional states. Due to this, it would be better if they get this service around their residence which is important in terms of cost effectiveness and all things.” (R4oncology doctor)*

According to most of the participants affordability will be a challenge if the service is not rendered for free and government should generate from private volunteers.

*“When we talk about affordability there are two things: rehabilitation centers free of charge and with cost. Patients who can afford the private section they can use the private and patients who cannot afford should be able to get equal service. If it is government owned it should be able to address for the poorer. If there is no income it should be able to generate from the volunteers. I think it would be better this way.” (palliative care specialist)*

### **Theme3: participants perspective of existing/potential opportunities for the initiation of cancer rehabilitation**

Most participants believe that increasing patient diagnosis can be an opportunity to initiate cancer rehabilitation service since it is knocking everybody's door. As a participant responded oncologist who took palliative care training are also an opportunity. And As some participants mentioned NGO's and volunteers can be a good opportunity if they are invited.

#### **3.1.Health policy related opportunities**

Some participants relate the opportunities with cancer being the primary national threat and number two non-communicable disease while some of them considered government's initialization of hospice care as a leading way to rehabilitation service implementation.

*“Speaking of opportunity, currently the government included cancer as national problem in strategic plan; this is one opportunity. Secondly cancer is ranked number two in non-communicable disease. The other thing is cancer is becoming a threat and I don't want to say that let government officials be diagnosed with cancer in order to establish rehabilitation center. Ha hahabut in many countries, it is the wife of government officials who establish centers like this in the form of donation.” (senior palliative care specialist)*

#### **3.2.Cancer burden as opportunities**

Most participants believe that increasing patient diagnosis can be an opportunity to initiate cancer rehabilitation service since it is knocking everybody's door.

*“Our diagnosis facility, stage facility and starting of treatment is a good opportunity, we can show the number.” (palliative care specialist)*

*“Increased prevalence of cancer in every home so this is as a big opportunity for initiation of cancer rehabilitation services.” (social worker)*

### **3.3.Facility related opportunities**

Most of the participants consider nurses and doctors studying at the moment as facility related opportunities.

*“Oncology nurse including you, you are yet studying and also as an institution education started 5 years ago; I think take this as opportunity.” (R3oncology doctor)*

As a participant responded under oncologist who took palliative care training are also an opportunity and participant under raised that the service is necessary but it should be linked with palliative care.

*“There are three oncologists who took palliative care training and I consider this as an opportunity. And we run palliative care clinic twice a week and I also consider this as an opportunity because it’s just extending this. Number of staff is increasing time to time, so by assigning dedicated man power the rest can handle daily activity.” (senior oncologist)*

### **3.4.Availability of Volunteer NGO and supportive group**

As some participants mentioned patients who recover from cancer, NGO’s and volunteers can be a good opportunity if they are invited.

*“Volunteers, charities, there are local NGOs which give attention for this thing. If they are invited, they will agree. So, this can be an opportunity.” (Non-Cd case team coordinator)*

*“Other thing there is cancer association which gives service only for females. It has only ten to twenty beds, they provide food and transportation. This is also opportunities.” (palliative specialist)*

### **3.4. Patient related opportunities**

One of the participants said that cancer survivors could be an opportunity.

*“cancer survivor are opportunities as no one will now what they have gone through more than them. So, bringing them as a group could be opportunities.” (oncology nurse)*

*“From patient side I think they will listen to us; we have a good communication with them and they stick with us.” (senior oncologist)*

#### **Solution attempted**

All participant mentioned that there are no previous failed efforts to initiate cancer rehabilitation service in Ethiopia.

## **CHAPTER SIX: DISCUSSTION**

To my knowledge, this is the first qualitative study to examine the challenges and opportunities for initiation of cancer rehabilitation services from the perspective of health workers. One of my key findings was that health worker believed that initiation of cancer rehabilitation service is very important and they believe that it will have inevitable positive impact on patients' health outcome

Though I couldn't get enough literature specifically with this topic, I become interested to do this research because it is vital for oncology unit. When we say rehabilitation service, it is multi-disciplinary and compressive like exercise, nutrition therapy, speech therapy, occupational and so on. From those I linked with my topic and discussed thoroughly.

Comparison with the international literature for some category, my results are comparable with previous qualitative studies concerning cancer rehabilitation services. For example, perceived patient related factors, health professional related factors and facility related factors health policy related factors (12–14) However, new categories were founded including opportunitiesparts, cancer burden, supportive/volunteer group, patient\, HCP relationship, availability of NGO and cancer association.

### **Challenges for initiation of cancer rehabilitation**

Increasing burden of cancer from all corners of the country. Currently, as the study participants reported, there could be more than 120,000 cancer cases in Ethiopia every year. Oncology health care provider also estimate that there were 300 to 500 patients seen at the oncology department per day. This is intolerable load on the health care professional in the department compared to the limited number of human resources in this department. This overload can lead to inadequate care and also decrease quality of life and survival rate of the cancer patients.

The National Rehabilitation Policy recommended that rehabilitation services must be delivered as part of PHC conferring to Community-Based Rehabilitation principles (15).

The findings suggest that the institution lacks willingness to initiate cancer rehabilitation service as it is not properly allocating budget and assigning specialized health professionals. Work load and inadequate space might impose a big challenge on the implementation of the service since

the institution is treating so many patients; obviously next to budget and adequate health professionals. By Smith-Turchyn et al qualitative Study conducted in Ontario during year of 2016 from health professional's perspective implied that lack of oncology rehabilitation service within the country is thanks to lack of health care professionals with experience in oncology, lack of support from administration, absence of space, inaccessible health facilities and equipment at the health centers Lack of your time with each patients and therefore the higher significance of other matters associated with Their own profession. (16)

In order to initiate the service, it is clear that health workers contribution is decisive. But according to participants implications there exists variation in technical preparation among health care professionals. Knowledge gap about cancer even exist in which it emanates from lack of awareness on the subject matter. It might be a result of not having or participating in a single training as the findings pointed out. Even though the service is initiated some of health professionals have doubts on the service outcome. Study in Korea by EunJoo Yan between May 2011 and august 2011 also showed that lack of data about benefits of rehabilitation services for cancer patients, lack of awareness of cancer rehabilitation services among oncologists are potential challenges for rehabilitation services. On the opposite hand, Participants reported that to increases the connection between oncological and rehabilitation specialties could also be important to coordinate the cancer rehabilitation process(13)

Additional studies by AlJohi AA et al have shown some also Saied that inadequate knowledge of the complications and treatment of cancer made it challenging rehabilitation therapists to line goals and plan interventions. because the complexity of cancer cases was a serious concern, this challenge required highly trained rehabilitation clinicians in various specialties. However, a number of the rehabilitation physicians were reluctant to simply accept oncology cases, thanks to a scarcity of subspecialty training for cancer rehabilitation and insufficient training to treat cancer patients.(14)

Besides health workers, government involvement is the first and most important thing to implement the service. But as the study shows the government and ministry of health is not committed on recognizing and acting on cancer as a major problem. Unavailability of guide line and policy on rehabilitation service shows clearly that the government is not giving due

attention. When we say government it's obvious that we are talking about top health managers in which they lack willingness which evolves from awareness and knowledge problem. Study in Korea between May 2011 and August 2011 also showed that lack of state support on health policies, financial and medical equipment support are barriers for cancer rehabilitation service.(13)

Effect of cancer on both the patients and their families will be devastating. Although it causes them a lot of problem, it wouldn't be easy for the patients' family to leave their sick family members to leave behind in the rehabilitation center even if we implement the service. According to the participants, it is not only the family that will be a challenge; the patients will not be willing to stay away from their families. In addition, our society considers cancer as a curse in which they might not understand the value of the service. Even if we pass through all that; as the participants implied; accessibility will be an obstacle if the service is centralized. As it is well known, cancer treatment will make the patient and their family suffer not only psychologically, it also squashes them financially. So, if the service is not affordable its implementation will face a challenge.

### **Opportunities for initiation of cancer rehabilitation**

The WHO has made cancer in developing countries a priority. It has formed key guidelines to assist developing countries to establish national cancer control programs that are appropriate to their setting(17)

Since cancer is listed as number two non-communicable disease, it might make the government to give due attention and also initialization of hospice care by the government will pave a way for initialization of rehabilitation service.

Day to day increment of cancer diagnosed patients might be an opportunity on the other side to initiate the service. Currently doctors and nurses are studying oncology which will increase health professionals. Also, oncologists who took palliative care training will be an addition since palliative care is one part of rehabilitation service as participants raised. The study conducted in Ontario, Canada during year of 2016 from health professional, reported that the facilitators of the rehabilitation services are institutional supports just like the services needed for a cancer center including a rehabilitation trained professional, housing exercise interventions within the

institution and creating content specific education for HCPs(12). Various NGOs, volunteers and cancer survivors will have significant impact if they get involved.

## **CHAPTER SEVEN: CONCLUSION AND RECOMMENDATION**

### **CONCLUSION**

One of the major findings of the study is that the government is not giving adequate attention for cancer as a general and rehabilitation service in particular. This can be seen easily as it drafts any policy or guide line and also did not allocate any budget. The other major finding is that institutional problems like workload, lack of working space and manpower.

### **RECOMMENDATION**

#### **Implication for Government and stakeholder**

government and stakeholders should consider the vitality of rehabilitation service since cancer is spreading dramatically. The government, facilitating suitable environment and allocating budget.

#### **Implication for Policy maker**

The policy maker should be committed and prepare policyIt gives a set of tangible actions and policy suggestions to improve cancer patient care.

#### **Implication for Health facility**

The institution should request the top management frequently for rehabilitation service, should train and narrow knowledge gap through facilitating trainings and awareness creation. Concerning working space, it should facilitate a center outside of the institution but supervised by it.

#### **Education/TrainingImplication**

Should Enhancing health workers knowledge through training and creating awareness. Facilitating opportunities for health workers who took palliative care training to extend it to rehabilitation service.

**Implication for other Research:** Furthermore, the existence of more researches will further direct the health care system

## **UNIT EIGHT STRENGTHS AND LIMITATION OF THE STUDY**

### **STRENGTHS**

- This study is the first qualitative study that attempted to identify challenges and opportunities for initiation of cancer rehabilitation from the perspective of health workers
- Can be used as baseline data for future study.

### **LIMITATION**

- Lack of literature hinders further discussion and comparison

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## ANNEX- I

### Information sheet and consent form

#### INITIATION OF CANCER REHABILITATION SERVICE IN TIKUR ANBESSA SPECIALIZED HOSPITAL: CHALLENGES AND OPPORTUNITIES: HEALTH WORKERS PERSPECTIVE

**Greeting!**

**Hello Dear participant!**

**Introduction and purpose:** My name is Meseret Gamene I am staff member of Addis Abeba University. Currently undertaking a masters of oncology nurse in AAU, college of health sciences department of nursing.

As part of the course I am required to carry out a research proposal with the aim of identifying the challenges and opportunities associated with the initiation of cancer rehabilitation services from your perspective, having an in-depth interview with you has become an important idea. I hope that the interview I would be having with you is very much helpful to improve problems related cancer survival rate and cancer patient quality of life.

In doing this interview, I was raising some questions concerning the challenges and opportunities.

**Voluntary Participation:** Your participation in this research is entirely voluntary. It is your choice whether to participate or not. If you choose not to participate, all the services you receive

at this hospital will continue and nothing will change. You may change your mind later and stop participating even if you agreed earlier.

**Procedure:** If you agree to you will have an interview with the researcher (Meseret) or another interviewer which will take approximately 30-50 minutes. During the interview, I or another interviewer will sit down with you in a comfortable place at the Hospital. If it is better for you, the interview can take place in your home or a friend's home. If you do not wish to answer any of the questions during the interview, you may say so and the interviewer will move on to the next question. No one else but the interviewer will be present unless you would like someone else to be there. The information recorded is confidential, and no one else except the researcher will access the information documented during your interview. The entire interview will be tape-recorded, but no-one will be identified by name on the tape. The tape will be kept in a laptop which is secured by a password. The information recorded is confidential, and no one else except the researcher will have access to the tapes. The tapes and manual paper data will be destroyed after five years.

**Confidentiality:** We will not be sharing information about you to anyone outside of the research team. The information that we collect from this research project will be kept private. Any information about you will have a number on it instead of your name. Only the researchers will know what your number is and we will lock that information up with a password.

**Risk and benefits:** There are no foreseeable physical, psychological or social risks or discomforts involved in participating in this study. However, this study might take about 30- 50 minutes of your time. This study has no direct benefits to the respondents by taking part in this study in terms of finance or other means. However, you and cancer patients will be benefitted indirectly by providing cancer rehabilitation services

**Who to contact:** If you have any questions, you can ask them now or later? If you wish to ask questions later, you may contact the researcher by the following address: MeseretGamene

Address: [Email mesiyared21@gmail.com](mailto:mesiyared21@gmail.com)

**Phone number+125968435426**

This proposal has been reviewed and approved by school of nursing and midwifery ethical review committee, which is a committee whose task it is to make sure that research participants are protected from harm.

**Thank you in advance to those of you willing to participate.**

**Informed consent:**

Form by understanding the foregoing information, I'm giving my consent to participate in a study entitled "challenges and opportunities associated with to initiation of cancer rehabilitation from perspective of health worker in TekurAnbesa Specialized Hospital, Ethiopia 2020". I have read or it has been read to me the foregoing information about the nature of the study, benefits, voluntary participation, confidentiality and withdrawal from the study at any time without any harm. I have had the opportunity to ask questions about it and any questions I have been asked have been answered to my satisfaction. I consent voluntarily to be a participant in this study.

Code number of Participant \_\_\_\_\_

Signature of Participant \_\_\_\_\_

Date \_\_\_\_\_

**If illiterate I**

have witnessed the accurate reading of the consent form to the potential participant, and the individual has had the opportunity to ask questions. I confirm that the individual has given consent freely. Print name of witness \_\_\_\_\_

Participant Signature of witness \_\_\_\_\_

Date \_\_\_\_\_

**Statement by the researcher**

I have accurately read out the information sheet to the potential participant, and to the best of my ability made sure that the participant understands what will be done. I confirm that the participant was allowed to ask questions about the study, and all the questions asked by the participant have been answered correctly and to the best of my ability. I confirm that the individual has not been coerced into giving consent, and the consent has been given freely and voluntarily.

Name of Researcher \_\_\_\_\_

Signature of Researcher \_\_\_\_\_

Date \_\_\_\_\_

## **Annex II Questionnaire (English Version)**

### **Un-structured in-depth interview guide form**

**Interview date:** .....

**Start time:** .....

**End time:** .....

**Interviewer:** .....

### **Background**

**Sex:** .....

**Age** .....

**Profession**.....

**Specialization:** .....

**Where did you complete your education:** .....?

**Experience related to cancer care/oncology unit:** .....?

## 1.General

- A. How many patients report to your desk in a week?
- B. Where do these patients come from (Probe: How many of them are referred and first timers, Age category of patients, stage of cancer)
- C. There might be different challenges for initiation of cancer rehabilitation services. Can you mention some of these challenges?

### 4.11 The open-ended questions were as follows:

#### 1. Challenges

1. Is there a challenge related to the knowledge, perception and attitude of health workers towards cancer rehabilitation service? (**Probe: perception on the importance of rehabilitation service**)
2. How do you see the technical preparation of health workers to render this service to cancer patients?
3. What is the perception and attitudes of health workers on service outcome? (**Probe: reasons**)
4. What are the challenges related to availability and adequacy of health workers to deliver the service?
5. Was there any training on cancer rehabilitation service?
6. Did you receive any training on cancer rehabilitation service?

7. Is there any facility related challenges for initiation of cancer rehabilitation services? Can you tell me those challenges? (**Probe with possible reason :**)

8. Is there challenges related to the knowledge, perception and attitude of Health managers towards cancer rehabilitation service? (Probe: perception on the importance of rehabilitation service)

9. Is there policy support for cancer rehabilitation service in Ethiopia? (**Probe: whether this service is addressed in the national health policy of Ethiopia, national cancer control and prevention program**)

10. Can mention challenges related to resource for cancer rehabilitation service

11. What are the implementation challenges related to cancer rehabilitation services. (**Probe: working procedure, Guidelines, readiness of health facilities**)

12. Considering the current situation, do you think that it is possible to initiate this service for cancer patients?

13. What is patients experience elsewhere in the world? (**Probe: perceived satisfaction of patients with the service outcome**)

14. How do you see the perceived acceptability of the service by cancer patients in Ethiopia?

15. What do you think are the challenges related to access, affordability and quality of the rehabilitation service?

16. What are the challenges from the family and society side?

## **2. Solution attempted**

1. Was there previous failed efforts to initiate cancer rehabilitation service in Ethiopia? (Probe: reason for failure)

## **3. Opportunities**

1. Is there any opportunities that can facilitate the initiation of cancer rehabilitation services?  
(Probe: opportunities in institution and society/community)

#### 4. Suggestion/strategies

1. Can you suggest the strategies/solutions that can be used to overcome the aforementioned challenges to initiate cancer rehabilitation service? (Probe: ways)

#### APPROVAL BY THE BOARD OF EXAMINATION

This thesis by Mesert Gamene is accepted in its present form by the board of examiners as satisfying thesis requirement for the degree of masters in oncology nurse.

INTERNAL EXAMINER:

NIGUSE TADELE                      ASSISTANT PROFESSOR

NAME                                      RANK      SIGNATURE      DATE

External EXAMINER:

NAME                                      RANK      SIGNATURE      DATE

RESEARCH ADVISORS:

DANEL MENGSTU                      PHD Fellow

NAME                                      RANK      SIGNATURE      DATE

DEPARTMENT HEAD

NIGUSE TADELE                      ASSISTANT PROFESSOR

NAME                                      RANK      SIGNATURE      DATE



**STATEMENT OF DECLARATION**

By my signature below, I declare and affirm that this thesis is my own work. I have followed all ethical principles of scholarship in the preparation, data collection, data analysis and completion of this thesis. All scholarly matter that is included in the thesis has been given recognition through citation. I affirm that I have cited and referenced all sources used in this document. Every effort has been made to avoid plagiarism in the preparation of this thesis.

This thesis is submitted in partial fulfillment of the requirement for a graduate degree from the Addis Ababa University at College of Health Sciences, School of Allied Health Sciences department of Nursing and Midwifery. The thesis is deposited in the Addis Ababa University Digital Library and is made available to local, national and international scientific community. I solemnly declare that this thesis has not been submitted to any other institution anywhere for the award of any academic degree, diploma or certificate.

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STUDENT

MESERET GAMENE                      BSC \_\_\_\_\_

NAME                                      RANK                      SIGNITURE                      DATE

RESEARCH ADVISORS:

\_\_\_\_\_ DANEL MENGSTU                      PHD FELLOW \_\_\_\_\_