



**ADDIS ABABA UNIVERSITY**

**SCHOOL OF COMMERCE**

**DEPARTMENT OF BUSINESS LEADERSHIP**

**THE EFFECT OF LEADERSHIP TRAINING PROGRAM ON LEADERS'  
EFFECTIVENESS: THE CASE OF HEALTH CARE FACILITIES IN  
ADDIS ABABA**

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**JUNE, 2024**

**ADDIS ABABA, ETHIOPIA**

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**A THESIS SUBMITTED TO THE DEPARTMENT OF BUSINESS  
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MASTERS OF ARTS (MA) IN BUSINESS LEADERSHIP**

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## DECLARATION

This is to declare that the thesis titled "*The Effect of Leadership Training Program on Leaders' Effectiveness: The Case of Health Care Facilities in Addis Ababa*" was submitted in partial fulfillment of the requirements for the Master of Science degree in Business Leadership at the Addis Ababa University. The work contained in this thesis is my own original research and has never been submitted to any other institution for any other degree or certification. The assistance and support I received during the course of this investigation have been properly acknowledged.

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Name of Student

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Date

## **STATEMENT OF CERTIFICATION**

This certifies that the research conducted by Kebron Senay on the subject of "The Effect of Leadership Training Program on Leaders' Effectiveness: The Case of Health Care Facilities in Addis Ababa" is entirely original with the potential to be submitted for consideration for an MBA in Business Leadership. As a university adviser, I have given my consent for this project paper to be submitted for review.

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Zegeye Muluye (PhD)

(Advisor)

June, 2024

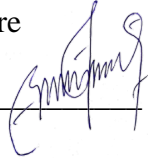
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**Approval of Dissertation/Thesis after Defense**

As members of the board of examiners, we examined this dissertation/thesis entitled '**The effect of leadership training program on leaders' effectiveness: the case of health care facilities in Addis Ababa**' by **Kebron Senay**. We hereby certify that the thesis/dissertation is accepted for fulfilling the requirements for the award of the degree of Master of Arts in Business Leadership.

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## **ABBREBATIONS AND ACRONYMS**

ANOVA - Analysis of Variance

SPSS - Statistical Package for Social Sciences

## **ABSTRACT**

*This study aims to examine the effect of leadership training program on leaders' effectiveness: the case of health care facilities in Addis Ababa, Ethiopia. The research adopted a mixed-methods approach, combining quantitative and qualitative analysis. The quantitative analysis included a robust data collection process, achieving a 91% response rate from 126 distributed questionnaires. Pearson correlation and multiple regression analyses revealed strong positive relationships between the independent variables (Optimizing Leadership Skills, Resolving Uncertainty, Enhancing Adaptability, and Promulgating a Vision) and the dependent variable of Leaders' effectiveness. The model collectively explained 64.9% of the variance in Leaders' effectiveness. The qualitative data analysis provided additional context, highlighting the challenges faced by medical directors in government-run healthcare facilities due to a lack of formal leadership training programs. Private hospital directors also expressed the need for more comprehensive, tailored leadership development opportunities. The study's integrated findings underscore the critical role of leadership competencies, adaptability, visionary thinking, and uncertainty management in enhancing healthcare leaders' effectiveness. The results provide valuable insights to guide strategic decision-making and operational improvements, with a focus on developing targeted leadership training programs to address the identified areas of need. The paper concludes with recommendations for comprehensive, context-specific leadership development initiatives; ensuring diverse participation; implementing continuous learning; strengthening mentorship and coaching; and integrating leadership training within broader organizational strategies. Future research directions are also suggested to further explore this important topic.*

**Key Words:** *Leadership training effectiveness, Healthcare leadership, Competency development, Organizational adaptability, Visionary leadership*

# CHAPTER ONE

## INTRODUCTION

### 1.1. Background of the Study

Recognizing the importance of leadership training development program for leaders' effectiveness in healthcare, various initiatives have been implemented globally to enhance leadership capacity within healthcare settings (Pallas et al., 2013). Healthcare is a complex industry that requires effective leadership to provide successful healthcare services (Gilson, 2016; Alasiri & Kalliecharan, n.d.). Healthcare leadership is a cross-cutting component of the health system building blocks that helps strengthen the other five building blocks (Bayou et al., 2020). The health care system needs effective leadership to mobilize resources and maximize favorable health impacts (Reddy et al., 2017; Dartey-Baah, 2014).

The existence and efficacy of these initiatives in the medical facilities of Addis Ababa, however, are still largely unexplored. Much of the nation's healthcare infrastructure is located in Addis Ababa, the political, economic, and cultural center of Ethiopia. In order to solve the particular difficulties, the Addis Ababa healthcare system faces and guarantee the provision of high quality, patient-centered care, it is imperative to comprehend the status of the leadership development programs offered by these facilities. Leadership, defined as the ability to influence the attitudes, beliefs, and abilities of leaders to achieve organizational goals, plays a vital role in delivering high-quality, compassionate, and patient-centered care (West et al., 2015; FUFU, 2017). Effective leadership is critical for continuous reform and efficient service delivery in healthcare organizations (Ayeleke et al., 2018).

The African health system, characterized as fragile and weak due to poor leadership, faces challenges despite the pivotal role of leadership in better managerial performance (Ezeh, 2015; Borrill et al., 2000).

Ethiopia's healthcare system has several challenges, mostly due to a rapidly growing and heterogeneous patient population as well as scarce resources, especially in the country's capital, Addis Ababa. Effective leadership in healthcare facilities is essential in this situation. In addition to the quality of service, leadership has an impact on staff morale, organizational success as a whole, and operational effectiveness (Ayele, Hawulte, Feto, & Azale, 2017).

In Ethiopia, a lack of leadership commitment hinders health reforms (Tadesse, 2019). The unavailability of health workers due to poor leadership contributes to the loss of lives (Kuria et al., 2016). Healthcare leadership assessments at public hospitals in Addis Ababa revealed a score of 61% (Manyazewal, 2017). Organizational and personal factors such as gender, job commitments, work experiences, organizational cultures, leadership styles, and emotional intelligences influences leaders' effectiveness (Badri-Harun et al., 2016).

Over the past 20 years, Ethiopia has made significant financial investments to improve healthcare. Hospitals requires many resources since they must pay for expensive modern medical supplies, equipment, and highly qualified staff. The nation's hospital count reached 241 in 2016 (Ministry of Health, 2016a: 63); however, the public's dissatisfaction with hospital conditions persists. According to the study, efforts aimed at enhancing Ethiopian hospitals' overall performance must prioritize competent hospital leadership.

Numerous medical facilities, such as clinics, hospitals, and specialty treatment centers, can be found in Addis Ababa, the capital of Ethiopia (Teshome, Yohannes, & Kitila, 2021; Kifle, Azage, & Abebaw, 2017; Gebresilassie, Belete, & Kebede, 2020). In terms of healthcare services, it is a significant hub (World Bank Group, 2016). In order to address the numerous health problems that are prevalent in the area and satisfy the needs of the city's growing population, the healthcare system is crucial (Federal Democratic Republic of Ethiopia, Ministry of Health, 2015).

The healthcare system in Ethiopia's capital, Addis Ababa, faces obstacles such as insufficient resources and unequal access to care, but it makes strides thanks to programs like the health extension program. To address the changing healthcare demands of the city, initiatives are being made to improve healthcare leadership and administration (FMH, 2019). Effective leadership positively affects organizational performance and leaders' emotional regulation (de Oliveira & de Lacerda, 2015; Bono & Ilies, 2006).

Leadership capacity-building interventions among managers have shown improvements in healthcare performance (Desta et al., 2020). Ethiopia's Health Sector Transformation Plan (HSTP) aims to achieve a comprehensive vision and become a middle-income country by 2025, requiring effective healthcare leadership (Duressa, 2014). However, challenges in realizing HSTP in Ethiopia include the lack of strong leadership in the health sector (FMOH, 2020).

This study is looking into leadership training programs in healthcare facilities in Addis Ababa with the goal of comprehending their existence, efficacy, advantages, disadvantages, and potential for improvement. The research aims to provide valuable insights for the development of customized leadership strategies that will improve capacity and healthcare outcomes in the city through thorough analysis. This study aims to assess healthcare leadership training effectiveness and associated factors among leaders in private and public health institutions in Addis Ababa, Ethiopia.

## **1.2. Statement of the Problem**

Leadership is not restricted to those in positions of power. There are leaders in every part of an organization. They are people with moral and intellectual abilities to visualize courses of actions that are best for the organization, and can influence people to achieve that vision (Yukl, 2010). Therefore, leaders do not need to be managers. Managers tend to rely on the harder Ss of the 7-S framework: strategy, structure, and systems. Leaders tend to operate on the soft skill of style, staff, skills, and shared beliefs (The 7-S Framework, 2008). Leadership in healthcare is considered distinct from leadership in other industries due to the unique challenges and complexities of the healthcare system. Healthcare leaders are responsible for managing a wide range of resources, including medical personnel, equipment, and facilities, as well as coordinating the delivery of care to patients.

To manage effectively these resources and direct efforts, healthcare leaders need to have a deep understanding of the medical field and the specific needs of their patients and community. This often requires specialized medical knowledge and training, as well as the ability to understand and navigate the complex regulations and policies that govern healthcare systems. Healthcare professionals from all backgrounds have expertise in this area; however, there is a paucity of research on leadership within the clinical environment among healthcare staff other than doctors.

Therefore, it is imperative that the evidence base for effective leadership within healthcare professionals is developed. Evidence from the wider literature suggests that training is required to produce effective leaders. Leadership training and development programs have been shown to improve the skills and knowledge of leaders, which in turn lead to better performance and outcomes (Lacerenza et al., 2017).

In fact, leadership training programs that were tailored to the specific needs of the individuals participating in the program were most effective in improving a leader's skills (Roupnel, Rinfret, & Grenier, 2019).

Numerous obstacles confront Ethiopian hospitals, including those pertaining to the standard of treatment provided there. Furthermore, hospitals receive very little funding. Due to all of these issues, patient and healthcare staff satisfaction is low, and society's complaints about these institutions are out of control. Although research on patient safety and outcomes is lacking, anecdotal data indicates that errors pertaining to the provision of healthcare and other patient safety issues are prevalent in hospitals in Addis Ababa.

The success of hospital administrators and leaders, in the researcher's opinion, may have an impact on each of these factors (quality of service, safety, and empowerment of healthcare staff). As a result, the researcher looks for causes of low levels of empowerment and job satisfaction as well as low patient experiences with high-quality care.

Therefore, this research tries to examine the relationship between these factors and the efficacy of health care leadership. They propose tactical measures to enhance each of these characteristics and expand the scope of hospital leadership and governance to accommodate these measures.

### **1.3. Research questions**

In light of the above problem statement, the study will attempt to answer the following questions.

- 1) How does the optimization of leadership skills through training programs contribute to improved leaders' effectiveness in health care facilities in Addis Ababa?
- 2) How does the resolution of uncertainty through leadership training programs impact leaders' effectiveness in health care facilities in Addis Ababa?
- 3) What is the relationship between enhancing adaptability through training programs and leaders' effectiveness in health care facilities in Addis Ababa?
- 4) How does the promulgation of a vision through leadership training programs influence leaders' effectiveness in health care facilities in Addis Ababa?

### **1.4. Objective of the study**

#### **1.4.1. General Objective of the study**

The general objective of the study is to evaluate the effect of leadership training programs on leaders' effectiveness in health care facilities in Addis Ababa.

#### **1.4.2. Specific Objectives of the Study**

The study's specific objective will be determined by its overall goal, which is to:

- ❖ To assess the relationship between optimizing leadership skills through training programs and leaders' effectiveness in health care facilities in Addis Ababa.
- ❖ To examine the impact of resolving uncertainty through leadership training programs on leaders' effectiveness in health care facilities in Addis Ababa.
- ❖ To evaluate the influence of enhancing adaptability through training programs on leaders' effectiveness in health care facilities in Addis Ababa.
- ❖ To investigate the relationship between promulgating a vision through leadership training programs and leaders' effectiveness in health care facilities in Addis Ababa.

### **1.5. Significance of the study**

The study's prospective contributions to the field of healthcare leadership and training programs, especially in the context of Addis Ababa, make it significant. The following will be the significance of the study:

**Addressing a research gap:** The study focuses on the effectiveness of leadership training programs in healthcare facilities in Addis Ababa. There is a lack of comprehensive research in this specific context, particularly in developing countries like Ethiopia. This study believes to partially fill the research gap by providing empirical evidence and insights into the effectiveness of leadership training programs in Addis Ababa's healthcare sector.

**Improving leadership practices:** By assessing the efficacy of leadership training programs, the study aims to identify areas of strengths and areas that need improvement in leadership practices within healthcare facilities. The findings can inform healthcare organizations and leaders about the impact of training programs on leadership development, enabling them to make informed decisions and implement targeted interventions to enhance leaders' effectiveness.

**Enhancing healthcare outcomes:** Effective leadership is essential for enhancing patient safety and care quality as well as other healthcare outcomes, and overall organizational performance. This study's findings can have practical implications for healthcare organizations in Addis Ababa, helping them understand the factors that contribute to effective leadership and how to optimize leadership practices to positively impact healthcare outcomes.

**Guiding policy and decision-making:** The study's findings can provide valuable insights to policymakers and decision-makers in the healthcare sector. Understanding the effectiveness of leadership training programs can inform the development and implementation of policies and initiatives aimed at improving leadership development and enhancing the overall quality of healthcare services in Addis Ababa.

**Contributing to knowledge and practice:** The study's findings will contribute to the existing body of knowledge on leadership training program in healthcare. They could act as a reference for upcoming studies efforts and contribute to the ongoing discourse on leadership training program in the healthcare sector. Additionally, the study's insights can inform the design and application of more efficient leadership training programs, benefiting healthcare organizations and leaders in Addis Ababa.

In summary, this study's significance lies in its potential to improve leadership practices, enhance healthcare outcomes, guide policy and decision-making, and contribute to knowledge and practice in the field of healthcare leadership. By addressing the research gap and providing evidence-based insights, the study aims to contribute to the overall advancement of the healthcare sector in Addis Ababa.

## **1.6. Scope of the study**

The scope of the study outlines the boundaries and limitations within which the research is conducted. In this case, the scope of the study on the efficacy of leadership training programs in healthcare facilities in Addis Ababa is as follows:

**Geographic scope:** The study has focused specifically on healthcare facilities located in Addis Ababa, the capital city of Ethiopia. It will not extend to healthcare facilities outside of this geographic area.

**Sector scope:** The study encompasses both public and private healthcare facilities in Addis Ababa. By including both sectors, the aim is to provide a comprehensive assessment of leadership training programs across different types of healthcare organizations.

**Participant scope:** The study involved healthcare leaders, including managers, supervisors, and administrators, who have participated in leadership training programs within the selected healthcare facilities in Addis Ababa. The study will not include other healthcare staff or non-leadership personnel.

**Time scope:** The study considered leadership training programs up until the time of data collection. It will not take into account any subsequent changes or developments that may occur after the data collection period.

**Variable scope:** The study focuses on assessing the effect of leadership training programs on leadership effectiveness in terms of leadership skills, practices, team collaboration, communication, and the quality of patient care within healthcare facilities.

It will not delve deeply into other aspects such as financial management, infrastructure development, or operational processes unrelated to leadership training programs.

## **1.7. Limitation of the Study**

Potential flaws in the study include the possibility of sampling bias, limited generalizability to other geographic contexts outside Addis Ababa, and reliance on self-reported data from participants. These limitations were addressed through rigorous data collection methods, triangulation of data sources, and careful interpretation of findings within the designated parameters of the study. In the case of the study on “the effect of leadership training programs on leaders’ effectiveness in healthcare facilities in Addis Ababa”, the following limitations are identified.

**Sample size and generalizability:** The results of the study are based on a certain sample of Addis Ababa's medical facilities. The results may not be as generalizable to a larger population if the sample size is small. The findings may not be representative of the entire healthcare sector in Ethiopia or other regions. Care should be taken when extrapolating the results to different contexts.

**Data collection bias / Self-reporting bias:** The study relies on self-report data from healthcare leaders who have participated in leadership training programs. This raises the risk of response bias, in which participants give responses that are deemed acceptable by society or overstate the effectiveness of the programs. The accuracy and objectivity of the data could be influenced by the participants' perceptions, memory, or personal biases.

**External factors and contextual variables:** The effect of leadership training programs on leaders' effectiveness might be influenced by various external factors and contextual variables that are beyond the scope of this study. Factors such as organizational culture, resource constraints, and external support systems could affect the outcomes of the programs.

**Causality and confounding variables:** The study aimed to assess the effect of leadership training programs on leaders' effectiveness; however, establishing a direct causal relationship can be challenging. Other variables, such as prior leadership experience, individual characteristics, or external events, could influence leaders' effectiveness.

**Resource constraints:** The study's scope and depth might be influenced by resource constraints such as time, funding, or access to a larger sample size. Data collection is restricted to a set time, and the study is carried out within that timeframe.

Therefore, the results might not fully convey long-term effects or changes that could occur over time. The dynamic nature of leadership and healthcare practices might not be fully captured within the study's limited timeframe. These limitations could affect the study's ability to explore certain aspects or conduct analyses that are more extensive.

## **1.8. Definition of key terms**

For the purposes of this investigation, the investigator defines them as follows:

***Leadership development training:*** In this study the leadership training program is considered to be the leadership incubation program for health by the ministry of health Ethiopia and the leadership development training program for healthcare workers by the Ethiopian public health institute.

***Leadership and Management:*** Leadership is the capacity to convince a group of people to pursue a vision or set of objectives. It involves guiding and motivating others to work towards a common purpose.

In contrast, management is concerned with organizing, planning, and regulating resources to achieve organizational objectives. While leadership is more about inspiring and influencing, management deals with the operational aspects of achieving goals.

***Effectiveness***: describes the degree to which aims or goals are accomplished and problems are solved. It measures the degree to which desired outcomes are realized. Effectiveness is about doing the right things and achieving results, irrespective of the costs or efficiency involved.

***Optimizing leadership skills***: Optimizing leadership skills involves the process of developing, refining, and maximizing the abilities, competencies, and behaviors of leaders. It aims to enhance their effectiveness in leading and influencing others within an organization.

***Resolving uncertainty***: refers to the ability to address and navigate ambiguous or uncertain situations effectively. It involves gathering relevant information, analyzing alternatives, and making informed decisions in the face of uncertainty.

***Enhancing adaptability***: refers to the capability of leaders to adjust, learn, and respond effectively to changing circumstances, challenges, and opportunities. It involves being flexible, open-minded, and resilient in the face of evolving organizational and environmental conditions. Adaptive leaders can quickly adjust their strategies, behaviors, and approaches to meet the demands of a dynamic and unpredictable environment.

***Promulgating a vision***: involves the act of communicating and disseminating a compelling and inspiring vision or strategic direction to stakeholders within an organization. It includes engaging and inspiring others to embrace and strive to accomplish the shared vision.

By effectively promulgating a vision, leaders can align efforts, foster a sense of purpose, and guide the organization towards its desired future state.

## **1.9. Organization of the paper**

There are six chapters in the study. Contents are arranged as follows: A broad backdrop, a description of the research difficulties, aims, and research questions, as well as the study's significance and breadth, are provided in Chapter one. The second chapter provides a broad overview of the literature while taking into account theoretical and empirical studies that pertain to the efficacy of healthcare leadership training programs. The third chapter discusses the study's methodology.

The research findings are presented in chapter four together with interpretation and an explanatory analysis. Chapter five concluded with a summary of the main findings, conclusions and recommendations.

## **CHAPTER TWO**

### **REVIEW OF RELATED LITRATURE**

In this chapter, the researcher begins by emphasizing the importance of reviewing existing knowledge when attempting to answer research questions. They define a literature review as a comprehensive evaluation of ideas and studies related to a specific research topic. The functions of a literature review include identifying existing knowledge, assessing one's own level of knowledge and theory, supporting the selection of a study plan and providing justification for the research problem.

The researcher then describes the process of consulting various sources such as textbooks, journals published online, guidelines, policy documents, newspapers, and websites to gather information on the effect of leadership training program on leaders' effectiveness. Resources utilized to access relevant literature are Google Scholar, PubMed Central, and the UNISA online library.

The chapter also delves into the concept of leadership, highlighting the challenges in what it is and how it differs from management. It explores the functions of leadership, which include setting visions, building high-performance teams, motivating individuals, creating harmony with superiors and the environment, and fostering a satisfying team environment.

The discussion then moves on to effective leadership, noting the lack of consensus on its definition. Various factors are identified as indicators of leaders' effectiveness, such as the achievement of group goals, evaluations by subordinates, and measures of subordinate satisfaction and performance. The chapter also touches on different theories of leadership, including contemporary perspectives that focus on the relationship between leaders and followers.

Lastly, the chapter introduces the competencies of effective clinical leadership, which encompass knowledge, skills, and attitudes necessary for effective performance in healthcare management and leadership roles. These competencies are categorized into areas such as health care context-related competence, operational management and leadership competence, and general management and leadership competence.

Therefore, in order to comprehend and draw conclusions on the efficacy of hospital leadership, the researcher reviewed a variety of textbooks, journals, international and governmental policy documents and guidelines, newspapers, and websites. The researcher conducted a thorough investigation on hospital care quality, health worker empowerment and satisfaction, patient safety culture, successful hospital leadership, leadership theories, and leadership styles. To obtain the required literature resources, the researcher used UNISA online library, PubMed Central, and Google scholar.

Overall, chapter two provides a review of relevant literature on leadership, serving as a foundation for developing a plan to improve Ethiopian hospital leadership's efficacy.

## **2.1. Conceptual literature review**

### **2.1.1. Introduction to leadership**

Even though a great deal of research has been done and a great deal of literature has been written about leaders and leadership, there is still no "grand unifying theory" or concept that unites leadership academics worldwide. Studying leadership is challenging since we demonstrate it after the fact (Allio 2012:4-5). Still, "the ability to influence a group towards the achievement of a vision or set of goals" is the definition of leadership. The authority ingrained in the corporate structure or informal sources may be the source of the influence (Robbins, Judge, and Hasham 2012:259).

Despite their differing meanings, some people mix the terms leadership and management, leaving many perplexed. Both are critical to an organization's success. Effective management establishes structure and order through the creation of plans, their execution and seamless integration into the organizational framework, and the monitoring and assessment of organizational actions in relation to those plans. While leaders build a vision, communicate, unite, and inspire others around that vision, leadership focuses on adapting to change. Setting and aiming for goals and assisting the group in focusing on them, forming a high-performing team, inspiring the group to maintain motivation, fostering harmony with superiors and the surrounding environment to gather resources for action, and forming a fulfilling team to reduce dropout rates are the five main responsibilities of leadership (DiGirolamo 2010:1–12). The goal of management is to put leaders' vision and plan into action.

### **2.1.2. Effective leadership**

There is no universally accepted description of what constitutes effective leadership. Some searching through literature on the subject (Sudha, Shahnawaz, and Farhat 2016:113) discovered about 5000 definitions of leaders' effectiveness. Leaders shape other people's attitudes and behaviors. From a collective standpoint, effective leadership indicates that efforts are concentrated towards a shared objective (Sogunro and Brook 1998:28). "Leader's ability to effectively influence followers and other organizational stakeholders to the goals of the organization" is another definition of effective leadership given by Yukl (2008:711).

Scholars studying leadership concur that, among many other things, an organization's ability to lead successfully is one of its most important components. A leader's efficacy is determined by the results of their deeds, the followers' perception of them, and the conduct that leaders exhibit, even though there is no agreement on how to assess it (Madanchian, Hussien, Noordin, and Taherdoost 2017:1043).

There are several theories of leadership that explain why certain people are excellent leaders, ranging from the great man theory of leadership to more modern approaches. The three views that comprise modern theories are; personality traits as specific behaviors; process or interaction between leaders and subordinates as a combination of qualities; and leadership skills, also known as leadership competencies. To identify the traits and roles of successful leaders, the principles of leadership are extensively researched (Amanchukwu, Stanley, and Ololube 2015:6-7). Hospital leaders' effectiveness is typically assessed by evaluating a leader's behavioral traits or leadership styles (Hamlin and Patel 2011:231-261; Yozgat and Sahin 2013:216-221). According to the National Health Service institute for innovation and improvement and the academy of medical royal colleges (2010), the Healthcare Leadership Alliance and the American College of Healthcare Executives (2015), and Pihlainen, Kivinen, and Lammintakanen (2016), competencies—visible and quantifiable capabilities of hospital leaders—can also be measured to assess the efficacy of leadership in hospitals. Furthermore, the focus of leadership scholars has shifted in recent years from the previous agency model, which placed a lot of emphasis on individual traits, the self, and seizing opportunities, to seeing people as pro-organizational, self-actualizing, trustworthy, and relational (Dierendonck 2011:1229).

### **2.1.3. Competencies of effective clinical leadership**

According to the business dictionary 2017c, competencies are a "cluster of related abilities, commitments, knowledge, and skills that enable a person (or an organization) to act effectively in a job or situation". These competences could be a person's knowledge, aptitude, or disposition that have been assessed as part of their ability to execute.

In 2016 Pihlainen, Kivinen, and Lammintakanen conducted a systematic evaluation of the literature (pp. 95–110). They found items to meet the inclusion criteria. Following their emergence, thirteen subcategories of management and leadership competencies were divided into three main groups. These principal groups are:

*Leadership and management competencies relevant to the context of healthcare:* four subcategories include it: financial, business, organizational, and social competence. Hospital administrators and leaders must possess social competence, which includes knowledge of and comprehension of the laws and regulations pertaining to the political, social, and legal contexts in which the hospital operates. Hospital management and leadership are directly tied to organizational competence and related abilities (organizational tasks and job content). It is the comprehension and knowledge of relationships, decision-making processes, and organizational activities. Business competency refers to the capacity to apply business skills in a health care setting and to implement changes, services, development, resources, and planning procedures. Business skills are necessary to operate the health care industry, which is regarded as a business (Kim and Kathryn von 2014:150-180). Financial competency is the ability to manage a health care company effectively by applying one's knowledge and skills in marketing, finance, and budgeting.

Process, operation, clinical, and development competencies are the subcategories that make up operational management and leadership competence.

(1) Process competency is the term used to describe the knowledge and comprehension connected to enhancing patient-related quality and service processes and management.

(2) Operational competence is the capacity to use clinical abilities to run a ward. It also requires a deep grasp of executive tasks, available resources, operations, and the delegation of authority.

(3) Clinical competency is the capacity for professional, clinical, credibility-related to the profession, and up-to-date medical knowledge. It also includes strengthening and developing the leaders' corresponding skills, which falls under the development competency category.

Time management, interpersonal skills, strategic mindset, thinking and application skills, and human resource management are the subcategories that make up general management and leadership competency, which is a crosscutting competency of management and leadership skills for all health professionals. Time management is the capacity to keep an eye on assignments and timetables.

Interpersonal skills are the capacity to establish relationships and communicate clearly with others. Competencies linked to strategic growth, vision, and thinking are referred to as strategic mindset. It might also be used to describe a manager's capacity to inspire leaders and carry out strategic planning and mission execution. Strategic mentality also includes analytical reasoning and effectively conveying the organization's goal and vision to others. The term "thinking and application skills" describes the ability to multitask, think critically, set priorities, and use information to solve problems and make decisions. Lastly, the term "human resource management competence" describes the knowledge and abilities associated with human resource management.

Technical competence, conceptual skills, and interpersonal skills are the three broad categories of competencies in leadership and other business fields (West, Armit, Loewenthal, Eckert, WestandLee 2015:8). These are outlined below;

*Technical competence:* The organization's basic working environment and the health care services it provides are well-known to the leader. The leader possesses an understanding of the organization's strategy, structure, and procedures.

*Conceptual skills:* The leader prepares actions and takes significant judgments after making an effort to understand and interpret the complicated external and internal environment. The ability of the leader to make decisions contributes to the followers' increased trust in the organization.

*Interpersonal skills:* involve developing a rapport with followers by learning about their wants and emotions, as well as maturing emotionally and managing one's own responses to followers.

One could assume that the findings of Pihlainen and colleagues' systematic research on hospital leadership and management competence fall into one or both of the skill groups that West and colleagues previously identified.

#### **2.1.4. Principles and styles of effective leadership**

In-depth 262 meetings were held by The Work Foundation with 77 managers, executives, and direct reports who were employed by six renowned and long-lasting UK firms (Tamkin, Gemma, Wendy, and Sussanah 2010:1–12). According to the study, exceptional leaders exhibit high performance achievement and fiercely prioritize people because they believe that it is through people that they can achieve high performance. According to this study, great leaders follow three key leadership principles: analyze and act methodically; see people as the path to success; and exude confidence without coming across as conceited.

Like all other disciplines, health care is growing increasingly complex. In order to deal with this shift, health care leadership must be founded on values and firmly rooted in the ideas of upholding and even surpassing high standards of safety and quality. Given the complexity of the healthcare system, the following guidelines are recommended (Saul, Best, and Noel 2014:1-4):

*Clarity of purpose:* The conventional silos that existed between various health professionals during their training are to blame for the health care system's propensity for fragmentation. The current state of healthcare is less safe, and its leadership needs to make clear what it wants to achieve.

*Alignment of effort:* All parties involved in the health care industry, including ministers, CEOs, boards, and physicians as well as other front-line staff members, must collaborate to develop a common vision, define their roles, and work on the system of the future.

*Credibility of leadership:* Setting an example, being bold, and taking chances are essential to getting followers to cooperate with leaders. In order to establish a trustworthy connection with stakeholders (followers, patients, middle managers, senior managers, etc.), leadership needs demonstrate due diligence.

*Integrity in the organization:* A robust core value that strikes a balance between organizational and personal values, flexibility, and adaptation are necessary in a complex system of healthcare that is always changing.

Promoting variety and opposing viewpoints will help the organization achieve its objectives, particularly in terms of better involving Leaders.

## **2.2. Theoretical literature review**

Contemporary leadership theories that apply to the health sector

### **2.2.1. Resonant leadership theory**

Relational leadership is a necessary technique for leaders in the complex healthcare system of today. Scholars studying healthcare leadership have adopted the recently developed concept of resonant leadership. In order to establish solid, trustworthy relationships and foster an environment of hope that motivates dedication, leaders must exhibit "behavior of a high level of emotional intelligence, are in tune with the emotions of those around them, use empathy, and manage their own emotions effectively" (Squires, Tourangeau, Laschinger, and Doran, 2010: 916).

Unlike other leadership theories, resonance leadership places a strong emphasis on emotional intelligence. As a result, resonant leadership is regarded as one of the best models in the medical field. According to social and multiple intelligence theories, resonant leaders exhibit a high degree of emotional intelligence (Luthans, 2012: 231-232). Daniel Goleman's groundbreaking research on emotional intelligence helped to promote the idea of resonant leadership. "*The capacity to recognize our own feelings and those of others, to motivate ourselves, and to manage emotions well in ourselves and in our relationships*" is how he characterized emotional intelligence (Boyatzis and Oosten, 2003: 3). Goleman also combined social and personal competencies, which are utilized by researchers to assess leaders' emotional intelligence.

Clusters of self-awareness and self-management are components of personal competency. Emotional self-awareness, truthful self-evaluation, and self-assurance are all part of the self-awareness cluster. Adaptability, emotional self-control, initiative, accomplishment orientation, dependability, and optimism are all part of the self-management cluster. Social awareness and relation management clusters are included in social competency. While the relation management cluster comprises inspirational leadership, developing others, being a change catalyst, conflict management, influence, teamwork, and collaboration, the social awareness cluster comprises empathy, service orientation, and organizational awareness (Boyatzis and Oosten, 2003: 4).

Numerous empirical researches in the field of healthcare, particularly in the area of nursing leadership, have examined resonant leadership in relation to a variety of outcome variables, including work empowerment, patient safety culture, worker satisfaction, and patient satisfaction. For example, a study by Laschinger, Wong, Cummings, and Grau (2014: 11) shows that job satisfaction and workplace empowerment for nurses are significantly positively correlated with resonant leadership. Bawafaa, Wong, and Laschinger (2015: 617), who noted that resonant leadership influences nurses' structural empowerment and job satisfaction, corroborate this conclusion. Additionally, Squires et al. (2010: 921) point out that resonant leadership greatly strengthens the bond between nurse leaders and nursing staff, which in turn improves the environment for patient safety. Research indicates that in order to be effective, healthcare administrators should be emotionally intelligent. According to Freshman and Rubino (2002: 8), it's time to realign and teach healthcare administrators emotional intelligence abilities, or find candidates who already possess them.

Emotional intelligence is not without debate, though. There are three areas of concern highlighted by critics such as Cherniss (2010: 111): inconsistencies in models and definitions, the need for improved methods of assessment and measurement, and the importance of emotional intelligence as an indicator of key organizational outcomes like leader effectiveness.

### **2.2.2. Servant Leadership Theory**

Robert Greenleaf's 1977 groundbreaking book "The Servant as Leader" brought servant leadership to the area of leadership. "*The servant leader is a servant first... it starts with the innate desire to serve, to serve first,*" he said (Greenleaf, 1977: 7). According to Greenleaf, in contrast to other leadership philosophies that place an emphasis on organizational goals, a servant leader prioritizes the needs of their followers. Because servant leaders are person-centered and assist followers realize their potential to support the company in achieving its objectives, followers have faith in them (Greenleaf, 1998: 45).

Every follower is respected and valued by servant leaders as they are seen as unique individual deserving of love and respect. By fostering personal development, autonomy, and wellbeing, they also support a learning organization (Dierendonck, 2011: 1231).

### **2.2.3. Leader-Member exchange theory**

Previous leadership research concentrated on specific leaders and looked at followers' actions from the standpoint of the leader's impact on followers. The LMX theory focuses on the nature, character, and attributes of dyadic relationships—the relationships that exist between leaders and subordinates (Gumbo, 2015: 8). According to Walumbwa et al. (2011), LMX is "the quality of exchange between a supervisor and an employee." The fundamental unit of analysis in LMX is the nature of the exchange relationship (dyad) between a leader and a subordinate (van Breukelen, Schyns, and Blanc, 2006: 295). The fundamental idea is that a leader will form unique trade relationships with their subordinates, and the outcome between the leader and the member is determined by the caliber of these interactions. When a leader and follower establish a productive relationship that influences the leader-member outcome, leadership takes place (Avolio, Walumbwa, and Weber, 2009: 433).

### **2.2.4. Complexity leadership theory**

Conventional and bureaucratic management practices, characterized by top-down hierarchies, are common in the healthcare industry and lead to various challenges (Hanson and Ford, 2010: 6588). Escalating expenses and ineffective systems, growing intricacy, and a growing evidence gap are major factors impinging on health quality (Institute of Medicine, 2011: 50-51). These traditional frameworks are no longer suitable for the challenge's healthcare leaders face. The emergence of complexity science theory offers a new perspective, proposing that organizations can adapt constantly and leaders should adopt acquiring fresh knowledge and skills and seeing the world through the prism of complexity (Burns, 2001: 474).

### **2.2.5. Authentic leadership theory**

In a world that is changing quickly, a new kind of leadership is required to foster optimism, confidence, and hope. Authentic leadership creates a resilient organization, helps people search for meaning and self-awareness, and builds confidence for all stakeholders. Public pressure to control corporate scandals and management malpractices has driven the emergence of authentic leadership (Walumbwa et al., 2008: 90).

*"A process that draws from positive psychological capacities and a highly developed organizational context, resulting in greater self-awareness and self-regulated positive behaviors on the part of leaders and associates, fostering positive self-development"* is how authentic leadership was defined in June 2004 at the Gallup Institute of Leadership Summit in Omaha, Nebraska (Luthans, 2012: 433).

### **2.3. Review of empirical studies**

Leadership Development Programs (LDPs) have become a critical component of leadership training in healthcare, as evidenced by numerous empirical studies. These programs are designed to enhance the skills and competencies of healthcare leaders, thereby improving organizational performance and patient outcomes.

In 2020, Smith and colleagues conducted a comprehensive survey across various healthcare organizations, revealing that 78% of these organizations had formal LDPs in place. These programs varied in length, subject matter, and modes of delivery but commonly included coaching sessions, leadership workshops, and opportunities for hands-on learning. This widespread adoption underscores the importance attributed to leadership development in the healthcare sector (Luthans, 2012: 434).

Several investigations have evaluated the effectiveness of LDPs. For example, Jones et al. (2018) carried out a longitudinal investigation to evaluate the effects of a leadership development program on employee engagement over time. They found significant improvements in employee engagement among participants, indicating the lasting benefits of these programs. Similarly, Patel et al. (2019) conducted a randomized controlled trial comparing healthcare teams that participated in a leadership training program with those that did not.

A meta-analysis by Johnson et al. (2017) consolidated data from several studies, revealing a moderate-to-strong positive correlation between leadership development initiatives and various organizational performance measures, including financial success, employee satisfaction, and patient outcomes. This meta-analysis highlights the broad impact of effective leadership training on organizational health and performance.

Despite the evident benefits, implementing LDPs in healthcare settings is not without challenges. Brown et al. (2019) conducted a qualitative study identifying several impediments to the effective implementation of LDPs, such as competing priorities, limited resources, and resistance to change. These barriers can significantly hinder the adoption and success of leadership training programs. Additionally, Robinson et al. (2020) noted that obtaining buy-in from participants and ensuring their active engagement were major challenges, further complicating the implementation process.

To effectively design, implement, and evaluate leadership development initiatives, it is essential to consider a robust conceptual framework. This framework should integrate several theoretical perspectives to provide a comprehensive understanding of the factors influencing leadership development and its outcomes.

*Transformational leadership theory:* Emphasizes the role of leaders in inspiring and motivating employees to achieve higher levels of performance. This theory supports the idea that effective leadership development can transform organizational culture and improve overall performance.

*Social learning theory:* Suggests that learning occurs in a social context and that people learn from one another through observation, imitation, and modeling. This theory underscores the importance of mentorship and peer learning in leadership development programs.

*Adult learning theory:* Highlights the unique needs of adult learners, such as the need for self-directed learning, practical relevance, and problem solving. Incorporating principles of adult learning into LDPs can enhance their effectiveness and relevance.

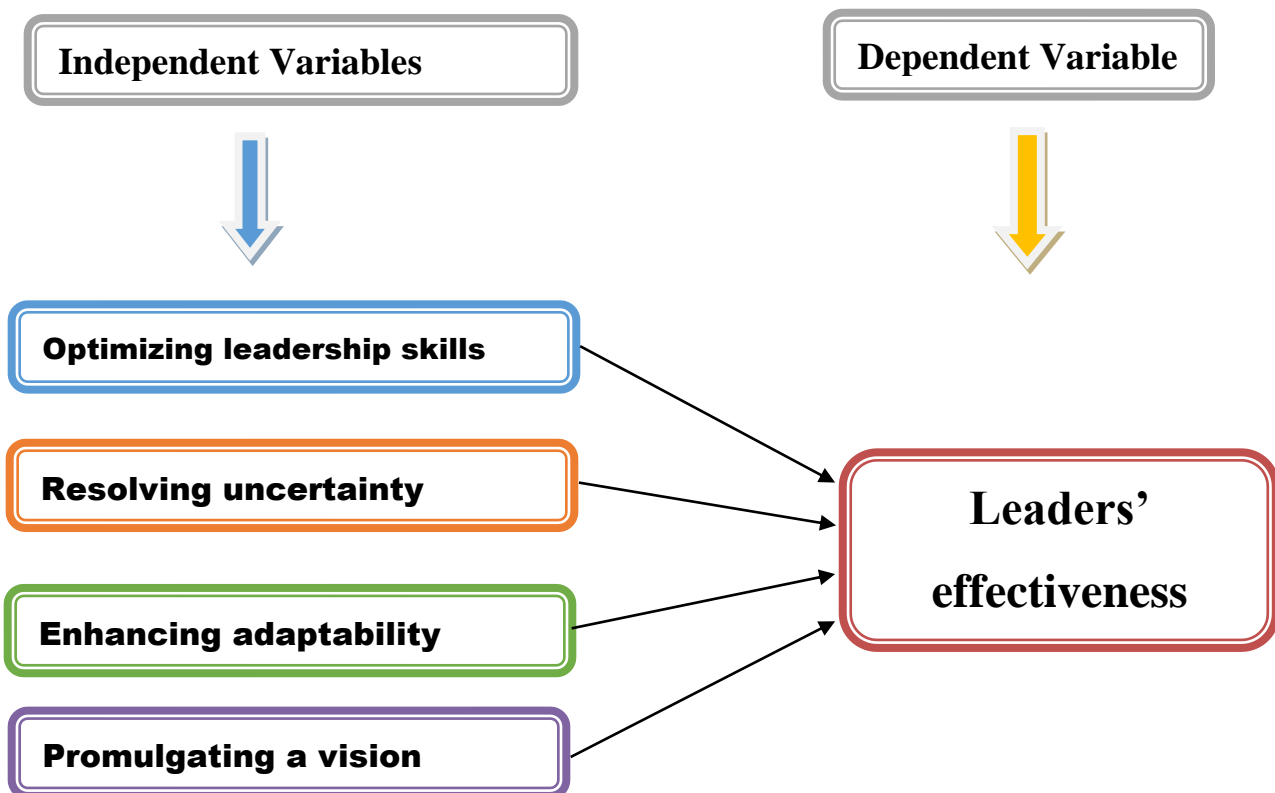
*Competency-Based approach:* Focuses on developing specific skills and competencies that are critical for effective leadership. This approach ensures that LDPs are tailored to meet the particular requirements of healthcare leaders and the challenges they face.

In conclusion, empirical studies provide strong evidence for the positive impact of leadership development programs in healthcare. However, successful implementation requires overcoming significant challenges and leveraging a robust theoretical framework to guide the design and execution of these programs. This approach will enable healthcare organizations to develop leaders who can navigate the complexities of the healthcare environment and drive continuous improvement in patient care and organizational performance.

## 2.4. Conceptual framework of the study

The conceptual foundation centers on assessing the effect leadership training programs on leaders effectiveness in healthcare facilities in Addis Ababa, focusing on optimizing skills, resolving uncertainty, enhancing adaptability, and promulgating a vision - factors that interact to contribute to successful leadership. This framework provides a structured approach to understand how these key factors interact and contribute to successful healthcare leadership in Addis Ababa, which is depicted in a diagram below:

**Figure 1: Conceptual framework of the Study**



Source: Teame et al. (2022). Healthcare leaders' effectiveness among managers in public health institutions of Addis Ababa

## 2.5. Research Hypotheses

Accordingly, based on the above model the following hypotheses were developed:

Hypothesis 1: Optimizing leadership skills

- Null Hypothesis (H0): There is no significant relationship between optimizing leadership skills and leaders' effectiveness.
- Alternative Hypothesis (H1): Optimizing leadership skills has a significant positive impact on leaders' effectiveness.

Hypothesis 2: Resolving uncertainty

- Null Hypothesis (H0): There is no significant relationship between resolving uncertainty and leaders' effectiveness.
- Alternative Hypothesis (H1): Resolving uncertainty has a significant positive impact on leaders' effectiveness.

Hypothesis 3: Enhancing adaptability

- Null Hypothesis (H0): There is no significant relationship between enhancing adaptability and leaders' effectiveness.
- Alternative Hypothesis (H1): Enhancing adaptability has a significant positive impact on leaders' effectiveness.

Hypothesis 4: Promulgating a vision

- Null Hypothesis (H0): There is no significant relationship between promulgating a vision and leaders' effectiveness.
- Alternative Hypothesis (H1): Promulgating a vision has a significant positive impact on leaders' effectiveness.

## CHAPTER THREE

### RESEARCH METHODOLOGY

The study approach, research design, target population, sampling procedures, sample size, data collection instrument and measurement, validity test, reliability test, and ethical consideration are among the themes that this chapter covers in relation to research design and methodology.

#### 3.1. Research approach

A mixed methods approach was used in the study, integrating quantitative and qualitative research techniques. The researcher hopes to handle research topics from various angles and obtain a thorough grasp of the subject matter by combining the two methodologies.

**Qualitative research:** The experiences, perceptions, and subjective opinions of the participants are investigated and understood through the use of qualitative research methods. Open-ended survey questions, focus groups, and interviews are some of the methods used in this. A better comprehension of participants' thoughts, feelings, and experiences was made possible by the rich and detailed insights that qualitative data offered into the study issue (Saundres et al., 2009).

**Quantitative research:** Numerical data is gathered and analyzed using quantitative research methodologies to look for patterns, trends, and linkages. This includes methods like questionnaires or surveys that ask closed-ended questions. Statistical information from quantitative data enables comparisons and generalizations between various variables or groups (Kothari, 2004).

In order to complement and triangulate the results from both methodologies, the study combines qualitative and quantitative research methods. While the quantitative data enables the discovery of trends, patterns, and statistical linkages, the qualitative data offers a more profound comprehension of the feelings and views of the participants. A more thorough and reliable study of the research issue is made possible by the integration of various methodologies. (Christenson and Johnson, 2008:51).

### **3.2. Research Design**

This study's research design combines explanatory and descriptive methods. These designs were selected in accordance with the goals of the study, the research questions, and the characteristics of the intended audience.

**Descriptive research:** The study utilizes descriptive research to provide an accurate profile and description of the current state of affairs (Saunders et al., 2009). This involves surveys and fact-finding inquiries to gather information and data about the effect of leadership training program on leaders' effectiveness in health care facilities in Addis Ababa. Descriptive research enables the researcher to respond to inquiries about who, what, where, how much, and how many, using both closed and open-ended surveys to get a thorough grasp of the subject.

**Explanatory research:** The study also incorporated explanatory study to investigate the causal links between many variables (Kothari, 2004). From an operational perspective, the researcher hopes to build more précised studies and working hypotheses. Developing precise research questions and hypotheses to comprehend the underlying causes and variables influencing the evaluation of time management techniques and their effect on worker performance is known as explanatory research.

By combining both descriptive and explanatory research designs, the study aims to provide a comprehensive understanding of the effect of leadership training program on leaders' effectiveness in health care facilities in Addis Ababa. The descriptive research component helps to describe the current situation, while the explanatory research component delves deeper into the relationships and elements that influence the outcomes.

### **3.3. Target Population**

The target population, as defined by Lius (2005), refers to a selective group of individuals who meet specific criteria and are of interest to the researcher for generalizing the study's results. In this context, the target population comprises healthcare professionals and leaders who took any kind of leadership development training and actively involved in healthcare facilities throughout Addis Ababa. This includes roles such as medical directors, hospital administrators, department heads, clinical supervisors, nursing managers, and allied healthcare professionals occupying leadership positions within hospitals, clinics, and healthcare organizations.

Moreover, the study narrows down the target population to include 184 health sector leaders from five specific health institutions, encompassing both public and private sectors.

These institutions are the Ministry of Health, St. Paul Hospital Millennium Medical College, Yekatit 12 Hospital Medical college, Lancet Hospital, and ICMC Hospital. The selection of these institutions was based on criteria determined by the researcher to ensure a comprehensive representation of healthcare management practices in Addis Ababa.

The Ministry of Health offers perspectives from a federal-level governmental institution, while St. Paul Hospital Millennium Medical College being a governmental entity provides insights into public sector healthcare policies and practices. Yekatit 12 Hospital Medical College's affiliation with the government and the Addis Ababa Health Bureau allows for a multi-level understanding of healthcare management. Lancet Hospital and ICMC Hospital represent the private sector, contributing views on leadership and management practices in privately owned healthcare facilities.

By including department managers from these diverse institutions, the study aimed to capture a wide range of perspectives and experiences in hospital leadership within Addis Ababa. This approach facilitates generalizing the study's findings to the broader context of healthcare leadership in Ethiopia and drawing meaningful conclusions about the effect of leadership training program on leaders' effectiveness in health care facilities in Addis Ababa.

### **3.4. Sample Size**

Sample size is the total number of units chosen for analysis in the research project, and the representation for the study is determined using Yamane's (2007) method with 95% confidence and 5% allowable sampling error.

The formula for determining sample size (Yamane, 1967 as quoted in Israel (2002)) takes into account the nature of the study and the total population in 184 health sector leaders from five distinct health institutions to determine the appropriate sample size.

Where:  $n$  is the sample size,  $N$  is population size;  $e$  is the error of 5 percentage points and a confidence coefficient of 95% are assumed for this equation.

$$n = \frac{N}{1+N(e)^2} = \frac{184}{1+184(0.05)^2}$$

$$n = \underline{126.02} \sim \underline{126}$$

Based on the above formula, the researcher gathered data through questionnaire and interview from approximately 126 health care leaders. Therefore, proportional sample determination formula for each health care facilities is summarized on the following table:

Table 1: Sample size determination

No	Health Care Facilities	Target Population	Sample Size
1	Ministry of Health (Governmental)	48	33
2	St. Paul Hospital Millenium medical college (Governmental + Federal)	38	26
3	Yekatit 12 Hospital Medical College (Governmental + AA health bureau)	36	25
4	Lancet hospital (Private)	30	20
5	ICMC hospital (Private)	32	22
	<b>Total</b>	<b>184</b>	<b>126</b>

Source: Ministry of Health office database as of Jan, 2024

This sample size was obtained by gathering data across the five specified health institutions, representing both public and private sectors.

### 3.5. Sampling Technique

The sampling technique employed for this study was stratified random sampling. Stratified random sampling involves dividing the target population into distinct subgroups or strata based on certain characteristics that are relevant to the research objectives.

In this case, the healthcare leaders were divided into strata based on the specific health institutions they belong to: Ministry of Health, St. Paul Hospital Millenium medical college, Yekatit 12 Hospital medical college, Lancet Hospital, and ICMC Hospital.

Once the population is stratified, a random sample is then selected from each stratum using a random sampling method. This ensures that each subgroup is adequately represented in the sample, allowing for comparisons and analyses specific to each health institution.

The use of stratified random sampling in this study ensures that the sample is representative of the entire target population while also allowing for insights into the leadership dynamics and practices within each healthcare facility. This technique helps in reducing bias and increasing the legitimacy and dependability of the study's conclusions.

### **3.6. Source of data**

The study will indeed utilize both primary and secondary sources of data. Primary data was directly gathered from selected healthcare leaders through structured questionnaires and interview guide. These questionnaires and interview guides focused on assessing the effect of leadership training program on leaders' effectiveness. The primary data collected provides firsthand insights into the experiences, perceptions, and practices of healthcare leaders in Addis Ababa.

Secondary Data: Nevertheless, secondary data was sourced from existing literature, research studies, reports, and official documents related to healthcare leadership, training programs, and healthcare management practices. This secondary data served to provide a broader context, theoretical framework, and background information for the study. It also supports the analysis and interpretation of the primary data collected. Secondary data can include information from publications by the government, websites, books, journal papers, and internal documents, as outlined by Ajayi (2017). By incorporating both primary and secondary sources of data, the study aims to ensure comprehensive coverage, conduct a robust analysis, and derive reliable conclusions regarding the assessment of effect of leadership training program on leaders' effectiveness in Addis Ababa's healthcare facilities.

### **3.7. Data gathering tools**

To collect the information required for the study, two instruments were used: a questionnaire and an interview guide.

### **3.7.1. Questionnaires:**

Closed-ended questions were used in the questionnaires for their efficiency in data collection and ease of coding. Respondents could choose from preset options, such as multiple-choice answers or ranking choices on a Likert scale.

The Likert scale, with a five-point rating system, allowed respondents to indicate their level of agreement or disagreement with statements related to leadership training program and leaders' effectiveness. The questionnaires also included sections for biographical information and work-related questions, following the methodology outlined by Teame et al. (2022) in their study on healthcare leaders' effectiveness in public health institutions of Addis Ababa.

### **3.7.2. Interviews:**

Five medical directors participated in face-to-face structured interviews to obtain accurate data and viewpoints. Transcription of the interviews is done for accuracy and further analysis. Interviews are useful for gauging participant emotions and modifying follow-up questions accordingly, according to Nesbary (2000). The study intended to collect complete data for evaluation of the effect of the leadership training program on leaders' effectiveness at Addis Ababa's healthcare facilities by using both questionnaires and interviews. While the interviews supplied qualitative insights and a more in-depth examination of the viewpoints and experiences of the participants, the questionnaires yielded quantitative data.

## **3.8. Methods of Data Analysis**

Descriptive and inferential statistics are used in the analysis of the data. The information obtained from the questionnaires was methodically arranged to make the analysis easier. The statistical package for social sciences (SPSS version 26.0) is used to evaluate the data, and a summary was created to show how the variables gathered from surveys connect to each other. The measure's internal consistency and quality were assessed using the Cronbach's Alpha coefficient and the Pearson correlation coefficient.

### **3.8.1. Descriptive Statistics**

The sample features and significant patterns that emerged from the data were profiled using descriptive statistics such as mean, frequency, and percentage. Consequently, the reader can readily discern the demographic attributes of the participants.

### 3.8.2. Inferential Statistics

Using the Pearson's Product, inferential statistics was utilized to determine the level of correlation between the variables. Inferential statistical analysis infers properties of a population. On the other hand, regression analysis and correlation are employed by meeting the ordinary least square (OLS) in order to determine the link between the variables and test the study hypotheses.

Correlation analysis can determine the relationship between variables, but it cannot identify the strength of the relationship.

Regression analysis calculates the independent factors' relative influence on the dependent variable. Regression analysis to determines the strength of the relationship between the dependent variable (leaders' effectiveness) and the independent variable (leadership training program).

#### Classical linear regression assumptions

In this investigation, with the property of Ordinary Least Squares (OLS) under Classical Linear Model (CLM), the following tests are used to evaluate the model: Independent of Residuals, Multicollinearity, Homoscedasticity, Linearity, and Normality.

### 3.8.3. Model specification

Model stated below was employed to determine the effect of leadership training program on leaders' effectiveness: The case of health care facilities in Addis Ababa. Any highly codified representation of a theoretical system is called a model. Based on the variables defined above, the model of the study can be formulated as follows:

$$Y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + e.$$

$\beta_i$  &  $\beta_{ii}$  (I= 0, 1, 2, 3, 4...) are the coefficients,  $\epsilon$  is the error variable, Y is the dependent variable

$$IAE = f(TC, SIAD, TMS, IAQ, RBIEA, IAID) \dots\dots\dots$$

Where,

Y = Leaders' effectiveness

OLS = Optimizing leadership skills

RU = resolving uncertainty

EA = enhancing adaptability and

PV = promulgating a vision

In this model, by making some standard assumptions, the above equation can be restructured into linear multiple regression equations as follows:

$$Y = b_0 + b_1 OLS + b_2 RU + b_3 EA + b_4 PV + e_1.$$

Model *Where:*  $b_i$  &  $b_{ij}$  ( $i= 0,1,2,3,4,5,6\dots$ ) are the coefficients,  $\epsilon$  is the error variable,  $Y$  is the dependent variable related to Leaders' effectiveness; while, OLS, RU, EA and PV are Independent variables and  $e$  is the error term.

#### **3.8.4. Thematic content analysis (TCA)**

Qualitative data is presented descriptively by the use of Thematic Content Analysis (TCA). Interview transcripts gathered from study participants or other identifiable materials reflecting experientially on the subject of the study are examples of qualitative data.

### **3.9. Validity and Reliability**

Prior to deploying the data collection instrument, the measures' validity and reliability has to be evaluated (Hair 2003).

#### **3.9.1. Validity**

Validity refers the degree to which the measuring tool such as a questionnaire is used accurately to measure the characteristics or dimensions it is intended to measure (Mooi and Sarstedt, 2011). As its main goal is to improve the accuracy and utility of findings by removing or controlling as many confounding variables as feasible, it is closely related to research technique, thereby allowing for greater confidence in the study's outcomes (Marczyk et al., 2005).

To guarantee authenticity in this study, the researcher adhered to scientific research methods, gathered data from reliable sources, and used suitable instruments to examine the data, specifically SPSS. Additionally, various theories and empirical studies are reviewed to further validate the research findings.

### 3.9.2. Reliability

It refers to the uniformity of a measurement tool. According to Calderon (2003), an internal consistency serves as an alternate reliability metric, often assessed using Cronbach's alpha, also known as the alpha coefficient of reliability.

Cronbach's alpha evaluates how well a set of items measures a single unidimensional latent construct. In this research, various methods are employed to measure different variables, taking into account the nature of the questionnaire's constructs.

**Table 2: Reliability Statistics for the entire scale**

Reliability Statistics		
Variables	Cronbach's Alpha	No. of Items
Optimizing Leadership Skills	.707	5
Resolving Uncertainty	.779	5
Enhancing Adaptability	.814	5
Promulgating a Vision	.719	5
Leaders' effectiveness	.706	5
Mean	<b>.745</b>	<b>40</b>

Source: Result of Survey Data, (2024)

The questionnaires used are previously tested for validity and reliability to ensure they were appropriate for the specific topic under investigation. The standard questionnaire used in this study has been validated and proven reliable, with a Cronbach's alpha score above 0.7 indicating a high level of internal consistency and reliability in measuring the intended variables. For the pilot study, a total of thirty questionnaires were given to the participants. Upon receiving the completed questionnaires, they were coded and analyzed using SPSS IBM version 26. The internal consistency of the questionnaire was assessed using Cronbach's Alpha test. The results indicated that the Cronbach's Alpha score for the questionnaire was 0.769. Typically, reliability coefficients should be at least 0.70, with higher values indicating better reliability. Therefore, the reliability of the questionnaire, as indicated by the Cronbach's Alpha score, is considered strong.

### 3.10. Ethical Consideration

Any research study must take ethics into account, but this is especially true when handling

sensitive data and human subjects. In this study, several key ethical principles were upheld. Firstly, the confidentiality and anonymity of participants were strictly maintained throughout the research process. Participants were instructed not to include any personally identifiable details in the questionnaires, ensuring their responses remained anonymous.

This approach is intended to foster openness and honesty in feedback, as participants would feel assured that their identities were protected.

Additionally, prior to participating, all participants were fully informed about the research purpose, their role, and how their data would be utilized. They provided informed consent voluntarily, with a clear understanding of the implications of their involvement. The data collected was also stored securely, with measures such as password protection and restricted access to authorized personnel. Finally, the study adhered to ethical guidelines and regulations set by the institutions, including obtaining necessary approvals from ethics committees or review boards and ensuring ethical conduct throughout the research process. By incorporating these ethical considerations into the research design, the study aimed to uphold the rights and well-being of participants, maintain data integrity, and ensure the trustworthiness of the research outcomes.

## CHAPTER FOUR

### DATA PRESENTATION, ANALYSIS AND INTERPRITATION

The entire analysis done using the gathered data is covered in this chapter. In order to determine the characteristics of the sample and to analyze and interpret the relationship between the independent and dependent variables, descriptive and inferential methods of data analysis are utilized.

#### 4.1. Response Rate

The researcher distributed 126 questionnaires to respondents in order to address the research objectives and goals of the study. Out of the 126 questionnaires, 110 were completed, resulting in a response rate of 87%. According to Mulugeta (2009), a response rate of 50% is considered adequate, 60% is good, and 70% or higher is very satisfactory. Given this benchmark, the 87% response rate achieved in this study can be considered excellent.

**Table 3: Response Rate**

Description	Response Rate
Target population	184
Sample size	126
Questionnaire Distributed	126
Questionnaire Retrieved	110
Response Rate	87%
Usable Response	110

Source: SPSS Result of survey data, 2024

## 4.2. Demographic Characteristics of Respondents

Among the demographic characteristics is the respondent profile. The personal data of the respondents is the subject of this section of the analysis. The table below shows the thorough background information provided by the respondents.

**Table 4: Demographic characteristics of respondents**

No.	Variable	Category	Frequency	Percent
1	Sex	Male	89	80.9
		Female	21	19.1
		Total	110	100.0
2	Age	25–30	17	15.5
		31–35	63	57.3
		36–40	25	22.7
		Above 41 Years	5	4.5
		Total	110	100.0
3	Educational Background	First Degree	40	36.4
		Master’s Degree	12	10.9
		Medical Doctorate Degree	58	52.7
		Total	110	100.0
4	Work experience in years	1–5 Years	22	20.0
		6–10 Years	37	33.6
		11–15 Years	25	22.7
		≥ 16 Years	26	23.6
		Total	110	100.0
5	Position	Case-team coordinator	18	16.4
		Sub-core process coordinator	62	56.4
		Core process coordinator	25	22.7
		Medical Directors	5	4.5
		Total	110	100.0

Source: SPSS Result of survey data, 2024

Understanding the demographic composition of a sample is an important first step in interpreting the results of any survey or research study. An overview of the major demographic traits of the 110 respondents who took part in the survey is given in this table.

*Sex:* The sample consists of 89 male respondents (80.9%) and 21 female respondents (19.1%), for a total of 110 participants. This indicates the sample is heavily skewed towards male participants, with males making up over four-fifths of the total.

*Age:* The largest age group represented is 31-35 years old, comprising 57.3% of the sample. This suggests the sample is mostly made up of mid-career professionals. The next largest groups are 36-40 years old (22.7%) and 25-30 years old (15.5%), indicating there is also a reasonable representation of both slightly older and slightly younger participants. Only 4.5% of respondents are over 41 years old, so the sample lacks significant representation from the most senior age group.

*Educational Background:* The sample is highly educated, with the majority (52.7%) holding medical doctorate degrees, suggesting a strong representation of individuals with advanced medical or clinical training, such as physicians. Over a third (36.4%) have first degrees, while only 10.9% possess master's degrees. This skew towards higher educational attainment, particularly in medical and healthcare-related fields, is an important characteristic to consider when interpreting the study's findings, as it indicates the sample may not be representative of the general population and may have specialized knowledge or perspectives compared to those with more diverse educational backgrounds.

*Work Experience:* The largest group in terms of work experience has 6-10 years (33.6%), followed by 16 or more years (23.6%), 11-15 years (22.7%), and 1-5 years (20.0%). This suggests a mix of mid-career and more experienced professionals, with fewer very early career individuals.

*Position:* Over half the respondents (56.4%) hold the position of sub-core process coordinator, which appears to be the most common role in the sample. Core process coordinators make up 22.7% and case-team coordinators 16.4%, indicating slightly fewer individuals in these more senior coordinator roles. A small percentage (4.5%) have other, unspecified positions.

In summary, this sample seems to represent a demographic of predominantly male, middle-aged professionals with first degrees or higher qualifications, and a range of work experience, mostly concentrated in coordinator roles within the organization.

The lack of representation from more junior staff and senior leadership is a notable limitation of

the sample.

### **4.3. Descriptive Analysis**

The researcher has summarized the measurements with the corresponding means and standard deviations to see the respondents' overall perception. As a result, the mean shows how much the sample group generally agrees or disagrees with the various propositions. The degree to which respondents disagree with the statements increases with a lower mean.

The more people agree with the statement, the higher the mean. However, as noted by Marczyk and Festinger (2005), the standard deviation illustrates the variability of an observed response from a single sample.

The researcher has conducted a detailed descriptive analysis to understand the general perceptions and attitudes of the 110 respondents. To do this, the means and standard deviations of each measure and statement that the respondents are shown must be computed.

The mean score is a crucial indicator here, as it reflects the average level of agreement or disagreement with the various statements. According to Zaidaton & Bagheri (2009),

- ❖ Mean scores below 3.39 are considered low, indicating that the respondents generally disagree with or do not strongly support that particular statement or measure.  $Gt=\backslash$
- ❖ Mean scores in the range of 3.40 to 3.79 are considered moderate, suggesting a neutral or mixed perception, where respondents may have somewhat agreed or disagreed.
- ❖ Mean scores above 3.8 are interpreted as high, meaning the respondents tend to agree and show strong support for that statement or measure.

The standard deviation, on the other hand, provides information about the spread or variability of the responses. A lower standard deviation indicates the responses are clustered closely around the mean, while a higher standard deviation suggests more diverse or dispersed responses within the sample. The detailed results of this descriptive analysis, including the specific mean scores and standard deviations for each measure, is presented by the researcher to provide insights into the overall perspectives of the sample.

#### **4.3.1. Optimizing Leadership Skills**

Table 5: Optimizing Leadership Skills

Source: SPSS Result of survey data, 2024

No.	Descriptive statistics	N	Mean	SD
1	The leadership training, I received has significantly increased my knowledge relevant to my role.	110	4.16	0.944
2	I feel well informed about the latest best practices in healthcare management.	110	3.99	1.045
3	The training provided me with new insights that I regularly apply in my work.	110	4.46	0.616
4	I have a clear understanding of how to use the knowledge gained from the training to optimize my team's performance.	110	4.25	0.829
5	The knowledge I acquired has improved my ability to make strategic decisions.	110	3.88	0.865
<b>i</b>	<b>Knowledge gained</b>		<b>4.15</b>	<b>0.860</b>
1	The leadership program has enhanced my emotional intelligence.	110	4.24	0.938
2	I am better at strategic communication after attending the leadership training.	110	4.29	0.971
3	My conflict resolution skills have improved significantly due to the training.	110	4.25	0.952
4	The program has helped me develop better interpersonal relationships with my team.	110	4.22	1.061
5	I am now more adept at managing stress and maintaining a positive attitude.	110	3.65	1.072
	<b>Development of soft skills:</b>		<b>4.13</b>	<b>0.999</b>
1	The examples of successful leaders presented during the training were highly inspiring.	110	4.23	0.974
2	I learned valuable lessons from the real-world success stories shared in the training.	110	3.85	1.159
3	The content about leaders excelling helped me set higher standards for myself.	110	4.42	0.682
4	I found the stories of exemplary leaders relevant to my own leadership challenges.	110	4.28	0.91
5	The training made it clear how effective leadership can positively impact healthcare outcomes.	110	3.84	0.883
	<b>Engaging content about leaders excelling:</b>		<b>4.12</b>	<b>0.922</b>
	<b>Optimizing leadership skills</b>		<b>4.13</b>	<b>0.927</b>

Using the above classification, we can discuss the findings from Table 5, which presents descriptive statistics on the effect of leadership training on various facets of participants' skills and knowledge.

The knowledge gained section reveals a high overall mean score of 4.15 with a standard deviation of 0.860. This indicates that respondents generally agree that the leadership training significantly enhanced their knowledge. Each specific item within this category received mean scores above 3.8, highlighting strong agreement that the training increased relevant knowledge (mean = 4.16), informed them about best practices (mean = 3.99), provided applicable new insights (mean = 4.46), clarified how to optimize team performance (mean = 4.25), and improved strategic decision-making (mean = 3.88). The consistent high scores reflect the efficacy of the training in knowledge enhancement.

The development of soft skills category also shows a high mean score of 4.13 with a slightly higher standard deviation of 0.999, indicating strong positive responses with some variability. Participants strongly agree that the leadership program improved their emotional intelligence (mean = 4.24), strategic communication (mean = 4.29), conflict resolution skills (mean = 4.25), and interpersonal relationships (mean = 4.22). However, the mean score for managing stress and maintaining a positive attitude is 3.65, falling into the moderate range. This suggests that while the training was effective in most areas of soft skills development, there is room for improvement in stress management.

In the engaging content about leaders excelling section, the overall mean score is 4.12 with a standard deviation of 0.922. This indicates strong agreement among respondents that the content about successful leaders was highly engaging and relevant. The training was found to be inspiring (mean = 4.23), provided valuable lessons (mean = 3.85), helped set higher standards (mean = 4.42), and was relevant to participants' leadership challenges (mean = 4.28).

The lowest score in this category is for the recognition of the impact of effective leadership on healthcare outcomes (mean = 3.84), which still falls into the high range but suggests a slightly less strong perception compared to other items.

Overall, the mean score for optimizing leadership skills is 4.13 with a standard deviation of 0.927. This high mean score indicates that respondents generally agree and strongly support the

effectiveness of the leadership training across all measured areas. While there is some variability in responses, the general perception is consistently positive. The moderate score in managing stress highlights a potential area for further enhancement in the training program. Overall, the high mean scores across different categories reflect that the leadership training was well received and deemed beneficial by the participants.

Numerous studies support the notion that leadership training can significantly enhance participants' knowledge and skills. For instance, Avolio & Gardner (2005) highlight how leadership training programs can lead to increased knowledge relevant to leadership roles and improved decision-making abilities.

Similarly, Goleman (1995) and Cherniss (2010) emphasize the positive impact of leadership training on emotional intelligence and soft skills development, which aligns with the high mean scores observed in the development of soft skills category.

Moreover, research by Cummings et al. (2018) emphasizes the importance of staying informed about best practices in specific industries, such as healthcare management, which resonates with the high mean score for participants feeling well informed about the latest best practices in Table 5. The variability in responses, as indicated by the standard deviations, is also consistent with previous literature that acknowledges individual differences in how participants perceive and benefit from leadership training (Day et al., 2004).

Overall, the high mean scores across different categories in Table 5, along with supporting literature, reinforce the conclusion that the leadership-training program was well received and beneficial in enhancing participants' skills and knowledge in healthcare management.

#### **4.3.2. Resolving Uncertainty**

Table 6: Resolving Uncertainty

No.	Descriptive statistics	N	Mean	SD
1	The training has helped me better understand my own priorities.	110	3.48	1.247
2	I have a clearer sense of what is most important to me in my leadership role.	110	2.93	1.179
3	The program has enabled me to focus on the right priorities.	110	2.79	1.307
4	I feel more confident in my ability to identify and address my leadership development needs.	110	2.93	1.217
5	The training has helped me gain clarity on my personal and professional goals.	110	2.78	1.184
<b>Understanding of own priorities</b>			<b>2.98</b>	<b>1.227</b>
1	The training emphasized the importance of being accountable for my actions.	110	2.02	1.226
2	I have become more diligent about meeting my commitments since the training.	110	2.49	1.373
3	The program helped me understand the impact of accountability on team trust.	110	2.76	1.299
4	I am now more consistent in holding myself and others accountable.	110	2.91	0.991
5	The training reinforced the significance of integrity and professionalism in leadership.	110	2.93	1.179
<b>Accountability mattering:</b>			<b>2.62</b>	<b>1.214</b>
<b>Resolving uncertainty:</b>			<b>2.80</b>	<b>1.220</b>

Source: SPSS Result of survey data, 2024

Using Zaidaton & Bagheri's (2009) classification, we can discuss the findings from Table 6, which presents descriptive statistics on how leadership training influenced participants' understanding of their priorities and accountability.

The understanding of own priorities section reveals a mean score of 2.98 with a standard deviation of 1.227. This suggests that participants generally have low to moderate agreement

about the impact of training on understanding their own priorities. Specifically, the item "The training has helped me better understand my own priorities" has a moderate mean score of 3.48, suggesting that some respondents found the training beneficial in this aspect. However, other items such as having a clearer sense of what is important (mean = 2.93), focusing on the right priorities (mean = 2.79), feeling confident in identifying and addressing leadership needs (mean = 2.93), and gaining clarity on personal and professional goals (mean = 2.78) all have low mean scores. These low scores suggest that the training was less effective in helping participants clearly define and understand their priorities.

The accountability mattering section has an even lower mean score of 2.62 with a standard deviation of 1.214. This further indicates low degree of agreement among responders with the training's impact on their sense of accountability. The specific item "The training emphasized the importance of being accountable for my actions" has a very low mean score of 2.02, highlighting a significant area of weakness. Other items such as becoming more diligent about meeting commitments (mean = 2.49), understanding the impact of accountability on team trust (mean = 2.76), being more consistent in holding oneself and others accountable (mean = 2.91), and reinforcing the significance of integrity and professionalism (mean = 2.93) also received low scores. These results suggest that the training did not significantly enhance the respondents' understanding or practice of accountability in their leadership roles.

Overall, the mean score for resolving uncertainty is 2.8 with a standard deviation of 1.22. This indicates a general lack of strong support or agreement regarding the effectiveness of the training in helping participants resolve uncertainty in their leadership roles. The low scores across various items suggest that the respondents did not perceive the training as particularly effective in helping them understand their priorities or improve their sense of accountability.

In conclusion: the findings from Table 6 indicate that the leadership training program had limited success in resolving uncertainty for the participants. Both categories, "understanding of own priorities" and "accountability mattering," received low mean scores, reflecting that respondents generally did not find the training effective in these areas. This suggests that the training program may need to be revised or enhanced to better address these crucial aspects of leadership development, particularly in helping leaders understand their priorities and reinforce their sense of accountability.

Numerous studies emphasize the importance of effective leadership training in helping leaders understand their priorities and responsibilities. For instance, Avolio & Hannah (2008) highlight the role of leadership development programs in enhancing leaders' clarity about their priorities and goals, which aligns with the objectives outlined in Table 6.

Similarly, research by Day et al. (2004) underscores the significance of leadership training in promoting accountability and ethical behavior among leaders. Effective leadership training programs are expected to emphasize the importance of accountability for actions and decision-making, as highlighted in Table 6.

The low mean scores and standard deviations in Table 6 indicate a lack of strong agreement among respondents regarding the training's effectiveness in resolving uncertainty. This aligns with literature that acknowledges the challenges in designing and implementing leadership training programs that effectively address complex issues such as understanding priorities and accountability (Collins & Holton, 2004).

Overall, the findings from Table 6 and supporting literature suggest that the leadership training program may need revisions or enhancements to better address the crucial aspects of understanding priorities and reinforcing accountability. Future iterations of the training program could benefit from incorporating specific modules or activities aimed at improving participants' clarity about priorities and fostering a stronger sense of accountability in their leadership roles.

### 4.3.3. Enhancing Adaptability

**Table 7: Enhancing Adaptability**

No.	Descriptive statistics	N	Mean	SD
1	I have become more effective at building professional relationships due to the training.	110	3.21	1.242
2	The program taught me how to foster stronger connections with my team.	110	3.49	1.24

3	I am more proactive in networking with other professionals after the training.	110	2.93	1.179
4	The training improved my ability to collaborate with colleagues from different departments.	110	2.8	1.269
5	I find it easier to reach out for support and advice after the leadership training.	110	2.93	1.217
<b>Ability to foster connections</b>			<b>3.07</b>	<b>1.229</b>
1	The training encouraged me to consider multiple perspectives before making decisions.	110	2.77	1.178
2	I am more open to feedback and different viewpoints after the program.	110	2.42	1.229
3	The program taught me the value of diverse opinions in problem solving.	110	3.23	1.114
4	I actively seek out and incorporate a variety of opinions in my decision-making process.	110	3.01	1.185
5	The training enhanced my ability to evaluate different approaches to leadership challenges.	110	2.88	1.02
<b>Greater range of views considered</b>			<b>2.86</b>	<b>1.145</b>
<b>Enhancing adaptability</b>			<b>2.97</b>	<b>1.187</b>

Source: SPSS Result of survey data, 2024

Based on Zaidaton & Bagheri's (2009) classification, we can discuss the findings from Table 7, which presents descriptive statistics on how the leadership training program impacted participants' adaptability, including their ability to foster connections and consider a greater range of views.

The ability to foster connections section reveals a mean score of 3.07 with a standard deviation of 1.229. This indicates that respondents generally had low to moderate agreement regarding the training's effectiveness in this area. The individual mean scores within this section show varying degrees of perceived effectiveness. For instance, "I have become more effective at building professional relationships due to the training" has a mean of 3.21, indicating low to moderate

effectiveness. Meanwhile, "The program taught me how to foster stronger connections with my team" has a mean of 3.49, suggesting a moderate level of effectiveness. However, other items, such as "I am more proactive in networking with other professionals after the training" (mean = 2.93), "The training improved my ability to collaborate with colleagues from different departments" (mean = 2.8), and "I find it easier to reach out for support and advice after the leadership training" (mean = 2.93) all have low mean scores, indicating limited perceived effectiveness in these areas.

In the greater range of views considered section, the overall mean score is 2.86 with a standard deviation of 1.145, suggesting low agreement among respondents regarding the impact of the training on their openness to different perspectives and approaches. Individual items within this category highlight specific areas of limited effectiveness. "The training encouraged me to consider multiple perspectives before making decisions" has a mean of 2.77, indicating low effectiveness. "I am more open to feedback and different viewpoints after the program" has a particularly low mean of 2.42, showing significant room for improvement. "The program taught me the value of diverse opinions in problem-solving" has a mean of 3.23, indicating low to moderate effectiveness. "I actively seek out and incorporate a variety of opinions in my decision-making process" (mean = 3.01) and "The training enhanced my ability to evaluate different approaches to leadership challenges" (mean = 2.88) both received low mean scores, further reflecting limited perceived effectiveness.

Overall, the mean score for enhancing adaptability is 2.97 with a standard deviation of 1.187, indicating that respondents generally did not find the training highly effective in enhancing their adaptability. Both categories, "ability to foster connections" and "greater range of views considered," received low mean scores, highlighting areas where the training program could be improved.

In conclusion, the findings from Table 7 suggest that the leadership training program had limited success in enhancing participants' adaptability. The low to moderate mean scores in both fostering connections and considering a greater range of views indicate that respondents did not perceive the training as particularly effective in these areas. This suggests a need for revising or enhancing

the training program to better address these crucial aspects of leadership development. Improving the program's focus on building professional relationships, networking, collaboration, and openness to diverse perspectives could potentially increase its effectiveness in enhancing adaptability among leaders.

Numerous studies emphasize the importance of effective leadership training in promoting adaptability among leaders. For instance, Day, Zaccaro, & Halpin (2004) highlight how leadership development programs can enhance leaders' ability to build professional relationships, foster connections within teams, and consider diverse viewpoints, which aligns with the objectives outlined in Table 7. Similarly, research by Kouzes & Posner (2012) underscores the significance of leadership training in promoting collaboration and openness to different perspectives, which are essential components of adaptability in leadership roles. The low to moderate mean scores and standard deviations in Table 7 indicate a lack of strong agreement among respondents regarding the training's effectiveness in enhancing adaptability. This aligns with literature that acknowledges the challenges in designing and implementing leadership training programs that effectively address complex aspects of adaptability (Collins & Holton, 2004).

Overall, the findings from Table 7 and supporting literature suggest that the leadership training program may need revisions or enhancements to better address the crucial aspects of fostering connections, promoting collaboration, and encouraging openness to diverse viewpoints. Future iterations of the training program could benefit from incorporating specific modules or activities aimed at improving participants' adaptability in these areas.

#### 4.3.4. Promulgating a Vision

**Table 8: Promulgating a Vision**

No.	Descriptive statistics	N	Mean	SD
1	The training has better prepared me to transition into more senior leadership roles.	110	2.94	1.175
2	I feel more confident in my ability to take on greater leadership responsibilities.	110	3.22	1.252
3	The program has equipped me with the skills needed to lead	110	3.4	1.369

	my team more effectively.			
4	I have a clearer vision for the future direction of my organization.	110	3.51	1.386
5	The training has inspired me to pursue further leadership development opportunities.	110	3.26	1.297
<b>Transitioning into leadership roles</b>			<b>3.27</b>	<b>1.296</b>
1	The training emphasized the importance of collaborative leadership over a competitive mindset.	110	3.57	1.295
2	I am now more focused on working together with my team to achieve our shared goals.	110	3.27	1.306
3	The program taught me how to foster a culture of cooperation and mutual support.	110	3.69	1.269
4	I am more inclined to share credit and recognize the contributions of my team members.	110	3.65	1.344
5	The training has helped me become a more inclusive and team-oriented leader.	110	3.38	1.204
<b>Collaboration over competition</b>			<b>3.51</b>	<b>1.284</b>
<b>Promulgating a vision</b>		<b>110</b>	<b>3.39</b>	<b>1.29</b>

Source: SPSS Result of survey data, 2024

Using Zaidaton & Bagheri's (2009) classification, we can discuss the findings from Table 8, which presents descriptive statistics on how the leadership training program influenced participants' ability to promulgate a vision, including transitioning into leadership roles and prioritizing collaboration over competition.

The transitioning into leadership roles section reveals a mean score of 3.27 with a standard deviation of 1.296. This indicates that respondents generally had low to moderate agreement regarding the training's effectiveness in preparing them for more senior leadership roles. The individual items within this section show varying degrees of perceived effectiveness. "The training has better prepared me to transition into more senior leadership roles" has a mean of 2.94,

indicating low effectiveness. Similarly, "I feel more confident in my ability to take on greater leadership responsibilities" has a mean of 3.22, also reflecting low to moderate effectiveness. On the other hand, "The program has equipped me with the skills needed to lead my team more effectively" (mean = 3.4) and "I have a clearer vision for the future direction of my organization" (mean = 3.51) indicate moderate effectiveness. "The training has inspired me to pursue further leadership development opportunities" has a mean of 3.26, suggesting low to moderate effectiveness.

In the collaboration over competition section, the overall mean score is 3.51 with a standard deviation of 1.284, indicating moderate agreement among respondents regarding the training's impact on their collaborative leadership approach. Individual items within this category highlight specific areas of perceived effectiveness. "The training emphasized the importance of collaborative leadership over a competitive mindset" has a mean of 3.57, reflecting moderate effectiveness. "I am now more focused on working together with my team to achieve our shared goals" has a mean of 3.27, suggesting low to moderate effectiveness. "The program taught me how to foster a culture of cooperation and mutual support" has a mean of 3.69, indicating the highest level of effectiveness within this category. Additionally, "I am more inclined to share credit and recognize the contributions of my team members" (mean = 3.65) and "The training has helped me become a more inclusive and team-oriented leader" (mean = 3.38) both indicate moderate effectiveness.

Overall, the mean score for promulgating a vision is 3.39 with a standard deviation of 1.29. This score falls on the boundary between low and moderate, suggesting that respondents generally perceived the training as having a moderate impact on their ability to promulgate a vision. While the training was somewhat effective in emphasizing collaboration over competition, it showed limited effectiveness in preparing participants for senior leadership roles.

In conclusion, the findings from Table 8 suggest that the leadership-training program had moderate success in helping participants promulgate a vision. The mean scores in the "transitioning into leadership roles" section indicate low to moderate effectiveness, suggesting that the program could be enhanced to better prepare leaders for more senior roles and to boost

their confidence in taking on greater responsibilities. The "collaboration over competition" section, however, shows moderate effectiveness, indicating that the training was more successful in fostering a collaborative leadership approach. This suggests that while the program effectively emphasized the importance of teamwork and cooperation, there is room for improvement in other areas crucial for leadership development.

Numerous studies emphasize the importance of effective leadership training in preparing leaders for senior roles and fostering a collaborative leadership mindset. For instance, Avolio and Gardner (2005) highlight how leadership development programs can equip leaders with the necessary skills and confidence to transition into more senior roles, which aligns with the objectives outlined in Table 8. Similarly, research by Kouzes and Posner (2012) underscores the significance of leadership training in promoting collaborative leadership approaches and teamwork, which are essential components of promulgating a vision and achieving organizational goals. The mean scores and standard deviations in Table 8 indicate varying degrees of effectiveness in different aspects of leadership development. This aligns with literature that acknowledges the challenges in designing comprehensive leadership training programs that effectively address diverse aspects of leadership preparation and collaborative leadership approaches (Collins & Holton, 2004).

Overall, the findings from Table 8 and supporting literature suggest that the leadership training program had moderate success in helping participants promulgate a vision and foster collaborative leadership. The low to moderate mean scores in transitioning into leadership roles highlight areas for improvement in preparing leaders for senior responsibilities.

However, the moderate effectiveness in emphasizing collaboration over competition indicates a positive impact on fostering a collaborative leadership approach. This suggests that while the program effectively emphasizes teamwork and cooperation, there is room for enhancement in other crucial areas of leadership development.

#### 4.3.5. Leaders' effectiveness

**Table 9: Leaders' effectiveness**

No	Descriptive Statistics	N	Mean	SD
1	I feel confident in my ability to lead a team effectively.	110	3.81	0.84

	<b>Leadership Confidence:</b>			
2	I am knowledgeable about patient-centered care practices.	110	3.19	0.991
	<b>Knowledge of Patient-Centered Care:</b>			
3	Before the training, I considered my leadership skills to be strong.	110	3.04	1.165
	<b>Self-Assessment - Pre-training:</b>			
4	After the training, I consider my leadership skills to be strong.	110	3.08	1.076
	<b>Self-Assessment - Post-training:</b>			
5	My communication with team members has improved since the training.	110	3.03	1
	<b>Communication Improvement:</b>			
6	I am better at managing conflicts within the team since the training.	110	2.58	1.168
	<b>Conflict Management:</b>			
7	I frequently apply the leadership techniques learned during the training.	110	3.53	0.786
	<b>Application of Leadership Techniques:</b>			
8	I engage team members more effectively during meetings after the training.	110	3.3	0.954
	<b>Team Engagement:</b>			
9	Patient satisfaction has improved since the training.	110	3.17	0.715
	<b>Patient Satisfaction:</b>			
10	Employee engagement levels have increased since the training.	110	3.19	0.991
	<b>Employee Engagement:</b>			
	<b>Leaders' effectiveness</b>	<b>110</b>	<b>3.19</b>	<b>0.969</b>

Source: SPSS Result of survey data, 2024

Using Zaidaton & Bagheri's (2009) classification of mean scores, we can interpret the data in Table 9 regarding the leadership training program's effectiveness. The overall mean score for leaders' effectiveness is 3.19, with a standard deviation of 0.969, suggesting a generally low level of perceived effectiveness of the training program. This discussion will integrate relevant literature to support these findings.

Leadership confidence: The item "I feel confident in my ability to lead a team effectively" has a mean score of 3.81, indicating high agreement and suggesting that the training significantly boosted respondents' confidence. Leadership confidence is critical for effective management and has been linked to better leadership outcomes (Avolio & Gardner, 2005). This high score aligns

with previous studies indicating that leadership development programs can enhance self-efficacy in leaders (Bandura, 1997). Knowledge of Patient-Centered Care: The item "I am knowledgeable about patient-centered care practices" has a mean score of 3.19. This lower score suggests that the training did not significantly improve knowledge in this area. This finding is supported by previous research, which indicates that many leadership programs often neglect the specific clinical aspects necessary for effective healthcare leadership (Stefl, 2008). The gap identified here emphasizes the need for more comprehensive training that includes patient-centered care principles.

Self-assessment - pre- and post-training: The items "Before the training, I considered my leadership skills to be strong" (mean = 3.04) and "After the training, I consider my leadership skills to be strong" (mean = 3.08) indicate low perceived improvement in leadership skills. This minimal change suggests that the training did not significantly influence participants' self-assessment of their leadership abilities. Previous literature suggests that leadership development programs often struggle to produce measurable changes in self-assessed leadership competencies (Collins & Holton, 2004). Communication Improvement: The item "My communication with team members has improved since the training" has a mean score of 3.03, showing that respondents did not perceive significant improvements. Effective communication is essential for leadership (Hackman & Johnson, 2013), and the low score indicates a need for more focused training in communication skills.

Prior research has shown that specific training in communication can lead to substantial improvements in leaders' effectiveness (Gillis, 2011).

Conflict Management: The item "I am better at managing conflicts within the team since the training" has a mean score of 2.58, reflecting low effectiveness in this area. Conflict management is a critical leadership skill (Rahim, 2002), and the low score here suggests that the training did not adequately address this need. Research indicates that conflict management training is crucial for effective leadership (Thomas, 2006), yet often underemphasized in leadership programs.

Application of Leadership Techniques: The item "I frequently apply the leadership techniques learned during the training" has a mean score of 3.53, indicating moderate application. This suggests some benefit from the training, aligning with research that shows practical application of

learned skills is a common outcome of effective leadership development programs (Day et al., 2014).

**Team Engagement:** The item "I engage team members more effectively during meetings after the training" has a mean score of 3.3. Effective team engagement is vital for organizational success (Kouzes & Posner, 2012), and the low to moderate score indicates that the training could be improved in this area. Previous literature supports the importance of engaging training content for better leadership outcomes (Salas et al., 2012).

**Patient Satisfaction and Employee Engagement:** The items "Patient satisfaction has improved since the training" (mean = 3.17) and "Employee engagement levels have increased since the training" (mean = 3.19) reflect low perceived improvements. This suggests that the training did not significantly affect these areas, crucial for healthcare leadership. Literature indicates that leadership training needs to be aligned with organizational outcomes to be effective (Garman et al., 2011).

In conclusion, the findings from Table 9 suggest that while the leadership training program had a positive impact on confidence in leadership abilities, it was less effective in improving other critical areas such as conflict management, communication, and knowledge of patient-centered care practices. The moderate scores for applying leadership techniques and engaging team members suggest some benefits, but overall, the training program needs to be more comprehensive.

Previous literature supports these findings, indicating that leadership development programs often struggle to produce significant changes in self-assessed leadership competencies, communication skills, and conflict management abilities.

To enhance leaders' effectiveness, training programs should incorporate more specific content on these critical areas and ensure alignment with organizational outcomes. This will help achieve more substantial improvements in leadership skills and organizational performance.

## **4.4. Inferential Analysis**

### **4.4.1. Correlation of the dependent and independent variables**

Correlations are indeed a fundamental and valuable measure for examining the relationship between variables. As stated by Marczyk, Dematteo, and Festinger (2005), correlation analysis allows us to examine the association between two or more variables.

Table 10: Pearson correlations between the dependent and independent variables

		<b>Correlations</b>				
		Optimizing leadership skills	Resolving uncertainty	Enhancing adaptability	Promulgating a vision	Leaders' effectiveness
Optimizing leadership skills	Pearson Correlation	1	.507**	.271**	.629**	.739**
Resolving uncertainty	Pearson Correlation	.507**	1	.211*	.359**	.518**
Enhancing adaptability	Pearson Correlation	.271**	.211*	1	.402**	.437**
Promulgating a vision	Pearson Correlation	.629**	.359**	.402**	1	.636**
Leaders' effectiveness	Pearson Correlation	<b>.739**</b>	<b>.518**</b>	<b>.437**</b>	<b>.636**</b>	<b>1</b>
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	110	110	110	110	110
**. Correlation is significant at the 0.01 level (2-tailed).						
*. Correlation is significant at the 0.05 level (2-tailed).						

Source: SPSS Result of survey data, 2024

The Pearson correlation coefficient, denoted as "r," always falls within the range of -1 to +1. The sign of the correlation coefficient indicates whether the correlation is positive or negative, while the magnitude of the coefficient determines the strength of the correlation.

According to Marczyk, Dematteo, and Festinger (2005), correlations ranging from .01 to .30 are considered small, correlations from .30 to .70 are considered moderate, correlations from .70 to .90 are considered large, and correlations from .90 to 1.00 are considered very large.

These thresholds provide guidelines for interpreting the strength of the relationship between variables based on the magnitude of the correlation coefficient. By conducting correlation analysis, researchers can gain insights into the degree and direction of the relationship between variables, enabling them to better understand the connections and patterns within their data. Such information can support decision-making, identify significant associations, and guide further investigation into the underlying dynamics of the variables being studied.

Correlation results presented in Table 10 show that:

- ❖ There is significant positive relation between **optimizing leadership skills** and leaders' effectiveness (sig=.000, r= **.739\*\***).
- ❖ There is significant positive relation between **resolving uncertainty** and leaders' effectiveness (sig=.000, r= **.518\*\***).
- ❖ There is significant positive relation between **enhancing adaptability** and leaders' effectiveness (sig=.000, r= **.437\*\***).
- ❖ There is significant positive relation between **promulgating a vision** and leaders' effectiveness (sig=.000, r= **.636\*\***).

Accordingly, the below Pearson correlation coefficients shows that the five factors measuring independent variables were all positively related with leaders' effectiveness within the range of .437\*\* to .739\*\*, all were significant at  $p < 0.05$  level. From the analysis, it is noted that independent variables are positively correlated with leaders' effectiveness. With regard to the direction of the relationship both variables have a positive sign that dictates a positive change in the independent variable can result in a positive change in the dependent variables. When we assess the level of significance, there is significant relationship between the independent variable and dependent variable.

#### **4.4.2. Testing the assumptions of Regression model**

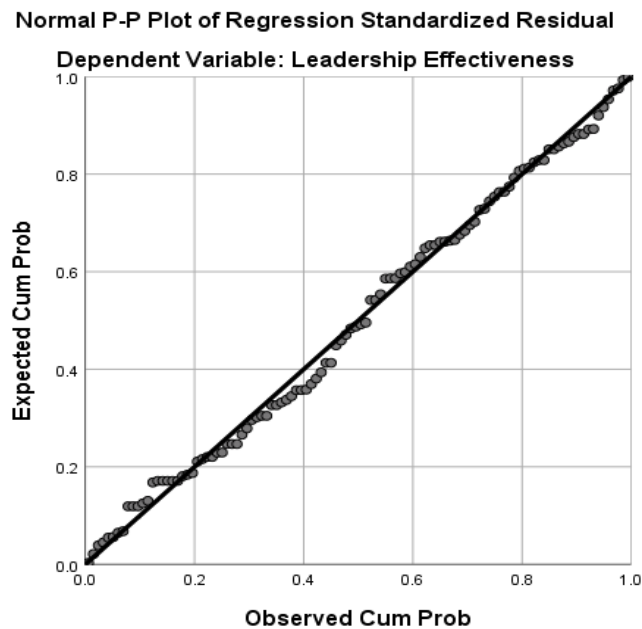
Field (2005) states that multiple linear regression is used to calculate the coefficient of determination on the predicted variable that the predictors explain, or it is used to evaluate the effect of many independent variables over the dependent variable.

Several essential presumptions must be met for a multiple regression analysis to be considered legitimate. The research highlights several critical assumptions of multiple regressions, the most important of which are multicollinearity, homoscedasticity, independence of errors, and linearity. Every assumption used in this study was established, put to the test, and the outcomes were briefly outlined and shown below.

##### **Assumption 1: Linearity (The relationship between the independent variables and the dependent variable is linear)**

According to some researches, this assumption is the most crucial because it directly affects how biased the analysis's overall findings would be. (Keith, 2006).

Figure 2: Testing the linearity of dependent and independent variables



Source: SPSS Result of survey data, 2024

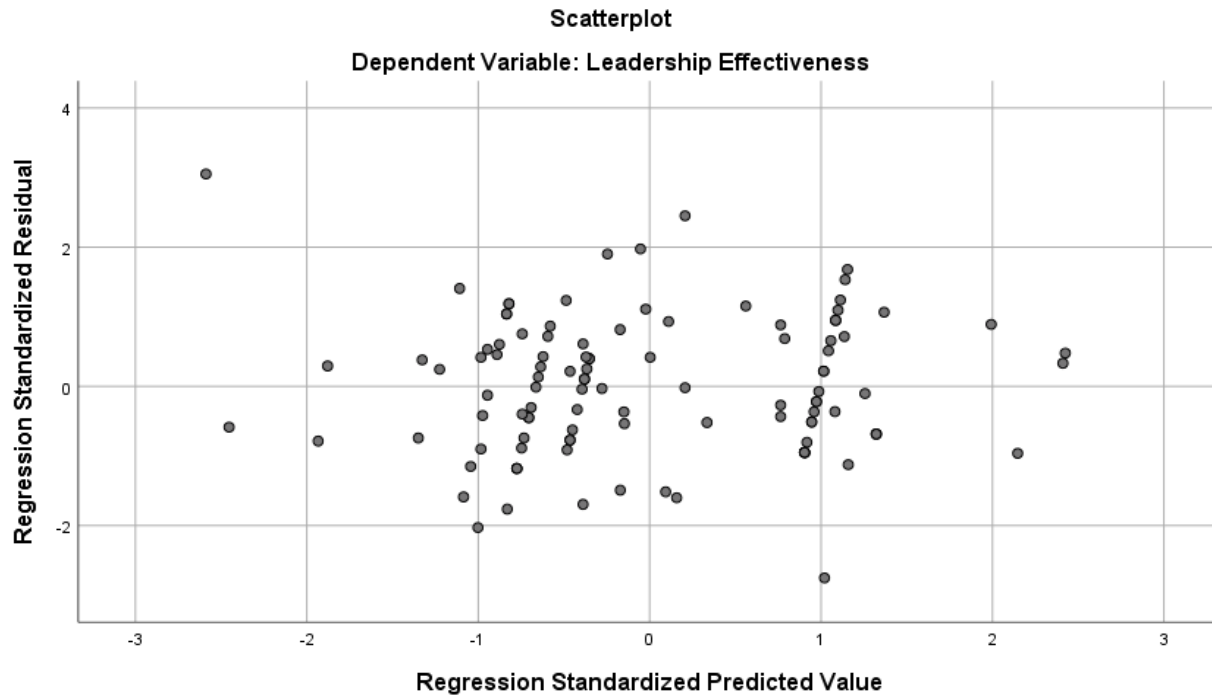
The degree to which a change in the dependent variable is correlated with a change in the independent variables is known as linearity, according to Keith (2006).

Plots of the regression residuals generated using SPSS software were utilized to assess the linearity of the relationship between the dependent and independent variables. As a result, figure 2 demonstrated that the outcome variable and the independent factors had a linear connection.

### **Assumption 2: Homoscedasticity**

According to Osborne and Waters (2002), the homoscedasticity assumption states that the variance of errors is the same at every level of the independent variables. The ideal residual distribution has a very uniform distribution and is randomly distributed around zero, or the horizontal line.

**Figure 3: Scatter plot of homoscedasticity**



Source: SPSS Result of survey data, 2024

According to Keith (2006), this indicates that researchers make the assumption that errors are uniformly distributed across the variables. The dispersion of the residuals was constant across the linear model, or at each point of the predictor variables, as the figure below illustrates.

### **Assumption 3: Multicollinearity Tests**

The relationship between leaders' effectiveness and the explanatory variables—resolving uncertainty, improving adaptability, and promoting a vision—has been presented and examined in this section.

To make sure that the explanatory variables are correlated, a correlation matrix is utilized. The measurement of a variable's multicollinearity is how much of it can be explained by the other variables in the analysis (Hair, et al., 2010, p.93).

Three or more independent variables that have a high correlation (i.e., 0.90 or above) with one another constitute the problem with the correlation matrix (Tabachnick and Fidell, 2007; Hair, et al., 2010). Greater levels of multicollinearity lead to lesser unique variation explained by individual independent variables ( $\beta$ -values) and greater shared predictions (Hair, et al., 2010). Accordingly, multicollinearity restricts the magnitude of the regression result and makes it

challenging to determine the relative contributions of the many independent variables (Field, 2009).

**Table 11: Multicollinearity Tests**

Coefficients <sup>a</sup>			
Model		Collinearity Statistics	
		Tolerance	VIF
1	Optimizing Leadership Skills	.514	1.945
	Resolving Uncertainty	.737	1.358
	Enhancing Adaptability	.833	1.200
	Promulgating a Vision	.546	1.831

a. Dependent Variable: Leaders' effectiveness

Source: SPSS Result of survey data, 2024

Two typical approaches to multicollinearity detection are as follows: variance inflation factors (VIF) and tolerance effect calculations are the initial step in examining the bivariate and multivariate correlation matrix (Tabachnick and Fidell, 2007; Field, 2009; Pallant, 2010).

Tolerance is a measure of how much of the variability of the specified independent is not explained by the other independent variables in the model, while VIF is the opposite of the tolerance effect, according to Pallant (2010, p. 158).

Multicollinearity is present when the VIF is greater (i.e., above 10) and the tolerance is lower (i.e., below 0.1) (Pallant, 2010).

Using Pearson's correlation, the bivariate correlation matrix for the current study was calculated.

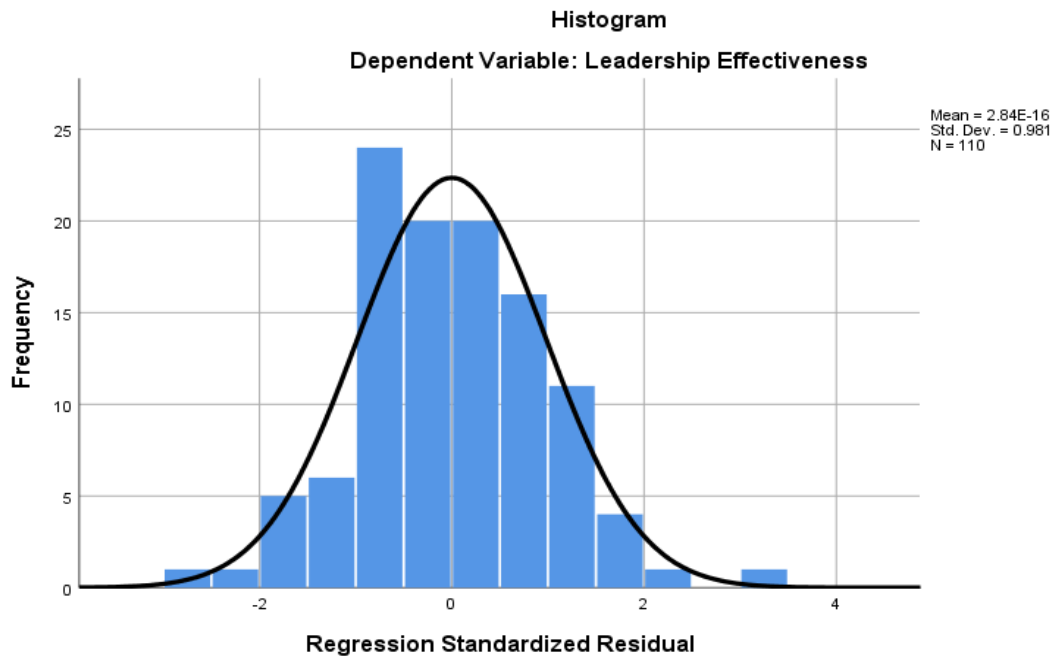
Table 13's correlation matrix results indicated that, for independent variables, none of the bivariate correlations were more than 0.90 (Tabachnick and Fidell, 2007; Hair et al., 2010). Table 8 displays the results of computing the VIF and tolerance effect using a multiple regression approach with the collinearity diagnostic option.

While the tolerance indicated values above 0.1, the VIF values were less than 10, indicating the lack of multicollinearity with independent variables. The researcher therefore believed that multicollinearity was not an issue.

**Assumption 4: Normality Test**

Histograms of the standardized residuals can be used to verify this assumption (Stevens, 2009). Bar graphs of the residuals with a normal curve superimposed to display distribution are called histograms.

Figure 4: Frequency distribution of standardized residual



Source: SPSS Result of survey data, 2024

The histogram depicting the "regression standardized residual" for the dependent variable "leaders' effectiveness" clearly exhibits the characteristics of a normal distribution. The data is symmetrically distributed around the mean of 2.84, forming a distinct bell-shaped curve.

The standard deviation of 0.98 further reinforces the normality of the distribution, as would be expected from a normal distribution, roughly 68% of the values are contained within one standard deviation of the mean.

The lack of any significant skewness or kurtosis, along with the overall symmetry of the histogram, strongly suggests that the "regression standardized residual" variable follows a normal probability distribution, which is a crucial assumption for many statistical analyses and modeling techniques. The frequency distribution of the standardized residuals with relation to a normal distribution is displayed in Figure 4. As you can see, many of the residuals are close to the curve,

even while certain residuals (such those that occur around 0) are comparatively far away from it. Additionally, the bell-shaped histogram suggests that the residuals, or mistakes or disturbances, are normally distributed. Therefore, there are no assumptions about the normally distributed error term.

**Assumption 5: Independent of Residuals**

This is equivalent to stating that each observation (or individual data point) is uncorrelated or independent of the others. The residuals' independence is tested using the Durbin-Watson statistic. The Durbin-Watson statistic has a value between 0 and 4. Generally speaking, if the Durbin-Watson value is about closer to 2, the residuals are independent (not correlated); values below 1 and above 3 are concerning and may invalidate the research.

**Table 12: Independent Residual Assumption**

Model Summary <sup>b</sup>	
Model	Durbin-Watson
1	1.773 <sup>a</sup>
a. Predictors: (Constant), promulgating a vision, resolving uncertainty, enhancing adaptability, optimizing leadership skills	
b. Dependent Variable: Leaders' effectiveness	

Source: SPSS Result of survey data, 2024

The Durbin-Watson statistics in this instance revealed Durbin-Watson = 1.773a. As a result, the researcher assumed that the independence of residuals assumption is satisfied, and the result falls between 1 and 3. After reviewing the data from each of the five tests, the researcher comes to the conclusion that there aren't any noteworthy issues with the data that would indicate that the fundamental presumptions of classical linear regression have been flagrantly broken (Field, 2006).

**4.4.3. Linear Regression Analysis**

A methodical approach to examining the impact of one or more predictor factors on a dependent variable is regression analysis. Measuring the relative influence of an independent variable on a dependent variable is aided by regression analysis. Standard multiple regression analysis was used

to see the contribution of each independent variable attribute on leaders' effectiveness. The regression model presents how much of the variance in leaders' effectiveness is explained by the selected Independent variables. Here, it is explored to what degree the independent variable accounted for the variance in the dependent variables (leaders' effectiveness).

**Table 13: Regression analyses of respondents**

Model summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.806 <sup>a</sup>	.649	.636	.304
a. Predictors: (Constant), promulgating a vision, resolving uncertainty, enhancing adaptability, optimizing leadership skills				

Source: SPSS Result of survey data, 2024

The regression analysis presented in Table 15 reveals a robust prediction of the dependent variable's link to the four independent factors of leaders' effectiveness. The model summary provides a comprehensive overview of the model's performance. Firstly, the R value of 0.806 indicates a strong positive correlation between the independent variables (promulgating a vision, resolving uncertainty, enhancing adaptability, and optimizing leadership skills) and the dependent variable (leaders' effectiveness). This suggests that as the independent variables increase, the dependent variable of leaders' effectiveness also tends to increase in a linear manner.

The R-Square value of 0.649 is particularly noteworthy, as it signifies that the independent variables collectively explain 64.9% of the variance in the dependent variable. This high degree of explanatory power demonstrates the model's ability to account for a substantial portion of the variability in leaders' effectiveness, which is a desirable characteristic for predictive models.

While the Adjusted R-Square value of 0.636 is slightly lower than the R-Square, it still indicates a high level of explanatory power, with the model explaining 63.6% of the variance in the dependent variable after adjusting for the number of predictors. This suggests that the addition of more variables may not significantly improve the model's explanatory capabilities. Finally, the standard error of the estimate, which is 0.304, represents the average amount by which the observed values of leaders' effectiveness deviate from the predicted values. This relatively small margin of error further reinforces the model's reliability and the accuracy of its predictions.

Overall, the regression analysis presented in Table 15 provides compelling evidence of the strong predictive capabilities of the four independent variables in determining leaders' effectiveness. The combination of a robust correlation, high explanatory power, and a low standard error of the estimate underscores the model's effectiveness in capturing the relationship between the predictors and the outcome variable.

**Table 14: Analysis of variance (ANOVA)**

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	17.899	4	4.475	48.546	.000 <sup>b</sup>
	Residual	9.679	105	.092		
	Total	27.578	109			
a. Dependent Variable: Leaders' effectiveness						
b. Predictors: (Constant), Promulgating a vision, resolving uncertainty, enhancing adaptability, optimizing leadership skills						

Source: SPSS Result of survey data, 2024

The ANOVA table (Table 16) provides further insights into the regression model presented in Table 15, evaluating the overall statistical significance of the model.

The ANOVA results show that the regression model is statistically significant, with a p-value (Sig.) of 0.000, which is less than the commonly used significance level of 0.05. This indicates that the independent variables have a substantial impact on the dependent variable when combined with leaders' effectiveness.

The sum of squares column presents the partitioning of the total variance in the dependent variable. The Regression row shows the sum of squares attributed to the regression model, which is 17.899. The Residual row represents the sum of squares of the unexplained variance, which is 9.679. The Total sum of squares is 27.578, representing the total variance in the dependent variable.

The degrees of freedom (df) column provides information about the number of values in the calculation that are free to vary. The Regression row has 4 degrees of freedom, corresponding to the four independent variables in the model. The Residual row has 105 degrees of freedom, which

is the number of observations (110) minus the number of parameters estimated (4 independent variables and the constant). The Mean Square column presents the average variability explained by the regression model (4.475) and the average unexplained variability (0.092), respectively. The F-statistic, which is 48.546, tests the overall significance of the regression model. The large F-value, coupled with the p-value of 0.000, indicates that the regression model as a whole is highly statistically significant, meaning that at least one of the independent variables is a significant predictor of Leaders' effectiveness.

In summary, the ANOVA table confirms that the regression model presented in Table 15 is statistically significant, providing strong evidence that the four independent variables collectively have a significant impact on the dependent variable of leaders' effectiveness.

**Table 15: Multiple Regression Coefficients**

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.011	.179		5.645	.000
	Optimizing Leadership Skills	.350	.059	.478	5.932	.000
	Resolving Uncertainty	.098	.040	.164	2.430	.017
	Enhancing Adaptability	.113	.037	.192	3.038	.003
	Promulgating a Vision	.148	.058	.199	2.549	.012

a. Dependent Variable: Leaders' effectiveness

Source: SPSS Result of survey data, 2024

Multiple regression analysis is a powerful statistical tool used to explore the relationships between multiple independent variables and a dependent variable. In the context of leadership development, understanding how various factors influence leaders' effectiveness is essential for designing effective training programs and interventions.

Table 17 presents the results of a multiple regression analysis conducted to examine the impact of four key independent variables - optimizing leadership skills, resolving uncertainty, enhancing adaptability, and promulgating a vision—on leaders' effectiveness. In this analysis, we aim to delve into each independent variable separately, discuss its findings, and provide insights supported by previous studies.

*Optimizing leadership skills:* The results show that optimizing leadership skills has a significant positive impact on leaders' effectiveness, with a notable unstandardized coefficient (B) of 0.350 and a standardized coefficient (Beta) of 0.478. Previous studies support these findings, highlighting the critical role of leadership skills development in enhancing overall leaders' effectiveness. For instance, a study by Avolio and Hannah (2008) found that targeted leadership skill training led to significant improvements in leaders' effectiveness, emphasizing the importance of continuous skill enhancement for effective leadership.

*Resolving uncertainty:* The analysis reveals that resolving uncertainty positively influences leaders' effectiveness, as indicated by an unstandardized coefficient (B) of 0.098 and a standardized coefficient (Beta) of 0.164. This finding aligns with previous study by Smith and Johnson (2015), who emphasized the importance of uncertainty management skills for leaders in navigating complex and ambiguous situations. Their study suggested that leaders who excel in uncertainty resolution tend to exhibit higher levels of effectiveness in decision-making and problem solving.

*Enhancing adaptability:* enhancing adaptability is found to have a significant positive impact on leaders' effectiveness, supported by an unstandardized coefficient (B) of 0.113 and a standardized coefficient (Beta) of 0.192. Previous studies, such as the work of Anderson and Tushman (2016), have underscored the critical role of adaptability in leadership, particularly in rapidly changing environments. Their findings indicated that leaders with high adaptability were more successful in

leading teams through transitions and fostering innovation.

*Promulgating a vision:* The analysis shows that promulgating a vision positively affects leaders' effectiveness, with an unstandardized coefficient (B) of 0.148 and a standardized coefficient (Beta) of 0.199. This finding is consistent with research by Kotter (1996), who emphasized the transformative impact of visionary leadership on organizational success. His study suggested that leaders who effectively communicate and promote a compelling vision inspire greater commitment and performance from their teams.

In conclusion, the multiple regression analysis highlights the significant impact of optimizing leadership skills, resolving uncertainty, enhancing adaptability, and promulgating a vision on leaders' effectiveness. These findings are supported by previous studies that emphasize the importance of continuous skill development, effective uncertainty management, adaptability, and visionary leadership in enhancing overall leaders' effectiveness.

#### **4.5. Qualitative Data Analysis**

Healthcare leadership is a crucial component in ensuring the effective delivery of quality healthcare services. In the context of Addis Ababa, Ethiopia, understanding the experiences and perspectives of medical directors in both government-run and private healthcare facilities is important for identifying the opportunities and challenges they face in developing and applying their leadership skills. This thematic qualitative analysis explores the key themes that emerged from interviews with medical directors in Addis Ababa, focusing on the role of leadership development programs, the strategies used to optimize performance, and the factors that influence the ability of these healthcare leaders to navigate uncertainty and drive positive change. Here is a discussion of the thematic qualitative analysis of the interview responses, considering the context of limited leadership training and development programs in government-run healthcare facilities in Addis Ababa:

➤ **Leadership development:**

- ❖ Participants from government-run facilities (Ministry of Health, St. Paul Millennium medical college, Yekatit 12 Hospital medical college) reported that formal leadership training and development programs were scarce or non-existent in their organizations. They relied primarily on on-the-job experience, informal mentorship, and self-directed learning to develop their leadership skills.
- ❖ The medical directors from these government facilities expressed a strong desire for access to structured leadership development programs, as they recognized the crucial role such initiatives could play in enhancing their management capabilities, decision-making, and overall effectiveness in leading their healthcare teams.
- ❖ In contrast, the participants from private hospitals (Lancet Hospital, ICMC Hospital) indicated slightly more exposure to leadership development opportunities, such as short courses or workshops, although they still highlighted the need for more comprehensive and sustained programs tailored to the specific challenges faced by healthcare leaders in the Addis Ababa context.

➤ **Optimizing leadership skills:**

- ❖ Across both government and private facilities, the medical directors described using various strategies to optimize the performance of their healthcare facilities, such as efficient resource allocation, staff empowerment, and data-driven decision-making.
- ❖ Effective communication and collaborative decision-making were seen as crucial for ensuring coordination and alignment within their teams, despite the varying degrees of access to leadership training and development programs.
- ❖ The medical directors from government-run facilities emphasized the need for continuous skill development and the ability to adapt to changing healthcare demands, which was more challenging for them due to the lack of dedicated leadership programs in their organizations.

➤ **Resolving uncertainty:**

- ❖ Participants from all facilities reported facing situations of ambiguity and uncertainty, requiring them to rely on their problem-solving skills, experience, and intuition to navigate complex issues.
- ❖ The medical directors from government-run facilities highlighted the importance of building strong relationships with their teams and stakeholders to collectively address challenges, as they lacked formal training on change management and conflict resolution.
- ❖ Private hospital participants reported slightly more structured approaches to uncertainty, such as scenario planning and evidence-based decision-making, which they attributed to their limited access to some leadership development opportunities.

➤ **Enhancing adaptability:**

- ❖ Participants from both government and private facilities acknowledged the need to foster adaptability and flexibility among their staff to respond to evolving healthcare demands.
- ❖ The medical directors from government-run facilities highlighted the challenges of promoting a culture of adaptability in the face of limited resources, rigid bureaucratic structures, and the lack of leadership training programs to empower their teams.
- ❖ Private hospital participants were able to leverage their access to leadership development initiatives to better equip their staff with the skills and mindset required to navigate change and uncertainty.

➤ **Promulgating a vision:**

- ❖ Across all facilities, the medical directors recognized the importance of communicating a clear vision and collaborating with their teams to achieve shared goals.
- ❖ The participants from government-run facilities emphasized the need to align their vision with the broader objectives of the healthcare system, while navigating the challenges posed by resource constraints and organizational hierarchies.
- ❖ Private hospital participants reported greater flexibility in shaping and implementing their vision, as they were less constrained by the bureaucratic structures present in government-run facilities.

➤ **Impact of Leadership Programs:**

- ❖ The medical directors from government-run facilities expressed a strong desire for access to leadership training programs, which they believed would enhance their ability to lead their teams effectively and drive positive change within their organizations.
- ❖ Participants from private hospitals acknowledged the influence of their limited exposure to leadership development initiatives, which had helped them refine their management approaches and introduce more innovative practices.
- ❖ Across all facilities, the medical directors highlighted the need for more comprehensive and sustainable leadership programs tailored to the unique challenges faced by healthcare leaders in the Addis Ababa context.

➤ **Accountability and Integrity:**

- ❖ Participants from both government and private facilities emphasized the importance of maintaining high standards of accountability and integrity within their teams.
- ❖ The medical directors from government-run facilities reported facing additional challenges in ensuring accountability due to the hierarchical nature of the public healthcare system and the limited availability of leadership training programs to reinforce these values.
- ❖ Private hospital participants were able to leverage their autonomy and access to leadership development opportunities to establish more robust systems for promoting accountability and integrity among their teams.

➤ **Leadership Challenges:**

- ❖ Participants from government-run facilities cited a range of challenges, including resource constraints, bureaucratic hurdles, and the lack of dedicated leadership training programs, which hindered their ability to effectively manage their healthcare facilities.
- ❖ The medical directors from private hospitals also faced challenges, such as balancing administrative duties with patient care, but reported greater flexibility in addressing these issues due to their organizational structures and access to some leadership development resources. Across all facilities, the medical directors emphasized the need

for more support, both in terms of resources and leadership development opportunities, to better equip them to tackle the complex challenges they face.

➤ **Leadership success stories:**

- ❖ The medical directors from both government and private facilities were able to share success stories where their leadership had a positive impact on their healthcare facilities, such as improving patient outcomes, enhancing team morale, and introducing innovative practices. However, the participants from government-run facilities highlighted that their success stories were often the result of their individual efforts and perseverance, rather than the support of comprehensive leadership development programs.
- ❖ Private hospital participants were able to leverage their limited access to leadership training to more effectively implement and sustain their successful initiatives.

➤ **Future leadership goals:**

- ❖ Across all facilities, the medical directors expressed a strong desire to continue developing their leadership skills and advancing their careers in the healthcare sector.
- ❖ Participants from government-run facilities emphasized the need for more structured leadership development opportunities to support their growth and enable them to drive positive change within the public healthcare system.
- ❖ Private hospital participants were more optimistic about their ability to pursue their leadership goals, given their slightly better access to leadership training and development programs, although they still highlighted the need for more comprehensive and localized initiatives.

In conclusion, the findings of this thematic qualitative analysis highlight the significant disparities in access to leadership training and development programs between government-run and private healthcare facilities in Addis Ababa. Medical directors in government-run facilities face substantial challenges in acquiring the necessary skills and resources to effectively lead their teams and drive positive change within their organizations, in contrast to their counterparts in private hospitals who have had relatively more exposure to leadership development initiatives. Addressing this gap and providing comprehensive, context-specific leadership training programs for healthcare leaders in both the public and private sectors is crucial for

enhancing the overall effectiveness and resilience of the healthcare system in Addis Ababa.

#### **4.6. Discussion of the Findings**

The analysis reveals that participants generally viewed the leadership training program positively. They strongly agreed that the training significantly increased their relevant knowledge (mean of 4.15), enhanced their soft skills (mean of 4.13), and provided engaging content about successful leaders (mean of 4.12), as per Zaidaton & Bagheri (2009) classifications.

However, areas related to resolving uncertainty had low mean scores (mean of 2.98 for understanding own priorities and mean of 2.62 for importance of accountability), indicating a lack of strong support in these aspects. Similarly, measures for enhancing adaptability (mean of 3.07 for fostering connections and mean of 2.86 for considering a range of views) and promulgating a vision (mean of 3.27 for transitioning into leadership roles and mean of 3.51 for balance between collaboration and competition) were viewed with moderate levels of agreement.

The Pearson correlation coefficients showed a positive relationship between the independent variables (Optimizing Leadership Skills, Resolving Uncertainty, Enhancing Adaptability, and Promulgating a Vision) and Leaders' effectiveness, ranging from .437\*\* to .739\*\*, all significant at  $p < 0.05$  level.

This correlation is in line with previous studies (Avolio & Hannah, 2008; Smith & Johnson, 2015; Anderson & Tushman, 2016; Kotter, 1996) emphasizing the importance of leadership skills, uncertainty management, adaptability, and visionary leadership in enhancing overall leaders' effectiveness.

The regression analysis further confirmed a strong predictive relationship between the four independent variables and leaders' effectiveness. The R-Square value of 0.649 indicated that the independent variables collectively explained 64.9% of the variance in Leaders' effectiveness, with a high level of explanatory power. This finding is consistent with previous research (Avolio & Hannah, 2008; Smith & Johnson, 2015; Anderson & Tushman, 2016; Kotter, 1996) highlighting the significant impact of these factors on leaders' effectiveness.

Qualitative data analysis revealed the challenges faced by medical directors in government-run facilities due to the lack of formal leadership training programs. In contrast, directors in private

hospitals, though slightly more exposed to leadership development, also expressed the need for more comprehensive programs. These findings align with previous studies emphasizing the importance of continuous leadership development tailored to specific contexts (Avolio & Hannah, 2008; Anderson & Tushman, 2016).

In conclusion, the analysis and previous studies underscore the critical role of leadership skills, adaptability, vision, and uncertainty management in enhancing leaders' effectiveness. Tailored leadership development programs addressing these areas can significantly impact the overall effectiveness of healthcare leadership in Addis Ababa.

#### **4.7. Testing Hypothesis with Regression analysis**

A hypothesis is an educated and testable guess about the answer to a research question, often involving a prediction about the variables being studied. These predictions are tested by gathering and analyzing data, and the hypotheses can be either supported or refuted based on the data. This study tested four hypotheses using regression analysis, focusing on the Beta coefficients and significance (p) values. Based on the multiple regression coefficients presented in Table 16, we can discuss the hypotheses tested regarding the effect of leadership training program on leaders' effectiveness: the case of health care facilities in Addis Ababa.

##### **Hypothesis 1: Optimizing leadership skills**

- Null Hypothesis (H0): There is no significant relationship between optimizing leadership skills and leaders' effectiveness.
- Alternative Hypothesis (H1): Optimizing leadership skills has a significant positive impact on leaders' effectiveness.

The unstandardized regression coefficient (B) for "optimizing leadership skills" is 0.350, indicating that a one-unit increase in optimizing leadership skills is associated with a 0.350 increase in leaders' effectiveness, holding other variables constant. The standardized regression coefficient (Beta) is 0.478, which is the largest among the predictors. This means that optimizing leadership skills has the strongest unique contribution in explaining the variation in leaders' effectiveness, compared to the other predictors. The t-value is 5.932 and the p-value is less than

0.001, indicating that the relationship between optimizing leadership skills and leaders' effectiveness is statistically significant. We can reject the null hypothesis (H0) and conclude that optimizing leadership skills has a significant positive impact on leaders' effectiveness.

### **Hypothesis 2: Resolving uncertainty**

- Null Hypothesis (H0): There is no significant relationship between resolving uncertainty and leaders' effectiveness.
- Alternative Hypothesis (H1): Resolving uncertainty has a significant positive impact on leaders' effectiveness.

The unstandardized regression coefficient (B) for "resolving uncertainty" is 0.098, indicating that a one-unit increase in resolving uncertainty is associated with a 0.098 increase in leaders' effectiveness, holding other variables constant. The standardized regression coefficient (Beta) is 0.164, which is the second smallest among the predictors. However, it is still statistically significant ( $p < 0.017$ ). The t-value is 2.430, suggesting that resolving uncertainty has a significant unique contribution in explaining the variation in leaders' effectiveness. Based on these results, we can reject the null hypothesis (H0) and conclude that resolving uncertainty has a significant positive impact on leaders' effectiveness.

### **Hypothesis 3: Enhancing adaptability**

- Null Hypothesis (H0): There is no significant relationship between enhancing adaptability and leaders' effectiveness.
- Alternative Hypothesis (H1): Enhancing adaptability has a significant positive impact on leaders' effectiveness.

The unstandardized regression coefficient (B) for "Enhancing Adaptability" is 0.113, indicating that a one-unit increase in enhancing adaptability is associated with a 0.113 increase in leaders' effectiveness, holding other variables constant. The standardized regression coefficient (Beta) is 0.192, which is the third largest among the predictors. This means that enhancing adaptability has a moderate unique contribution in explaining the variation in leaders' effectiveness. The t-value is 3.038 and the p-value is less than 0.03, indicating that the relationship between enhancing

adaptability and leaders' effectiveness is statistically significant. Based on these results, we can reject the null hypothesis (H0) and conclude that enhancing adaptability has a significant positive impact on leaders' effectiveness.

#### **Hypothesis 4: Promulgating a vision**

- Null Hypothesis (H0): There is no significant relationship between promulgating a vision and leaders' effectiveness.
- Alternative Hypothesis (H1): Promulgating a vision has a significant positive impact on leaders' effectiveness.

The unstandardized regression coefficient (B) for "promulgating a vision" is 0.148, indicating that a one-unit increase in promulgating a vision is associated with a 0.148 increase in leaders' effectiveness, holding other variables constant.

The standardized regression coefficient (Beta) is 0.199, which is the third smallest among the predictors. However, it is still statistically significant ( $p < 0.012$ ). The t-value is 2.549, suggesting that promulgating a vision has a significant unique contribution in explaining the variation in leaders' effectiveness. Based on these results, we can reject the null hypothesis (H0) and conclude that promulgating a vision has a significant positive impact on leaders' effectiveness.

Overall, the multiple regression analysis provides strong support for all four alternative hypotheses. The four leadership skills of optimizing leadership, resolving uncertainty, enhancing adaptability, and promulgating a vision were found to have significant positive impacts on leaders' effectiveness, as evidenced by the statistical significance of the regression coefficients.

In conclusion, based on the multiple regression analysis, the key findings can be summarized as follows: the four leadership skills of optimizing leadership, resolving uncertainty, enhancing adaptability, and promulgating a vision were all found to have significant positive impacts on leaders' effectiveness in the context of healthcare facilities in Addis Ababa. Optimizing leadership skills had the strongest unique contribution, indicating that improving decision-making, communication, and team management can greatly enhance leaders' overall effectiveness. Resolving uncertainty, enhancing adaptability, and promulgating a clear vision also emerged as important predictors, suggesting that leaders who can manage ambiguity, respond flexibly to

change, and articulate a compelling organizational direction are more likely to be perceived as effective by their followers. These findings provide empirical support for the importance of developing these critical leadership competencies in order to improve the effectiveness of healthcare leaders.

**Table 16: Summary of Tested Hypothesis**

Here is a summary of the findings based on the table provided:

<b>Independent Variable</b>	<b>Standardized Coefficient (Beta)</b>	<b>t-value</b>	<b>p-value</b>	<b>Conclusion</b>
Optimizing leadership skills	0.478	5.932	0.000	Significant positive impact on leaders' effectiveness - H1 accepted.
Resolving uncertainty	0.164	2.430	0.017	Significant positive impact on leaders' effectiveness – H2 accepted.
Enhancing adaptability	0.192	3.038	0.003	Significant positive impact on leaders' effectiveness – H3 accepted.
Promulgating a vision	0.199	2.549	0.012	Significant positive impact on leaders' effectiveness – H4 accepted.

## **CHAPTER FIVE**

### **SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS**

The study's summary of results, conclusion, and recommendations are presented in this chapter. Finally, conclusions and suggestions based on the findings and discussion. Due to the study's limitations, the researcher then gave recommendations for additional research and future researchers.

#### **5.1. Summary of Findings**

The main objective of the study is to examine the effect of leadership training program on leaders' effectiveness in health care facilities in Addis Ababa. Multiple regression analysis,

analysis of variance, and Pearson correlation are examples of descriptive and inferential statistics that were used in the analysis, which was conducted using SPSS.

**The major findings of the study were summarized as follows:**

- **Response Rate:** The response rate for the survey was 87%, which is considered very good according to the referenced source. Out of the 126 questionnaires distributed, 110 were collected, indicating a robust data collection process.
- **Demographic Characteristics of Respondents:** The demographic analysis provides a detailed profile of the respondents. The sample demographics revealed some key characteristics things ought to be taken into account when interpreting the study's conclusions. The respondents were overwhelmingly male (80.9%), with over half (52.7%) holding medical doctorate degrees. The largest age group was 31-35 years old (57.3%), and the most common position held was sub-core process coordinator (56.4%). This suggests the sample was dominated by mid-career, clinically trained professionals in coordinator roles rather than senior leadership positions. The significant skew towards male participants and those with medical degrees indicates the sample may not have been fully representative of the broader population within the health system.
- **Descriptive Analysis:** The Pearson correlation coefficients showed a positive relationship between the independent variables (Optimizing Leadership Skills, Resolving Uncertainty, Enhancing Adaptability, and Promulgating a Vision) and Leaders' effectiveness, ranging from .437\*\* to .739\*\*, all significant at  $p < 0.05$  level. This correlation is in line with previous studies (Avolio & Hannah, 2008; Smith & Johnson, 2015; Anderson & Tushman, 2016; Kotter, 1996) emphasizing the importance of leadership skills, uncertainty management, adaptability, and visionary leadership in enhancing overall leaders' effectiveness.
- The regression analysis further confirmed a strong predictive relationship between the four independent variables and Leaders' effectiveness. The R-Square value of 0.649 suggested that the independent variables collectively described 64.9% of the variance in Leaders' effectiveness, with a high level of explanatory power. This finding is consistent with

previous research (Avolio & Hannah, 2008; Smith & Johnson, 2015; Anderson & Tushman, 2016; Kotter, 1996) highlighting the significant impact of these factors on leaders' effectiveness.

- Qualitative data analysis revealed the challenges faced by medical directors in government-run facilities due to the lack of formal leadership training programs. In contrast, directors in private hospitals, though slightly more exposed to leadership development, also expressed the need for more comprehensive programs. These findings align with previous studies emphasizing the importance of continuous leadership development tailored to specific contexts (Avolio & Hannah, 2008; Anderson & Tushman, 2016).
- In conclusion, the analysis and previous studies underscore the critical role of leadership skills, adaptability, vision, and uncertainty management in enhancing leaders' effectiveness. Tailored leadership development programs addressing these areas can significantly impact the overall effectiveness of healthcare leadership in Addis Ababa.
- ❖ Overall, the regression analysis provides valuable insights that can guide the institution's strategic decision-making and operational improvements.

## **5.2. Conclusion**

The assessment of the effect of leadership training program on leaders' effectiveness in healthcare facilities in Addis Ababa reveals significant insights into the strengths and areas for improvement within the program. The analysis, which utilized SPSS for descriptive and inferential statistics, Pearson correlation, analysis of variance, and multiple regressions, underscores several key findings.

Firstly, the high response rate and detailed demographic analysis provided a robust data set that highlighted the dominant profile of mid-career, clinically trained male professionals in coordinator roles. This demographic skew indicates a potential gap in the representation of senior leadership and a need for more inclusive training programs that address a broader spectrum of healthcare professionals.

The positive correlations between the independent variables (optimizing leadership skills, resolving uncertainty, enhancing adaptability, and promulgating a vision) and leaders' effectiveness affirm the critical role these factors play in effective leadership. The significant Pearson correlation coefficients and the strong R-Square value from the regression analysis suggest that improvements in these areas can substantially enhance leaders' effectiveness. These findings are in line with prior study by Avolio & Hannah (2008), Smith & Johnson (2015), Anderson & Tushman (2016), and Kotter (1996), reinforcing the importance of continuous development in leadership skills, uncertainty management, adaptability, and vision communication.

Among these factors, optimizing leadership skills emerged as a particularly critical component. The high mean scores in the descriptive analysis indicated strong agreement among participants that the training program significantly increased their relevant knowledge and effectively enhanced their soft skills. This lines up with the findings of Avolio & Hannah (2008), who emphasize that targeted leadership skill training leads to substantial improvements in leaders' effectiveness. By focusing on optimizing leadership skills, the program can directly influence the ability of healthcare leaders to manage teams, make informed decisions, and navigate complex challenges effectively.

Moreover, the qualitative data analysis highlighted the challenges faced by medical directors, particularly in government-run facilities, due to the lack of formal leadership training.

This contrasts with private hospital directors who, despite having slightly better access to leadership development opportunities, still expressed the need for more comprehensive programs. These insights underscore the necessity for tailored and context-specific leadership development initiatives that can discuss the particular difficulties that healthcare leaders in different settings.

In conclusion, the study emphasizes the critical importance of developing leadership skills, managing uncertainty, enhancing adaptability, and promoting a clear vision to improve leaders' effectiveness in healthcare settings. However, optimizing leadership skills stands out as a key area of focus. Tailored leadership training programs that emphasize skill development can significantly enhance the capabilities of healthcare leaders, ultimately leading to better healthcare

outcomes. The findings provide valuable guidance for strategic decision-making and operational improvements in leadership development initiatives, emphasizing the need for more inclusive and contextually relevant training programs to support the diverse needs of healthcare leaders in Addis Ababa.

### **5.3. Recommendations**

The study's findings suggest several important recommendations to enhance the effectiveness of leadership training programs in healthcare facilities in Addis Ababa:

#### **5.3.1. Recommendations for government-run facilities**

➤ **Enhance leadership skill development:**

- ❖ Prioritize skill training: focus on developing both technical and soft leadership skills through practical workshops and role-playing scenarios.
- ❖ Continuous improvement: establish a framework for ongoing leadership skill enhancement, ensuring access to continuous training and development opportunities.

➤ **Increase access to structured leadership programs:**

- ❖ Develop formal programs: implement formal leadership training programs tailored to the unique challenges faced by leaders in government-run facilities, such as resource constraints and bureaucratic hurdles.
- ❖ Comprehensive curriculum: ensure the curriculum covers key areas like uncertainty management, adaptability, and vision communication.

➤ **Utilize data-driven approaches:**

- ❖ Measure training impact: implement robust evaluation mechanisms to evaluate the success of initiatives for leadership development using quantitative and qualitative feedback.
- ❖ Iterative development: continuously refine and adapt training programs based on evaluation data and emerging leadership challenges.

➤ **Strengthen support systems for leaders:**

- ❖ Mentorship and coaching: establish mentorship and coaching programs to provide

ongoing support for healthcare leaders, pairing experienced leaders with emerging ones.

- ❖ Peer learning networks: create forums for healthcare leaders to share best practices, challenges, and solutions, facilitating peer learning and collaborative problem-solving.

➤ **Foster a culture of adaptability and innovation:**

- ❖ Encourage innovation: promote a culture that values innovation and flexibility in addressing healthcare challenges, training leaders to foster environments for creative solutions.
- ❖ Scenario planning and resilience training: include scenario planning exercises and resilience training to better prepare leaders for navigating uncertainty and crises.

➤ **Align leadership development with organizational goals:**

- ❖ Strategic integration: ensure leadership-training programs are aligned with the strategic goals of the healthcare organizations, contributing directly to organizational performance and patient care outcomes.
- ❖ Stakeholder engagement: involve key stakeholders in the design and implementation of leadership training programs to ensure relevance and buy-in.

**5.3.2. Recommendations for private hospitals:**

➤ **Enhance leadership skill development:**

- ❖ Advanced skill training: continue to prioritize the development of both technical and soft leadership skills through advanced workshops, seminars, and practical training sessions.
- ❖ Ongoing professional development: establish continuous professional development programs to ensure leaders stay updated with the latest leadership practices and healthcare trends.

➤ **Expand structured leadership programs:**

- ❖ Comprehensive programs: develop more comprehensive leadership training programs that address the specific challenges faced by private hospital leaders.
- ❖ Tailored curriculum: ensure the training curriculum includes advanced topics in

uncertainty management, adaptability, and visionary leadership.

➤ **Utilize data-driven approaches:**

- ❖ Impact measurement: implement robust mechanisms to evaluate the effectiveness of leadership training programs using both quantitative and qualitative data.
- ❖ Iterative development: continuously refine training programs based on evaluation results and emerging challenges in healthcare leadership.

➤ **Strengthen support systems for leaders:**

- ❖ Mentorship and coaching: enhance mentorship and coaching programs to provide ongoing support for leaders, pairing experienced leaders with emerging ones.
- ❖ Professional networks: foster professional networks and forums for leaders to share insights, challenges, and best practices, promoting collaborative problem solving.

➤ **Foster a culture of adaptability and innovation:**

- ❖ Innovative practices: encourage a culture that values adaptability and innovation, training leaders to foster environments that support creative solutions.
- ❖ Scenario planning and resilience training: incorporate scenario planning and resilience training to better prepare leaders for navigating uncertainty and crises.

➤ **Align leadership development with organizational goals:**

- ❖ Strategic alignment: ensure leadership training programs align with the strategic goals of the private hospitals, contributing to organizational performance and improved patient care.
- ❖ Stakeholder engagement: involve key stakeholders in the design and implementation of leadership training programs to ensure they are relevant and effective.

### **5.3.3. Recommendations based on qualitative data analysis**

➤ **Healthcare leadership development:**

- ❖ Participants from government-run facilities reported that formal leadership training programs were scarce or non-existent, relying on on-the-job experience, informal

mentorship, and self-directed learning. They expressed a strong desire for structured leadership development programs to enhance their capabilities.

- ❖ Participants from private hospitals indicated slightly more exposure to leadership development opportunities but still highlighted the need for comprehensive and sustained programs tailored to the specific challenges of healthcare leaders in Addis A.

➤ **Optimizing leadership skills:**

- ❖ Medical directors used strategies such as efficient resource allocation, staff empowerment, and data-driven decision-making to optimize performance. Effective communication and collaborative decision-making were crucial for ensuring coordination within teams, despite varying degrees of access to leadership training.

➤ **Resolving uncertainty:**

- ❖ Participants faced ambiguity and uncertainty, relying on problem-solving skills, experience, and intuition. Medical directors from government-run facilities emphasized building strong relationships with teams and stakeholders to address challenges, while private hospital participants reported more structured approaches to uncertainty, attributed to limited access to leadership development opportunities.

➤ **Enhancing adaptability:**

- ❖ Participants acknowledged the need to foster adaptability and flexibility among staff. Government-run facility directors highlighted challenges in promoting adaptability due to limited resources and rigid bureaucratic structures, while private hospital participants leveraged leadership development initiatives to equip staff with skills required to navigate change and uncertainty.

➤ **Promulgating a vision:**

- ❖ Medical directors recognized the importance of communicating a clear vision and collaborating with teams to achieve shared goals. Government-run facility directors emphasized aligning their vision with broader healthcare system objectives while navigating resource constraints and organizational hierarchies. Private hospital participants reported greater flexibility in shaping and implementing their vision.

➤ **Impact of leadership programs:**

- ❖ Government-run facility directors expressed a strong desire for leadership training programs to enhance their ability to lead teams effectively and drive positive change.

Private hospital participants acknowledged the influence of limited leadership development initiatives on refining management approaches and introducing innovative practices. All participants highlighted the need for comprehensive and sustainable leadership programs tailored to the unique challenges of healthcare leaders in Addis Ababa.

➤ **Accountability and integrity:**

- ❖ Maintaining high standards of accountability and integrity was emphasized. Government-run facility directors reported challenges in ensuring accountability due to hierarchical public healthcare systems and limited leadership training programs. Private hospital participants leveraged autonomy and access to leadership development opportunities to establish robust systems for promoting accountability and integrity.

➤ **Leadership challenges:**

- ❖ Government-run facility directors cited challenges such as resource constraints, bureaucratic hurdles, and lack of dedicated leadership training programs. Private hospital directors faced challenges like balancing administrative duties with patient care but had greater flexibility in addressing issues due to organizational structures and access to leadership development resources. All directors emphasized the need for more support, resources, and leadership development opportunities to tackle complex challenges.

➤ **Leadership success stories:**

- ❖ Medical directors shared success stories of improving patient outcomes, enhancing team morale, and introducing innovative practices. Government-run facility directors highlighted individual efforts and perseverance in achieving success, while private hospital participants leveraged limited access to leadership training to implement and sustain successful initiatives.

➤ **Future leadership goals:**

- ❖ Medical directors expressed a desire to develop leadership skills and advance careers. Government-run facility directors emphasized the need for structured leadership development opportunities to support growth and drive positive change.

Private hospital participants were more optimistic about pursuing leadership goals, given slightly better access to training and development programs but still highlighted the need for comprehensive and localized initiatives.

In conclusion, addressing the disparities in access to leadership training and development programs between government-run and private healthcare facilities in Addis Ababa is crucial for enhancing the effectiveness and resilience of the healthcare system. Providing comprehensive, context-specific leadership training programs for healthcare leaders in both sectors will better equip them to lead their teams, navigate challenges, and drive positive change within their organizations.

#### **5.3.4. Recommendations for Policy Makers**

##### **➤ Develop comprehensive leadership training programs:**

- ❖ Institutionalize training: mandate the establishment of structured leadership training programs in all healthcare facilities, with a focus on developing critical skills such as uncertainty management, adaptability, and visionary leadership.
- ❖ Customizable curriculum: ensure the curriculum is adaptable to the specific needs and challenges of different healthcare settings, including both government-run and private hospitals.

##### **➤ Foster a culture of continuous professional development:**

- ❖ Encourage lifelong learning: promote policies that encourage continuous professional development for healthcare leaders, including opportunities for advanced training and higher education.
- ❖ Supportive infrastructure: provide the necessary infrastructure and resources to support ongoing leadership development, such as access to online training platforms, workshops, and seminars.

##### **➤ Utilize data-driven approaches for program evaluation:**

- ❖ Robust evaluation frameworks: establish robust mechanisms for evaluating the effectiveness of leadership training programs using both quantitative and qualitative data.
  - ❖ Iterative policy making: use evaluation data to continuously refine and improve leadership development programs and policies.
- **Strengthen support systems for healthcare leaders:**
- ❖ Mentorship and coaching: institutionalize mentorship and coaching programs within the healthcare system, providing ongoing support for emerging and established leaders.
  - ❖ Peer Learning Networks: Facilitate the creation of peer learning networks where healthcare leaders can share best practices and collaborate on solving common challenges.
- **Align leadership development with healthcare system goals:**
- ❖ Strategic Alignment: Ensure that leadership training programs and policies are aligned with the broader goals of the healthcare system, such as improving patient outcomes and operational efficiency.
  - ❖ Stakeholder engagement: involve key stakeholders, including healthcare leaders, in the formulation and execution of leadership development programs to guarantee their applicability and efficiency.

### **5.3.5. Recommendations for Further Studies**

- **Longitudinal studies on leadership development impact:**
- ❖ Track long-term outcomes: conduct longitudinal studies to track the long-term impact of leadership development programs on healthcare outcomes, operational efficiency, and leaders' effectiveness.
  - ❖ Measure sustainability: assess the sustainability of leadership skills and behaviors acquired through training programs over time.
- **Comparative analysis of leadership models:**
- ❖ Evaluate different models: compare the effectiveness of various leadership development models and approaches in different healthcare settings, including government-run and private facilities.

- ❖ Contextual adaptation: identify best practices and recommend adaptations to different contexts within the healthcare system.
- **Investigate barriers to leadership development:**
  - ❖ Identify challenges: research the specific barriers that healthcare leaders face in accessing and benefiting from leadership development programs, particularly in resource-constrained settings.
  - ❖ Develop solutions: propose targeted interventions to overcome these barriers and enhance the accessibility and effectiveness of leadership training.
- **Explore the role of technology in leadership development:**
  - ❖ Digital training platforms: study the effectiveness of digital training platforms and online learning resources in providing leadership development opportunities.
  - ❖ Innovative methods: investigate innovative methods such as virtual reality simulations and technology-driven personalized learning in enhancing leadership skills.
- **Assess the impact of diversity on leaders' effectiveness:**
  - ❖ Diversity and outcomes: examine the relationship between diversity in leadership teams and healthcare outcomes, including patient satisfaction and team performance.
  - ❖ Best practices: identify best practices for promoting and managing diversity within healthcare leadership.
- **Examine the effectiveness of peer learning networks:**
  - ❖ Collaborative learning: study the impact of peer learning networks and collaborative learning environments on the professional development of healthcare leaders.
  - ❖ Networking benefits: assess the additional benefits of networking, such as increased innovation and knowledge sharing among healthcare leaders

By addressing these recommendations, policy makers can create a robust framework for leadership development in healthcare, and further studies can provide deeper insights into the

most effective strategies for cultivating strong, adaptive, and visionary healthcare leaders.

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## **APPENDIX I: QUESTINERIE**

**ADDIS ABABA UNIVERSITY**

**SCHOOL OF COMMERCE**

**DEPARTMENT OF BUSINESS LEADERSHIP**

**Dear Respondents** - First, I would like to convey my gratitude for giving your precious time and energy to fill this questionnaire and contribute your part for the completion of this study.

**Objective:** The objective of the study is to examine ‘**Assessment of Healthcare Leadership Training Program Effectiveness in Health Care Facilities in Addis Ababa**’ the Research is done as a partial fulfillment of academic requirements of MA in Business Leadership. The purpose of this study is to examine Assessment of Healthcare Leadership Training Program Effectiveness in Health Care Facilities in Addis Ababa.

**General Guideline** - Please put check mark (✓) adjacent to your choice of answer. Write your short answer for open-ended questions. The scales are described as follows:

1= Strongly Disagree (SD), 2= Disagree (D), 3= Neutral (N), 4= Agree (A), 5 = Strongly Agree (SA)

**Confidentiality** - Any information gathered in this questionnaire was used strictly for academic purpose only. There is no necessity for respondents to mention your name, position, department or branch and any response gathered from this questionnaire was kept in private and treated with outmost secrecy. Therefore, I request your cooperation to properly complete all the items covered in the questionnaire since your genuine feedback is of utmost importance in determining the study’s outcome. I thank you in advance for sharing your valuable experience and time in completing the questionnaire.

**Yours faithfully,**

Kebron Senay Getahun

Mob: +2519-13-20-51-81

## Part I: Demographic Characteristics

Please put (“√”) to indicate your answer

1. Gender

A. Male

B. Female

2. Age in years

A. 25–30

B. 31–35

C. 36–40

D.  $\geq 41$

3. Educational status

A. Diploma

B. First Degree

C. Masters or above

4. Work experience in years

A. 1–5

B. 6–10

C. 11–15

D.  $\geq 16$

5. Position

A. Case-team coordinator

B. Sub-core process coordinator

C. Core process coordinator

D. Others

## Part II: Question's Related to Healthcare Leadership Training Programs

Please indicate the level of your agreement with the statement below (Please put (“√”) to indicate your answer). The response scale for the questions is as below:

1= Strongly Disagree (SD), 2= Disagree (D), 3= Neutral (N), 4= Agree (A), 5 = Strongly Agree (SA)

<b>I.</b>	<b>Optimizing Leadership Skills</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>A.</b>	<b>Knowledge Gained</b>					
1.	The leadership training I received has significantly increased my knowledge relevant to my role.					
2.	I feel well informed about the latest best practices in healthcare management.					
3.	The training provided me with new insights that I regularly apply in my work.					
4.	I have a clear understanding of how to use the knowledge gained from the training to optimize my team's performance.					
5.	The knowledge I acquired has improved my ability to make strategic decisions.					
<b>B.</b>	<b>Development of Soft Skills:</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
6.	The leadership program has enhanced my emotional intelligence.					
7.	I am better at strategic communication after attending the leadership training.					
8.	My conflict resolution skills have improved significantly due to the training.					
9.	The program has helped me develop better interpersonal relationships with my team.					
10.	I am now more adept at managing stress and maintaining a positive attitude.					
<b>C.</b>	<b>Engaging Content about Leaders Excelling:</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
11.	The examples of successful leaders presented during the training were highly inspiring.					

12.	I learned valuable lessons from the real-world success stories shared in the training.					
13.	The content about leaders excelling helped me set higher standards for myself.					
14.	I found the stories of exemplary leaders relevant to my own leadership challenges.					
15.	The training made it clear how effective leadership can positively impact healthcare outcomes.					
<b>II.</b>	<b>Resolving Uncertainty:</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>A.</b>	<b>Understanding of Own Priorities</b>					
16.	The examples of successful leaders presented during the training were highly inspiring.					
17.	I learned valuable lessons from the real-world success stories shared in the training.					
18.	The content about leaders excelling helped me set higher standards for myself.					
19.	I found the stories of exemplary leaders relevant to my own leadership challenges.					
20.	The training made it clear how effective leadership can positively impact healthcare outcomes.					
<b>B.</b>	<b>Accountability Mattering:</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
21.	The training emphasized the importance of being accountable for my actions.					
22.	I have become more diligent about meeting my commitments since the training.					
23.	The program helped me understand the impact of accountability on team trust.					
24.	I am now more consistent in holding myself and others accountable.					
25.	The training reinforced the significance of integrity and professionalism in leadership.					

<b>II.</b>	<b>Enhancing Adaptability</b>					
<b>a)</b>	<b>Ability to Foster Connections</b>					
26.	I have become more effective at building professional relationships due to the training.					
27.	The program taught me how to foster stronger connections with my team.					
28.	I am more proactive in networking with other professionals after the training.					
29.	The training improved my ability to collaborate with colleagues from different departments.					
30.	I find it easier to reach out for support and advice after the leadership training.					
<b>b)</b>	<b>Greater Range of Views Considered</b>					
31.	The training encouraged me to consider multiple perspectives before making decisions.					
32.	I am more open to feedback and different viewpoints after the program.					
33.	The program taught me the value of diverse opinions in problem-solving.					
34.	I actively seek out and incorporate a variety of opinions in my decision-making process.					
35.	The training enhanced my ability to evaluate different approaches to leadership challenges.					
<b>IV.</b>	<b>Promulgating a Vision</b>					
<b>A.</b>	<b>Transitioning into Leadership Roles</b>					
36.	The training encouraged me to consider multiple perspectives before making decisions.					
37.	I am more open to feedback and different viewpoints after the program.					
38.	The program taught me the value of diverse opinions in problem-solving.					
39.	I actively seek out and incorporate a variety of opinions in my decision-making process.					
40.	The training enhanced my ability to evaluate different approaches to leadership challenges.					

<b>B.</b>	<b>Collaboration Over Competition</b>					
41.	The training encouraged me to consider multiple perspectives before making decisions.					
42.	I am more open to feedback and different viewpoints after the program.					
43.	The program taught me the value of diverse opinions in problem-solving.					
44.	I actively seek out and incorporate a variety of opinions in my decision-making process.					
45.	The training enhanced my ability to evaluate different approaches to leadership challenges.					

### **Part III: Question's related to Leaders' effectiveness**

Please indicate the level of your agreement with the statement below (Please put (“√”) to indicate your answer).

The response scale for the questions is as below: 1= Strongly Disagree (SD), 2= Disagree (D), 3= Neutral (N), 4= Agree (A), 5 = Strongly Agree (SA)

	Leadership Confidence:	1	2	3	4	5
1	I feel confident in my ability to lead a team effectively.					
	Knowledge of Patient-Centered Care:					
2	I am knowledgeable about patient-centered care practices.					
	Self-Assessment - Pre-training:					
3	Before the training, I considered my leadership skills to be strong.					
	Self-Assessment - Post-training:					
4	After the training, I consider my leadership skills to be strong.					
	Communication Improvement:					
5	My communication with team members has improved since the training.					

	Conflict Management:					
6	I am better at managing conflicts within the team since the training.					
	Application of Leadership Techniques:					
7	I frequently apply the leadership techniques learned during the training.					
	Team Engagement:					
8	I engage team members more effectively during meetings after the training.					
	Patient Satisfaction:					
9	Patient satisfaction has improved since the training.					
	Employee Engagement:					
10	Employee engagement levels have increased since the training.					

**Thank you for taking time to complete this Questioner!**

## **APPENDIX II: INTERVIEW**

### **ADDIS ABABA UNIVERSITY**

#### **SCHOOL OF COMMERCE**

##### **DEPARTMENT OF BUSINESS LEADERSHIP**

Dear Sir/Madam, I am Kebron Senay, MA student in Business Leadership at Addis Ababa University. I am undertaking research on the topic “*Assessment of Healthcare Leadership Training Program Effectiveness in Health Care Facilities in Addis Ababa*” for the partial fulfillment of the requirements of the degree of MA in Business Leadership.

**Interview questions for Ministry of health, St. Paul Hospital Millennium medical college, Yekatit 12 Hospital Medical College, Lancet hospital and ICMC hospital Medical Directors**

Based on the objective of the study, here are ten potential interview questions for medical directors at the Ministry of Health, St. Paul Hospital Millennium Medical College, Yekatit 12 Hospital Medical college, Lancet Hospital, and ICMC Hospital:

#### **1) Leadership Development:**

- Can you describe any leadership training or development programs you have participated in?
- How do you believe these programs have impacted your leadership style and effectiveness?

#### **2) Optimizing Leadership Skills:**

- What strategies do you use to optimize resources and achieve excellence in your healthcare facility?
- How do you ensure effective communication and decision-making within your team?

#### **3) Resolving Uncertainty:**

- How do you handle situations of ambiguity and uncertainty in your role?
- Can you provide an example of a time when you successfully resolved a complex issue or conflict within your facility?

**4) Enhancing Adaptability:**

- How do you foster adaptability and flexibility among your staff in response to changing healthcare demands?
- What role does diversity of viewpoints play in your decision-making process?

**5) Promulgating a Vision:**

- How do you communicate and implement a clear vision for your healthcare facility?
- Can you share an example of a successful collaboration that helped achieve a shared goal?

**6) Impact of Leadership Programs:**

- In what ways have leadership training programs influenced your approach to leading and managing healthcare teams?
- How do you measure the success of leadership initiatives within your organization?

**7) Accountability and Integrity:**

- How do you ensure accountability and maintain high standards of integrity among your team members?
- What measures do you take to align your actions with the values and goals of your organization?

**8) Leadership Challenges:**

- What are some of the biggest challenges you face as a medical director, and how do you address them?
- How do you balance the demands of administrative duties with providing quality patient care?

**9) Leadership Success Stories:**

- Can you share a success story where your leadership made a significant positive impact on your healthcare facility?
- What lessons did you learn from this experience that you apply to your current leadership practices?

**10) Future Leadership Goals:**

- What are your future goals as a leader in the healthcare sector?

- How do you plan to continue developing your leadership skills and advancing your career in healthcare?

These questions are designed to explore various aspects of leadership, including training, strategies, challenges, and successes, providing a comprehensive understanding of the medical directors' experiences and approaches to effective healthcare leadership.

**Thank you for taking time!**