ST. MARY'S UNIVERSITY

SCHOOL OF GRADUATE STUDIES

ASSESSMENT OF FACTORS AFFECTING PROJECT QUALITY IMPLEMENTATION IN ADDIS KETEMA SUB CITY HEALTH CENTERS

BY

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JULY, 2023

ADDIS ABABA, ETHIOPIA

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APPROVED BY BOARD OF EXAMINERS

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External Examiner	Signature & Date
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Internal Examiner	Signature & Date

DECLARATION

I hereby declare that the work entitled: "Assessment of Factors Affecting Project Quality Implementation in Addis Ketema Sub City Health Centers" is the outcome of my own effort and study and that all source of materials used for the study have been duly acknowledged. I have produced it independently with the guidance and suggestions of my research advisor.

This study has not been submitted for any degree in this University or any other university. It is offered for the partial fulfillment of requirements for the Award of Masters of Arts in Project Management.

Tsion Alemayehu

Student's Name

Signature & Date

ENDORSEMENT

This thesis has been submitted to St. Mary's University, School of Graduate Studies for Examination with my approval as a university advisor.

_____   _____
    Advisor's Name   Signature

ACKNOWLEDGMENT

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Acronyms

CQI   Continuous Quality Improvement

EHCQI Ethiopian Health Care Quality Initiatives

FDRE   Federal Democratic Republic of Ethiopia

FMOH   Federal Ministry of Health

HSDP   Health Sector Development Program

HSTP   Health Sector Transformation Plan

NHQS   National Health Quality Strategy

NHS   National Health Service

QI   Quality Improvement

SaLTS   Saving Lives through Safe Surgery

TQM   Total Quality Management

Abstract

The Objective of this study is to assess factors affecting project quality implementation in Addis Ketema Sub City Health Centers. The study design used for this was a descriptive research design with quantitative research approach. The target population for this study was staff working in Addis Ketema sub city health centers. This study used a stratified sampling method to select 137 study participant out of three health center in Addis Ketema sub city. Out of 137 study participants for whom the questionnaire was sent 130 have responded making the response rate 95%. The data was analyzed using SPSS version 23 software. The Quality Improvement team members have least influence on preparing project goal and resource allocation. The descriptive analysis shows that there is high perceived competency on Quality implementation, quality improvement team have positive attitude toward Quality improvement project, there is high level of team work on Quality improvement, there is gaps in using generated evidence for decision making and sustaining gains. The research shows that Leadership commitment, Staff competency, positive The Leadership commitment emerged as a significant factor followed by positive Attitude toward Quality improvement implementation. Finally, Leadership commitment jointly predicted by Staff competency positive Attitude toward Quality improvement implementation and Team Work on Quality Improvement Project Implementation while Team Work on Quality Improvement Project Implementation contributed more for the variation in attitude and the reducing the burden health centers, improving quality relations. The Addis ketema sub city health centers is recommended to work on standardize it through strengthening supportive follow up and Close follow up of Quality improvement project implementation is very important factors.

Key Words: QI project implementation, Leadership, team work, Attitude, staff competency

CHAPTER ONE
INTRODUCTION

1.1 BACKGROUND OF THE STUDY

Quality as a concept seems to vary both in definition and in understanding. Even well-known authors define quality in different ways (Endashaw. 2020). QI embraces a philosophy of meeting or exceeding customer expectations through the continuous improvement of the processes of producing a good or service. QI posits that the quality of goods and services depends foremost onthe processes by which they are designed and delivered. Hence, QI focuses on understanding, controlling, and improving work processes rather than on correcting individuals' mistakes after the fact. (Weiner, Alexander, Shortell, et al 2006).

A project is a temporary endeavor undertaken to create a unique product, service, or result. The temporary nature of the projects indicates a definite beginning and end. The end is reached when the project's objective have been achieved or when the project is terminated because its objectiveswill not or cannot be met or when the need of the project no longer exist. (PMI, 2008). The Project Management Institute (2000) indicates that the project implementation phase requires closecollaboration with clients to ensure that the project is delivered on time within the defined scope and cost to meet the organization's needs

More recently, the WHO (2007) recognized QI as critical to promoting efficiency in health services delivery and improved health outcomes. Accordingly, QI methods have increasingly been implemented in the health systems of low- and middle-income countries (LMICs) (Sifrim, Barker, & Mate, 2014) to improve processes and outcomes related to maternal and child health and infectious diseases, including HIV (Althabe et al., 2008; Barker et al., 2007; Franco & Marquez, 2011). Research in LMICs has shown QI can be used to improve health services delivery by promoting quality in health facility management, assessing gaps in service delivery, and identifying and implementing change measures (Altherton, Mbekem, & Nyalusi, 1999; Bradley et al., 2008; Mohammadi, Mohammadi, Hedges, Zohrabi, & Ameli, 2007; Rowe et al., 2010). Moreover, these studies indicate that health professionals can be equipped to enhance the capacity of health systems to provide efficient care using QI principles. Recent findings from a QI project in Malawi demonstrate the importance of combining both facility and community engagement components, such as community mobilization through women's groups, to reduce newborn mortality (Colbourn et al., 2013).

For healthcare, the goal of CQI is to consistently meet or exceed the needs of caregivers, patients, service providers and the community. CQI has mostly been used at the health facility level, often addressing defined care processes. In decentralized health systems like in Uganda where the District Health Management Teams (DHMT) have the overall responsibility for the quality of care provided, it is important to understand their role in implementation of CQI processes (FDRE MOH, 2015).

Continuous quality implementation has been used with reasonable success in Ethiopia to build Woreda (district) leadership capacity to facilitate continuous improvement of maternal, neonatal and child health at the community level In Rwanda, nurse mentors were trained in CQI and mentorship techniques and integrated into the Ministry of Health (MoH) district supervision team, which resulted in a significant improvement in several quality-of-care indicators. A study in Kenya also showed that training supervisors to improve reproductive health resulted in significant improvement in the quality of health care for the supervisors, the providers, as well as client-provider interactions. Different factors have been important in the different countries to support institutionalization of Quality improvement processes (FDRE MOH, 2019).

 In the last 20 years, Ethiopia has successfully implemented its strategy of expanding and rehabilitating primary health care facilities. Ministry of health (MOH) have invested on thousands of health facility construction, investment in human resource development and management has been scaled up; reformed supply chain and logistics management to ensure continuous availability of health commodities at an affordable price in a sustainable manner; and strengthened coordination and partnership (FMOH 2015).Since the launch of the Health Sector Development Program (HSDP) in the 1990s, there have been significant achievements in improving health outcomes for the Ethiopian population, such as the reduction of child deaths by more than two-thirds to meet Millennium Development Goal Four (Magge, Kiflie, Nimako, K. et al 2019).

The study done in the quality improvement of public health stated that healthcare, by eliminating inefficiency, error, and redundancy can continually improve critical processes and reduce costs associated with poor quality. Ethiopia has implemented a number of innovative and successful national interventions for improving quality of care and Water and Sanitation Hygiene (WASH) in its health care facilities. The 2015-2020 Ethiopian National Health Care Quality Strategy (NQS) was crafted as a call to action to improve quality across the entire Ethiopian health

system. Formally launched in March 2016, it was developed in order to achieve the health improvement goals stated in the Health Sector Transformation Plan. The NQS builds on the existing quality effort in Ethiopia which includes a number of national quality initiatives and tools that have been developed and implemented over the last 20 years – all of which have been aimed at improving the quality of health care delivery and services. The aim of the NQS is to consistently improve the outcomes of clinical care, patient safety, and patient-centeredness, while increasing access and equity for all segments of the Ethiopian population, by 2020. The strategy focuses on ensuring reliable, excellent clinical care, protecting patients, staff, and attendants from harm, and improving the efficiency of the delivery of care, while increasing access, equity, and dignity of care for all segments of the Ethiopian population.

1.2 STATEMENT OF THE PROBLEM

Cognizant of the problem the Ethiopian MOH make excellence in quality improvement and assurance as one of the pillars of excellence of health sector transformation plan I (2015/16-2019/20). Following its launch National Quality Strategy was developed in 2016 focusing on ensuring reliable, excellent clinical care, protecting patients, staff, and attendants from harm, and improving the efficiency of the delivery of care. The Strategy has prioritized five major health priority areas namely Maternal and Child Health, nutrition, Communicable Diseases, Non Communicable Diseases, clinical and surgical services (FDRE MOH 2016). Quality of care remains a key determinant of service utilization and universal health coverage (UHC) in Africa. A significance amount of efforts has gone into improving availability of services, with less focus on the quality of those services (World Health Organization 2018). The quality of care index of Africa is 0.63 which indicate that quality of care in the Region is only 63% of what is feasible. Ethiopia's quality of care index falls in 0.51-0.59 which is even lower than the continental average figure.

The focus on system-level quality improvement has resulted in CQI methods being identified, and increasingly used, as an approach to enhance the quality of care and reduce costs. In systematically reviewing the evidence comparing the use of CQI with non-CQI interventions in health care, it was apparent that, regardless of the growth in evidence in the last 10 years, the results were largely equivocal (Hill, Stephani, Sapple, & Clegg, 2020).

Healthcare systems are operating in complex and dynamic working environment. (Emma colis et al, 2020) identified; leadership, organizational culture, individual skills and capabilities,

organizational capacity and capability, data and technical infrastructure, readiness for change, championship and relationships, as factors that influence the implementation, effectiveness, sustainability and transferability of QI initiatives in healthcare.

Globally the most studied subcategory of quality programs is hospital quality programs, particularly US hospital total quality management programs. However there is limited evidence of QI in developing country (ovretveit, & Gustafson, 2002, Hill et al 2020). Hospital based descriptive study in Serilankya reported that top management commitment, training, teamwork, physical structure and monitoring system as independent variables that influence the CQI implementation programs. In Ethiopian context one study (Nebiyou et al) assessed factors affecting continuous quality improvement in health centers and primary hospital setting of Southern Nation Nationality and People Regional State. In Ethiopian context only limited health service are provided at health centers and primary hospital level while most public hospital at Addis provided different specialty service with highly trained doctors. However there is no empirical evidence on the QI implementation practice in Addis Ababa public health centers setting which is very different from district and primary level health care context. Therefore this study aimed at assessing factors affecting project quality implementation in Addis ketema sub city health centers.

1.3 OBJECTIVE 0F THE STUDY

1.3.1 General Objective

The general objective of the study is to assess factors affecting project quality implementation in Addis Ketema Sub City Health Centers.

1.3.2 Specific Objectives

The specific objectives of the study are

☑ To examine Leadership commitment practice in Addis ketema sub city health centers

☑ To investigate Staff competency practice in Addis ketema sub city health centers

☑ To examine Team Work effect on project quality implementation in Addis ketema sub city health centers

☑ To investigate the health workers attitude toward project quality implementation

1.4.RESEARCH QUESTIONS

1. What is the level of leadership commitment practice in Addis ketema sub city health centers?

2. How was Staff competency practice in Addis ketema sub city health centers?

3. How team work practice affect quality improvement project Implementation in Addis ketema sub city health centers?

4. What was the health workers attitude toward quality implementation project implementation

1.5 SIGNIFICANCE OF THE STUDY

The purpose of the study is to assess factors affecting project quality implementation in Addis ketema sub city health centers. Through this purpose the researcher believes that this study is very important and would go a long way to notifying all organizations, most especially in case of Addis ketema sub city health centers on the need to ensure the effective management of project quality project implementation. It also issues in organizations to appreciate the impact of quality improvement to project implementation. In this study the researchers get knowledge about the study and experience for conducting other research. This study used to determine the methods of training and development take by Addis ketema sub city health centers and it helps also to assess the level of workers attitude toward quality improvement practices of the health centers. To other researchers: conductive effective research on project quality implementation serves as a stepping stone for other researchers.

1.6 SCOPE OF THE STUDY

This study is designed to assess factors affecting project implementation in Addis ketema sub city health centers. Researcher has also delimiting this study only to achieve the research objective. Conceptually, the researcher assesses quality project implementation in Addis ketema sub city health centers. Methodologically, the study delaminated to descriptive study research design; quantitative research approach have used for data collection and analysis. To quality project implementation Stratified random sampling has used for group homogeneity. Geographically, Addis ketema sub city health centers was taken as an area for this study because of its convenience for the researcher to collect data easily and Addis ketema sub city health centers is the first favorite for the researcher to do this study. Regarding the time scope, the study was conducted for academically year 2015/2023.

1.7 ORGANIZAATION OF THE STUDY

Broadly, a component of the Organization of the Study is to provide a map that may guide readers through the reading and understanding of the dissertation. This research paper has included four Chapters. Chapter one tells about background of the study that included

Introduction, statement of the problem, objectives, research question, scope and limitation of the study, significance of the study. Chapter two includes literature review of the paper. Chapter three tells about background of the study area, methodology, sampling method and techniques will be included in this chapter. The last chapter four talks about data presentation and analysis, recommendation and conclusion.

CHAPTER TWO
LITERATURE REVIEW

INTRODUCTION

This section covers review of literature from different scholars and authors that have been reviewed in the area of project management with special focus on project quality implementation. It deals with theoretical, empirical, and conceptual findings of various researchers concepts related to projects, project management, quality improvement, quality implementation principles, and factors that affect quality project implementation. It deals with the review of related literature gathered from different secondary sources such as published books, articles and related websites. In this regard, efforts were exerted to include as much significantly related literatures as possible by reviewing available documents that exhibits points, targeting at the attainment of the research objectives.

2.1 THEORETICAL REVIEW

According to McDonald. et al (2004) theory describes and explains what is observed and why it happens. It expands on the "what" question by addressing "how" and "why" these quality improvement (QI) strategies or their components might or might not be effective, and under what conditions ("when" and "where").

This section briefly outline three theories that can help in understanding the quality implementation and also can be used in designing interventions to modify interactions among individual patients, health care providers, and the organizations they function within. Additionally basic quality concept is also included. Furthermore the concept of project and project implementation structure was described briefly.

2.1.1: Classical theory of change

Classical theories/models of change (sometimes referred to as descriptive or normative theories) are passive; they explain or describe the naturalistic process of change or diffusion of innovation. Perhaps the most prominent example of a classical theory of change is Everett Rogers' diffusion of innovation theory (Rogers 1995). Some of the better known observations deriving from Rogers' work are the innovation-decision process, which describes how potential adopters' perceptions of the

attributes or characteristics of an innovation influence diffusion of the innovation, and the relationship between adopter types and diffusion. The innovation-decision process consists of five stages that potential adopters pass through as they decide to adopt an innovation. These stages are: knowledge (becoming aware of the innovation), persuasion (developing positive attitudes toward the innovation), decision (making a cognitive decision to adopt the innovation— i.e., developing an intention to adopt), implementation (using the innovation), and confirmation (continuing to use the innovation, adapting the innovation, or abandoning it). While classical theories/models of change may help to identify potential determinants of change, they provide little information on the best way to either accelerate or hinder natural diffusion.

2.1.2: Planned Models of Change

A planned change model/theory is a set of logically interrelated concepts that explain, in a systematic way, the means by which planned change occurs. These models predict how various forces in an environment react in specified change situations, and help QI implementers control variables that increase or decrease the likelihood that changes occur (Tiffany CR 1994). Planned change, in this context, refers to deliberate (not haphazard) efforts to engineer change in groups that vary in size and setting. Those who use planned change theories/models may work with individuals, but their objective is to alter ways of doing things in social systems. Planned change models provide broad frameworks for planning implementation activities, but are less helpful when considering which specific interventions to use.

2.1.3: Organization theory

Organizational behavior is the study of individual and group attitudes and actions within an organizational setting, and describes how the resultant behavior affects the goals of the organization. Macro theories regarding how organizations function and behave fall into three major typologies: 1) rational system theories, which focus on the internal structures and processes of an organization, 2) natural-system theories, which also focus on internal workings, but emphasize the organization as a social system, noting the importance of unplanned processes and events, human relations, and integration of individual and organizational goals, and 3) open-system theories, which emphasize the ways in which an organization's environment relates to its structure and behavior (Scott WR 1998).

2.1.4 Quality Improvement Concept

To date, there is no universally accepted definition of "quality." Within the global health care community, the definition from the US Institute of Medicine (Richardson, 2001) is generally used: "the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge".

The BMJ's Quality Improvement series uses the Academy of Medical Royal Colleges definition (Backhouse, & Ogunlayi, 2020). A systematic continuous approach that aims to solve problems in healthcare, improve service provision, and ultimately provide better outcomes for patients.

The Ethiopian National Health Quality Strategy (2016) defined quality as "Comprehensive care that is measurably safe, effective, patient centered, and uniformly delivered in a timely way that is affordable to the Ethiopian population and appropriately utilizes resources and services efficiently."

The following are among other varies definition of quality improvement

- Improvement in patient outcomes, system performance, and professional development that results from a combined, multidisciplinary approach in how change is delivered. (Batalden, & Davidoff, 2007).
- The delivery of healthcare with improved outcomes and lower cost through continuous redesigning of work processes and systems. (Ham , Berwick, Dixon, 2016)
- Using a systematic change method and strategies to improve patient experience and outcome. (, Ovretveit. 2009)
- To make a difference to patients by improving safety, effectiveness, and experience of care by using understanding of our complex healthcare environment, applying a systematic approach, and designing, testing, and implementing changes using real time measurement for improvement. (Backhouse, &Ogunlayi, 2020).

2.1.5 Project and Project implementation

A project is "a temporary endeavor undertaken to create a unique product, service, or result." Operations, on the other hand, is work done in organizations to sustain the business. Projects are different from operations in that they end when their objectives have been reached or the project has been terminated (Turner 2017)

Project management is "the application of knowledge, skills, tools and techniques to project activities to meet the project requirements." Project managers must not only strive to meet specific scope, schedule, cost, resource, risk, and quality requirements of projects, they must also facilitate the entire process to meet the needs and expectations of the people involved in or affected by project activities (Lester 2006).

The fundamental difference between project management and general management stem from the difference in the type of work they manage. Project management deals with management of projects (which are temporary and unique) whereas, general management deal with management of operations (which are ongoing and repetitive). Generally project organization changes continually as the project progresses through its various phases and terminate when the mission is accomplished; whereas the ongoing organizations that manage operations sustain at least over a period of time and continue assuming a broader outlook (Hendrickson and Carmichael, 2004)

Implementation of approved projects requires choosing among different organizational Structures. There are three main types of project organizations: Functional, matrix and project or task force. Functional organization consists of specialist or functional departments, each with their own departmental manager responsible to one or more directors. Such an organization is ideal for routine operations where there is little variation of the end product. Functional organizations are usually found where items are mass produced. The functional structure gives the least power to a project manager, but offers plenty of other advantages: It works well for small teams and small projects because the function has full control over the team members and other resources required (Lester, 2006).

Matrix organization structure is probably the most common type of project organization, since it utilizes an existing functional organization to provide the human resources without disrupting the day-to-day operation of the department. In matrix organization, many employees would end up working both under a department head and a project manager of an interdisciplinary project team. When compared with other organizational forms, a matrix organization is a mixed form in which traditional hierarchy is overlaid by some form of lateral authority, influence, or communication. This overlay present in a matrix creates two chains of command—one along the functional lines, the other along project lines (Gobeli and Larson, 1986). Given the complexity of project management in the

actual business world, the matrix structure is often used where the need for strong technical assistance across many areas is required (El-Najdawi, & Liberatore. 1997)

In project organization the project team are usually located in one area, which can be a room for a small project or a complete building for a very large one. Lines of communication are short and the interaction of the disciplines reduces the risk of errors and misunderstandings. This type pf structure is essential for large project with so many area of business. The key to success lies with the personality of the project manager and his or her ability to inspire the project team to regard themselves as personal stakeholders in the project (Lester, 2006)

2.2 Empirical Review

2.2.1 Project Management in Health Care

A project is a useful way to introduce innovations, address new needs, or find solutions to problems that the status quo does not accommodate (Turner, 2009).

Project management is presented as an approach that allows the implementation of strategic changes within organizations (Turner, 2009). It is also presented as a way of improving organizational performance (Crawford and Helm, 2009). Although project management appears to be the ideal approach to meet the challenge of operational improvement in order to bring about a better performance of health care systems (Shirley, 2011, Lavoie-Tremblay *et al.*, 2012), its implementation in health sector is limited.

Results of the literature review indicate that the information technology project management in health sector is the favorite topic of researchers. Furthermore, very little of the research on health sector project management is published in the project management discipline's journals and, on the other hand, a minority of the articles reviewed make reference to the works that are published in the project management Journals (Afzal, & Gauthier, 2017).

There is less evidence of the explicit use of project management in the delivery of organizational changes in the healthcare sector. There is no question that organizational change can be considered as a project (Englund, Graham, &Dinsmore, 2003), or that formal project management is commonly found in IT projects delivered in a healthcare context (Kumpf & Wittelsberger, 2005). However, relatively little attention has been paid to project management in other facets of healthcare. Some

exceptions to this include the application of a project management approach when managing healthcare infrastructure and patient needs (Sa Couto, 2008),the development of internal project management systems to assist in healthcare service provision (Kumpf & Wittelsberger, 2005), and the 2005 former partnership between the Project Management Institute's (PMI) Healthcare Project Management Specific Interest Group and the executive committee of the National Association for Public Health Information Technology (Claudio, 2005).

2.2.2 Quality implementation Principles

The primary intent of quality implementation is to bring about measurable implementation to a specific aspect of healthcare delivery, often with evidence or theory of what might work but requiring local iterative testing to find the best solution (Ogrinc et al 2013). QI uses an iterative process of testing change ideas by adopting a theory of change which emphasizes a continuous process of planning and testing changes, studying and learning from comparing the results to a predicted outcome, and adapting hypothesis in response to results of previous tests (Reed, & Card, 2016, McNicholas, et al 2019)

There are certain agreed available QI methodologies. Commonly cited methodologies include the Model for Implementation, Lean, Six Sigma, and Experience-based Co-design (Ham, Berwick, Dixon, 2016). Systematic review shows that the choice of tools or methodologies has little impact on the success of QI provided that the chosen methodology is followed consistently (Alderwick, et al 2017). Though there is no formal agreement on what constitutes a QI tool, it would include activities such as process mapping that can be used within a range of QI methodological approaches. National Health Service (NHS) Scotland's Quality Improvement Hub has a glossary of commonly used tools in QI (Backhouse, & Ogunlayi, 2020).

Most of the QI project uses the PDSA cycle together with the model for implementation. The four key methodological feature of QI are: Use of an iterative cyclic method, Use of continuous data collection, Small-scale testing and explicit description of the theoretical rationale of the projects. A systematic literature review study done by Knudsen, S. et al (2019) that included 120 QI projects revealed almost all project reported improvement (98%). However, only 32 (27%) described a specific, quantitative aim and reached it. The application of the key PDSA features appeared to be highly inconsistent. A total of 72 projects (60%) documented PDSA cycles sufficiently for inclusion in a full analysis of key features. Of these only three (4%) adhered to all

four key methodological features. The researcher concludes adherence to key methodological features in the individual projects pose a challenge for the legitimacy of PDSA-based QI to draw firm conclusions about the size and the causality of the reported improvements in quality of care.

QI approach is known for its empowerment of front line staff and service users. QI work should engage staff and patients by providing them with the opportunity and skills to contribute to improvement work. Recognition of this need often manifests in drives from senior leadership or management to build QI capability in healthcare organizations, but it also requires that frontline staff and service users feel able to make use of these skills and take ownership of improvement work (Mary, Sarah, & Graham, 2012).

Project quality implementation uses data for evidence informed decision to drive improvement. As a tradition it is requirement to document baseline drive, continuously collect data to measure the impact of change idea implementation over time and understand variation in processes and outcomes. Measurement for improvement typically prioritizes this narrative approach over concerns around exactness and completeness of data (Shah, 2019).

QI advocate for testing change idea in small scale and recommend scale-up and with adaptation to specific context. As interventions tested using a QI approach are scaled up and the degree of belief in their efficacy increases, it is desirable that they spread outward and be adopted by others. Key to successful diffusion of improvement is the adaption of interventions to new environments, patient and staff groups, available resources, and even personal preferences of healthcare provider's in surrounding areas, again using an iterative testing approach (Horton, et al 2018, Massoud, 2016)

2.2.3 Quality Implementation in Ethiopian Health Sector

Quality and equity was given high prominence in five years Ethiopian Health Sector Transformation plan by considering this issue as one of transformation agenda (FMOH, 2015). To operationalize the agenda the national health quality strategy (NHQS) was developed by the FMoH with support from institute of health care implementation (IHI) at the beginning of the initiative, in March 2016. The NHQS identified four strategic focus areas: (i) developing an integrated approach to quality management, (ii) igniting consumer demand for quality, (iii) linking UHC strategy with the quality agenda and (iv) strengthening data systems and feedback. Implementation of the NHQS is underway

with the leadership of the FMOH, including creating quality governance structures at all levels, building QI capability and convening annual QI summits to support a QI 'movement'.

The FMOH and IHI co-designed three pronged multi-level approach (prototype phase 15 months, test of scale phase 18 month and full sale to all woreda) for the Ethiopian Health Care Quality Initiatives (EHCQI) that, anchored in the Juran Trilogy of quality planning, QI and quality control, was intended to ensure large-scale implementation and sustainability of effective QI efforts (Magge H. et al 2019). The combination of a national strategy, expanded QI capability across the system and successful demonstration of QI method implementation holds promise for scale-up and sustainability of this comprehensive approach to improve outcomes across the Ethiopian healthcare system.

2.2.4 Factors affecting Project quality implementation

Christopher M., et al (2018) study conducted on contextual factors that influence quality improvement implementation in primary care revealed variation between respondents' views on individual contextual factors (e.g., perceptions of the meaning and value of QI) based on staff role. At the organizational- and team-level, respondents from all roles reported similar challenges including lack of clear communication about QI, differences between stated leadership priorities and leadership support for QI (e.g., time and resources), and differences in top-down versus bottom-up QI priorities.

Study by Somatunga et al (2015) on Factors Influencing Continuous Quality Improvement Programme in Government Hospitals of Sri Lanka identified top management commitment, training, teamwork, physical structure and monitoring system as independent variables that influence the CQI implementation program. All the participants rated lower for teamwork and felt that teamwork had little influence on CQI program implementation. This study have also reported varies roadblock to CQI implementation such as insufficient training of the staff, First line supervisor resistance; Lack of management support for the quality improvement initiatives, Organization objectives are not being publicized, mostly government hospitals are disorganized and staff spend most of their time for non-value added activities. Hence they are unable to concentrate on their quality improvement activities. Lack of proper planning, incompatible

rewards and compensation are also reported to be important barrier of quality improvement implementation.

Another study by Catherine Hart, et al (2015) also reported Successful QI is achieved by combining a thorough understanding of not only the methodology and science but also the "softer skills" of change management. Capable leaders and well-balanced teams must personalize and adapt their approaches to create cultures and contexts where change will flourish. Incontrovertibly, central to every test of change and innovation must be an engaged patient or family, directing the future of healthcare in the very ways that matter most

A qualitative study on health administrator perspective (Kash, Spaulding, Johnson, , &Gamm, 2014) have reported the following ten success factors: culture and value, business process, people and engagement, service quality and client engagement, coherence planning, leadership, market force and external demand, access to information and communication. "In health care setting culture, people and engagement, and service quality are more relevant factors than are leadership and communication factors, frequently identified in the broad management literature. Another study done on sustainability and spread of quality improvement activities (Lisa Cranley et al, 2018)) reported that sustainability of a QI project which empowers and engages care aides is possible and achievable, but requires ongoing staff and leadership engagement.

An evaluation of QI program by Ovretveit, & Gustafson, (2002) reported that factors appear to be necessary to motivate and sustain implementation and to create conditions likely to produce results are: Senior management commitment, sustained attention and the right type of management roles at different levels, a focus on customer needs, physician involvement, sufficient resources, careful programme management, practical and relevant training which personnel can use immediately, and the right culture. Same study showed that little is known about long term result of QI achievement and what works in one area might not work in other area which call for context specific adaptation.

According to study done by Wendwessen, Dereje, and Gize (2020) The implementation of continuous quality projects was associated with factors such as leadership receptiveness, leadership encouragement for learning, client satisfaction level, and the level of satisfaction of health staffs with their work. Overall, staff training on QI, team work, and leadership

engagement did not show significant associations with CQI implementation, despite mentions by various previous studies as important determinant factors

2.3 SYNTHESIS OF LITERATURE REVIEW

Quality implementation is an iterative process that requires continuous collection of data to measure improvement or change overtime. There are no universally agreed QI tools; however there are certain agreed methodological features even though adherence to recommended features is found to be inconsistent. QI project is usually implemented at small scale and most of the project self-reported results shows an improvement. However due to variability in methodology comparing one study finding with others is recommended to be interpreted with caution. The long term effect of quality improvement was not adequately studied.

Multiple studies (Ovretveit, & Gustafson, 2002; Catherine. Hart, et al, 2015 and Christopher M., et al 2018) reported that contextual factors related with organization capacity, leadership, physician involvement, team work, health workers skills, readiness for change, use of quality data and resource availability affects the effective implementation of QI.

The researcher found that even though studies have been done on quality improvement project implementation, most of them are done in other countries except one. One study done in Ethiopia is done at SNNP region in primary health care setting which is different from Addis Ababa City context. Therefore the investigator of this study took this knowledge gap as a source of research problem.

2.4 THEORETICAL FRAMEWORK
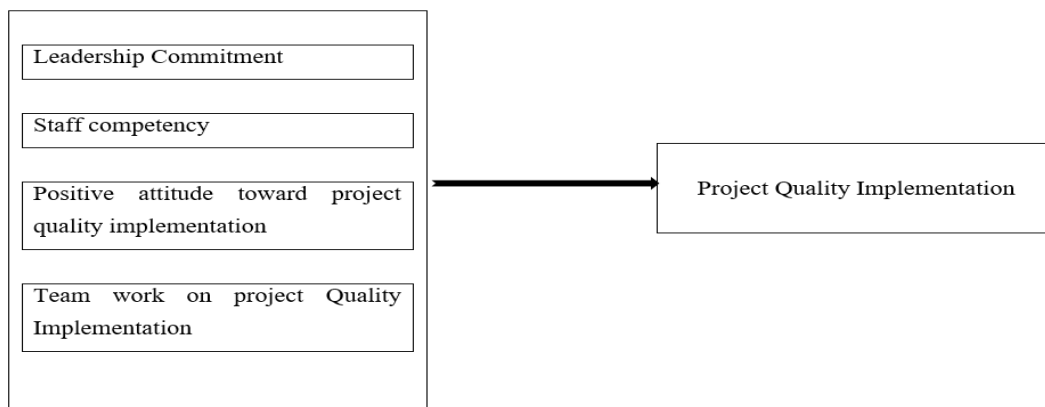
Figure 2.1: conceptual framework of this study (Source, own)

Nationally there are desired level of health service care target in each area of department. When the gaps exists between the desired level of performance and actual performance the importance of improving it through project quality implementation is considered as one of the option.

From literature review and synthesis of literature, it is hypothesized that leadership commitment in leading QI project, capacitated hospital staff through training and follow up on how to implement QI project, the perception of staff toward QI implementation and teamwork plays paramount importance in designing and successful implementation of the project. Resource is not explicitly stated on the framework because it is one of the expected output from committed leaders.

Measurement and follow up is a cross cutting for QI project implementation from its inception to completion make continues data collection, analysis, interpretation and uses of evidence for decision making as one key component of the study.

CHAPTER THREE
RESEARCH METHODOLOGY

INTRODUCTION

This chapter comprises the research design, population, sample and sampling technique, data collection methods, research procedures, data analysis methods, and in conclusion, the chapter summary.

3.1 RESEARCH DESIGN AND APPROACH

A research design is outline or plan that used to generate answers to research problems by collecting and analyzing the required data according to (Cooper and Schindler (2008), and Churchill (2002). The researcher has used descriptive studies which are concerned with specific predictions, narrations of facts and characteristics concerning individuals, groups or situations this study adhere to descriptive quantitative study. Quantitative data was collected in order to acquire advance statistical analysis of Addis ketema sub city health centers.

Therefore descriptive study design with quantitative approach was used to assess factors affecting project quality implementation in Addis ketema sub city health centers.

3.2 DATA COLLECTION METHODS

The primary sources of data was used in this study. It was collected from Health centers staff members that were involved in process of quality project implementation. This research have used questionnaire survey which is the most common method for collecting relevant data.

3.2.1 Primary Data

Primary data for the study has gather by using questionnaires which were managed to the targeted respondents. The choice of using questionnaires as method of data collection considering the fact that project quality implementation somewhat to give for employees since busy working place and employees may have a limited time. Therefore, questionnaires has distributed among the respondents who found their own time to fill them.

3.3 POPULATION AND SAMPLING DESIGN

3.3.1 Population

The total population of this study has been employees of Addis ketema sub city health centers of mikililand health centers, lomi meda health centers and philipos health centers. This health centers have their own different geographical locations and covers large number of clients

because they are chosen for this research. The total population of this research will be 208. And the samples are 137 by using standardized formula

Health centers	Total numbers of employees
Mikililand health centers	72
Lomi meda health centers	66
Philipos health centers	70
Total	**208**

Table 3.1. Total Population of the study

3.3.2 Sampling Design

3.3.2.1 Sampling Frame

Sampling frame is an objective list of the population from which the researcher can make a selection according to Cox and Hassard (2005). The sampling frame was obtained from selected employees. The sample frame consists of the valid full time employees currently working at Addis ketema sub city health centers

3.3.2.2 Sampling Technique

The sampling method used in drawing samples from a population has been driven by the objectives of the research activity. The sampling process has been guided by the parameters in the population in line with specific objectives of the study (Cooper and Schindler, 2011). The study adopted stratified random sampling and simple random sampling to ensure that a sample population has best represent the entire population being studied.

3.3.3. Sample Size

According to Cooper and Schindler (2008), sample size is described as a smaller set of elements from the larger population. Mugenda (2003) argued that the choice of sample size is governed by the confidence you need to have in your data, level of certainty, and the accuracy. You require for any estimates made in your sample, the type of analysis you are going to undertake and finally the size of the total population from which your sample is drawn. The total population of the health centers of the study areas mikililand health centers, lomi meda health centers and philipos health centers are 208.

n= $\underline{\quad N \quad}$

$\qquad$ 1+N (e)^2 $\qquad$ Where N= number of total population

$\qquad\qquad\qquad\qquad\qquad$ n= sample

$\qquad\qquad\qquad\qquad\qquad$ e=level of precision (5%)

n= $\underline{\quad N \quad}$ = $\underline{\quad 208 \quad}$ = 137

$\quad$ 1+N (e)^2 $\qquad$ 1+208 (0.05)^2

3.4 RESEARCH INSTRUMENT

The researcher was used questionnaires as primarily data collection instrument. Owen (2002) recommends use of questionnaires for its potential to reaching out to a large number of respondents within a short time; ability to accord respondent's adequate time to respond; offers a sense of privacy and confidentiality to the respondent. The researchers therefore select this instrument as a quick and cost effective way to collect data. The questionnaire was developed using five scales ranking i.e, Likert scale; where 1. Represents strongly disagree, 2. Disagree, 3. Neutral, 4. Agree and 5. Strongly Agree. Self-Administer Drop off survey data collection technique was used. Research questionnaire prepared for the study contained two parts; The General information of respondent's part and the project monitoring and controlling process part. Under the second parts of the questionnaire total of 30 questions with five sections were prepared with regard to the project monitoring and controlling process and projects success. The section include: the statement regarding with project progress report, change control, documentation, project success and project monitoring and controlling with project success.

3.5 VALIDITY AND RELIABILITY

Validity Test: since validity of a research study is a conceptual and scientific soundness, the test focused on eliminating or minimizing the effect of extraneous influences, variables and explanations that might detract the accuracy of the ultimate findings. After the researcher has constructed the questionnaire, pre-testing was done with persons who have knowledge of the area by allowing them to read it. This is done to ensure that the questionnaire is clear to respondents and can be completed in useful way (Adam et al., 2007), then, the instrument was evaluated by academic advisor prior to the data collection so as to Maintain its validity and to increase the accuracy and usefulness of the findings in which it allows greater confidences of the study.

Reliability test refers to the stability of the measure used to study the relationships between variables Ghauri, &Gronhaug. (2010), the questions in the questionnaire were designed taking into consideration the issues related to the problem and goals of the study and theories on the subject. The reliability of the study was conducted by using cronbach"s alpha. Reliability refers to the consistent of measurements throughout the entire finding of the study and it is a determination of obtaining the same results with in the sample respondents. A comprehensive measurement must fulfill the tests of validity and reliability; validity is the most critical criterion that indicates the degree to which an instrument measures what it is supposed to measure (Kothari, 1984). Concerning the reliability, as Zikmund, et.al, (2009), the measure of internal consistency; a pilot test was conducted distributing questionnaires to the selected sample employees and analyzed using SPSS version 23.

3.6 ETHICAL CONSIDERATIONS

This study has observed all ethical considerations. It dually acknowledged all cited information in both the body and the reference section. In other words, no review/accessed document is used without acknowledging the sources. Concerning the questioner respondents': their consent was requested to ascertain their voluntary participation. Full description of the study, the purpose/intention, confidentiality and privacy protection is highlighted with a brief cover letter beforehand. In addition to this, the survey is kept anonymous/ nameless

3.6.1. Validity Analysis

Validity analysis is the extent to which differences discovered using a measuring device reflect genuine differences between individuals being tested (Kothari, 2004). Also how accurately a mentioned measures what it is intended to measure To put it another way, validity is the most important criterion since it demonstrates how well an instrument measures what it is designed to assess. The construct validity of the research will be examined to confirm the quality of the research design material. According to Kothari (2004), content validity refers to how well a measuring instrument covers the topic under investigation. The content validity of an instrument is good if it contains a representative sample of the universe. It makes decisions based on judgment and intuition.

3.6.2. Reliability Test

Reliability is fundamentally concerned with issues of consistency of measures whereas validity is the degree to which an instrument measures what it is supposed to measure. (Bryman and Bell,

2003). The total number of complete feedback received was 130 sample populations. In order to confirm the reliability of the data, Cronbach"s Alpha was calculated for each variable. As below table indicate, all variables Cronbach"s alpha test result shows to be larger than 0.7 which is known to be satisfactory.

Table 3.2. Cronbach's Alpha Result

Scale	Cronbach's Alpha	Number of Items	Remarks
Leadership commitment	0.892	5	Accepted
Staff competency	0.781	7	Accepted
positive Attitude toward QI implementation	0.986	5	Accepted
Team Work on Quality Improvement Project Implementation	0.885	10	Accepted

The overall Cronbach's alpha for the four categories which is 0.886. The findings of the pilot study showed that all the four scales were reliable as their reliability values exceeded the prescribed threshold of 0.7 (Bryman and Bell, 2015).

3.7. METHODS OF DATA ANALYSIS

Quantitative data analysis methods have used to analyze the acquired data. Frequencies and percentages are employed in descriptive analysis to portray quantitative data in the form of tables and graphs. For analysis, the data was coded and entered into a computer using the statistical software for social science (SPSS version 23). Each independent and dependent variable's means, standard deviations, correlations, and frequency distribution are provided. In this study, the mean and standard deviation are the most descriptive statistics utilized to describe the data.

The Statistical Package for Social Sciences (SPSS) version 23 was getting to be used to analyze quantitative collected data. The descriptive statistics (frequencies distribution) has been applied to assess the extent of customer service delivery while the connection and thus, the influence of the broadband internet services dimensions are getting to be analyzed by using multiple regressions. Data analysis that was conducted involved reducing the collected data to a manageable size, by developing summaries, through the utilization of data analysis techniques (Cooper and Schindler, 2008). The quantitative data was analyzed using both descriptive statistics. Descriptive statistics was utilized for measures of central tendencies (Mean, Median and Mode), and measures of dispersion (Variance, Standard deviation, Standard Error, and Percentiles).

CHAPTER FOUR

DATA PRESENTATIONS AND ANALYSIS

INTRODUCTION

This section is organized by presenting the general information about the respondents, were presented and data collected through questionnaires were analyzed at the same time. This study was distributed 137 questionnaires, to respond the respondents. The first section of this chapter presents the profiles of respondents. The second section in this chapter is on the analysis, presentation and interpretation of the relationships under employee's performance and those factors. The presentation and interpretation was in line with the study's objective. The findings are presented in the form of tables showing frequencies, percentages, mean and standard deviation. Since descriptive research design was used in this study, descriptive analysis was carried out in this chapter. For each research objective, descriptive analysis was first done by use of the percentiles and frequencies, mean and standard deviation.

4.1 Questionnaire Response Rate

The survey had a sample size of 137 respondents, returning questionnaires, yielding a response rate of 95% percent. It is a reliable response rate for data analysis as Babbie (2002) posited that any response of 50 % and above is adequate for analysis. Moreover, it is possible to generalize that as the response rate indicates all of the respondents were happy towards the study and its findings.

Table 4.1: Response Rate

No.	Respondents category	Frequency	Percentage
1	Responded	130	95%
2	Did not responded	7	5%
	Total	137	100%

(Source: SPSS output researcher survey data, 2023)

4.2 General Information of the Respondents

This section profiles the respondents in respect to gender, age, level of education, year of experience and trainings to participate in one year of the respondents of employee's performance, the items in the research instruments used in the study informed profiling of the respondents.

4.2.1 Gender of respondents

Table 4.2 genders of the respondent

Genders of the respondent					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	74	56.9	56.9	56.9
	Female	56	43.1	43.1	100.0
	Total	130	100.0	100.0	

(Source: SPSS output researcher survey data, 2023)

The data sought on whether respondents were males or females. The study did not consider any of the gender in the selection of respondents. Respondents asked to indicate their gender. From the findings of the males male are the majority of the respondents with 74 (56.9 %) and e females with 56 (43.1 %) as shown the above table, this indicates that the majority of the respondents are males.

4.2.2 Age of the respondent
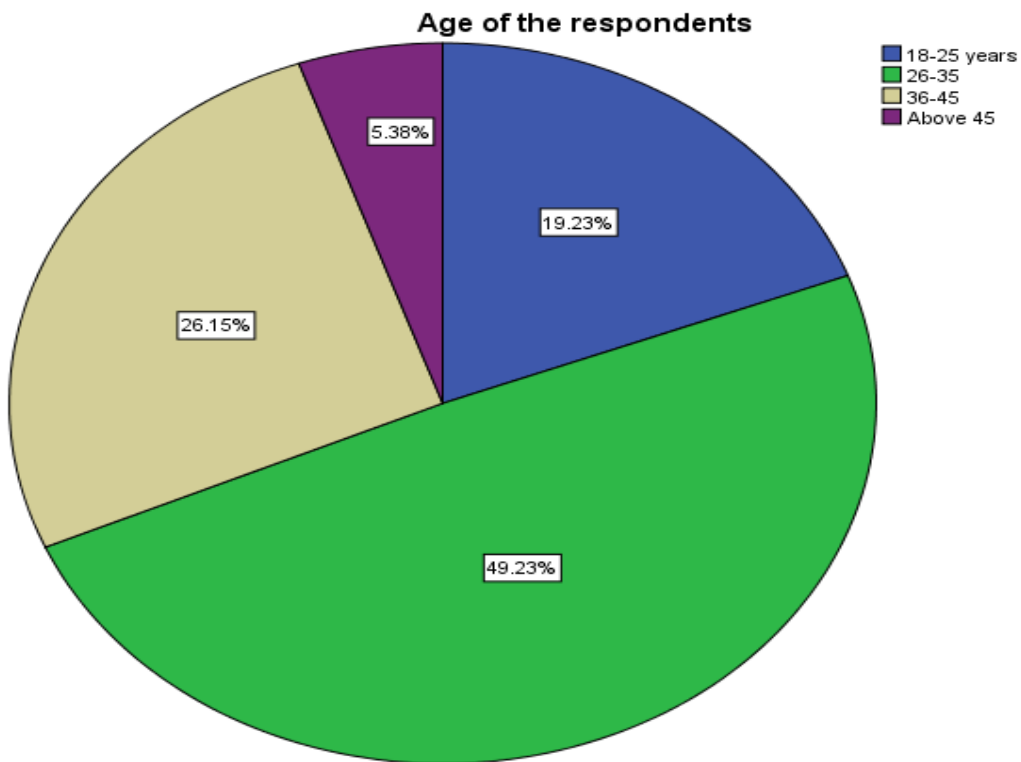
Figure 4.1. age of the respondents Source: - SPSS output

From the given figure above Respondent asked to indicate their age group in years. This done to understand the agedistribution of the respondents since an individual's age was considered in the selection of respondents in this study. Age groups classified into four categories: as we see the 18-25 years; 26-35 years, 36-45 years and above 45 years. Regarding to respondent Age category in year majority 64 (49.2%) of respondents are participated at age of 26-35 years old, similarly the second highest number 34 (26.2%) of respondents are at age of 36-45 years. on other hand the list participated respondents are 18-25 year-olds are 25(19.2) and finally above 45 years old are 7(5.4 %). This confirms that 64 (49.2 %) of respondents were youths between the age of 26-35 years. About the age, distribution of the respondent majority of them found at young and youth age and well known that the study Assess quality improvement project implementation.

4.2.3 Education level of respondents
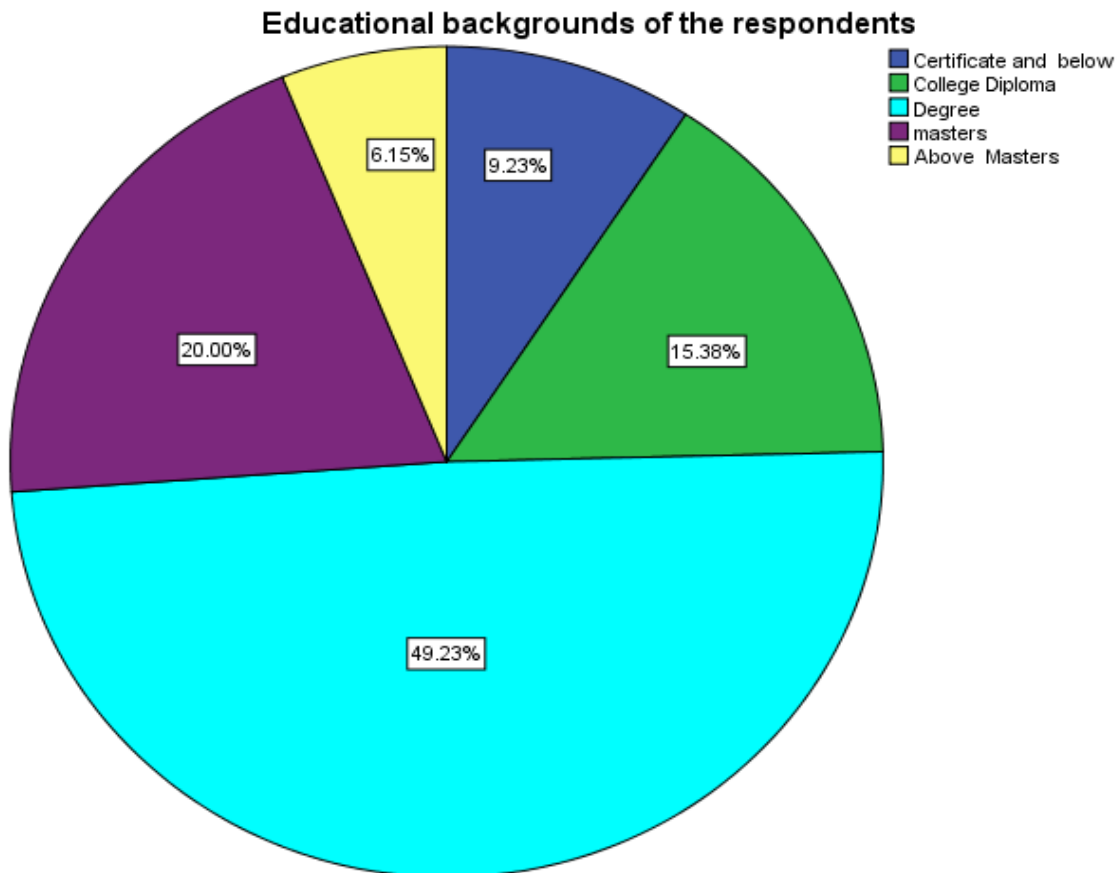
Figure 4.2. Educational levels of the respondents Source: - SPSS output

From the figure above the respondents asked to indicate their highest level of education. Respondent's level of education considered important in this study in respect to responding to

the research instruments as well understanding the effect of employee's performance. The study sought to establish the educational level of respondents from the findings of the respondents 12 (9.2 %) had certified and below followed by those diploma 20 (15.4%) whereas first degree were the majority of the respondents having64 (49.2%) and with master's level of education having 26(20%) as shown in the figure above. From this majority of the respondents are educated and have knowledge of the quality improvement project implementation which ware first degree having 64 (49.2%).

4.2.4 Marital status of respondents

Table 4.3. Martial states of the respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Martial states of the respondents					
Valid	Single	32	24.6	24.6	24.6
	Married	86	66.2	66.2	90.8
	Divorced	12	9.2	9.2	100.0
	Total	130	100.0	100.0	

Source: - SPSS output (2023)

From the table above the respondents asked to indicate their highest level of Martial states. Respondent's Martial states considered important in this study in respect to responding to the research instruments as well understanding the effect of quality improvement project implementation. The study sought to establish Martial states of respondents from the findings of the respondents the highest respondents are married which is 86 (66.2%) whereas single respondents were 32 (24.6%) and finally the remaining 12(9.2%) of respondents are divorce as shown in the figure above. From this majority of the respondents are married and have knowledge of the quality improvement project implementation which ware single having 180(75%).

4.2.5 Work Experience of respondents
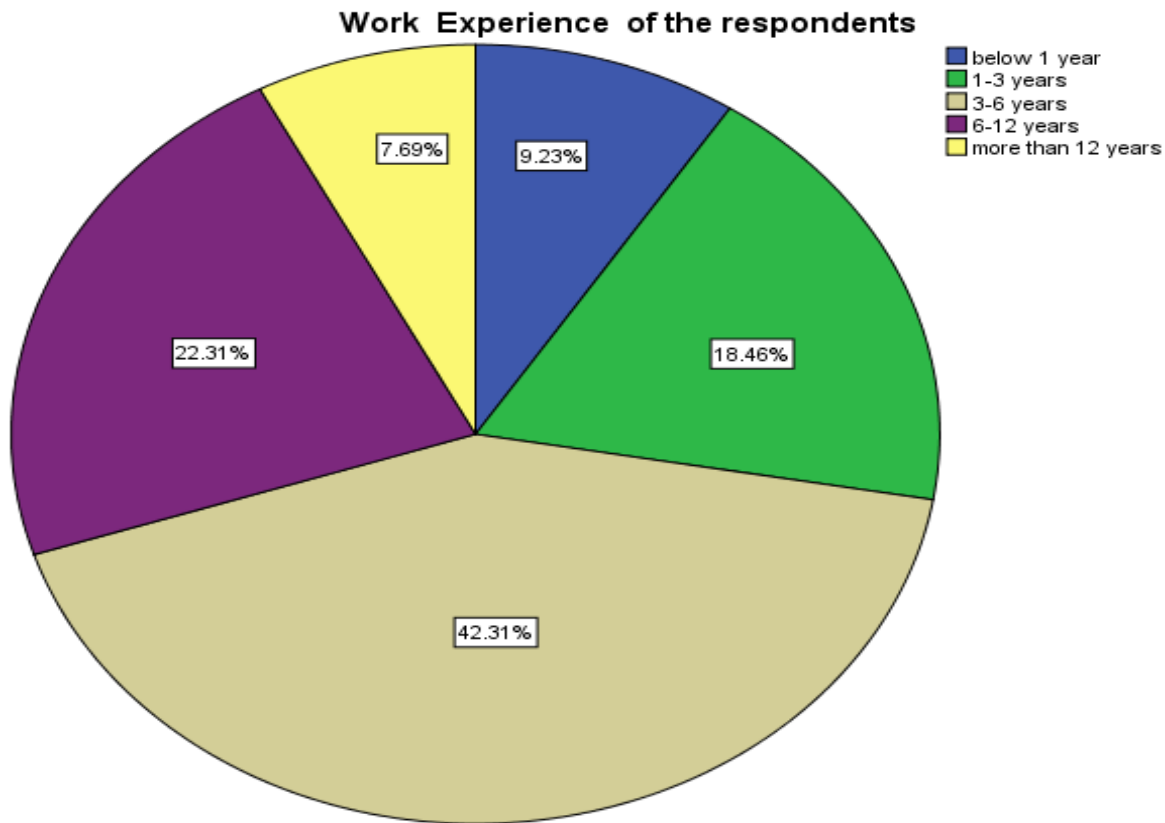
Figure 4.3 Work Experience of respondents Source: - SPSS output 2023

From the given table above the study sought to establish that the work experience of respondents. From the findings of the respondents below 1 year are 12 (25%), 1-3 years 24 (18.5 %) followed by those 3-6 years 55(42.3 %), 6-12 years are 29(22.3%) and finally more than 12 years 10(7.7 %), as shown the above figure. So, the established of the work experience of the respondents from the findings the majority of them are from 6-12 years which is 55(42.3 %) years followed by 6-12 years' work experience About the education, distribution of the respondent majority of them found at young andyouth age which were found under work group.

4.3 Descriptive statics of quality improvement project implementation

4.3.1 Leadership commitment

The data analysis for this section helps to identify how Leadership commitment contributes to the project quality implementation in Addis ketema sub city health centers. The analysis of the Leadership commitment was assessed by using means and standard deviations from the results.

The results of the means were interpreted based on: 1-1.49 = Very Low; 1.5-2.49 = Low; 2.5-3.49 = Moderate; 3.5-4.49 = High; 4.5-5.0 = Very high.

Table 4.4 Leadership commitment

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
The health centers senior leadership are receptive to new idea	130	1.00	5.00	3.9923	.90216
The CEO/Medical director is/are a primary driving force behind quality improvement efforts.	130	1.00	5.00	3.8923	1.02863
The health centers leadership shares information/ data about health facility service delivery status	130	1.00	5.00	4.1077	.82824
The health centers leadership consistently participate in monitoring QI activities implementation	130	1.00	5.00	3.9692	.94777
The health centers leadership encourages learning that help all employees advance their knowledge	130	1.00	5.00	3.9077	.98395
Valid N (listwise)	130				
Aggregate mean and SD				3.974	0.93834

	Strongly Agree		Agree		neutral		disagree		Strongly disagree	
	freq	%	freq	%	freq	%	freq	%	freq	%
The health center senior leadership are receptive to new idea	33	25	79	61	5	3.8	10	7.7	3	2.3
The CEO/Medical director is/are a primary driving force behind quality improvement efforts.	31	24	78	60	4	3.1	10	7.7	7	5.4
The health center leadership shares information/ data about health facility service delivery status	37	29	82	63	2	1.5	6	4.6	3	2.3
The health center leadership consistently participate in monitoring QI activities implementation	33	25	79	61	3	2.3	11	8.5	4	3.1
The health center leadership encourages learning that help all employees advance their knowledge	30	23	80	62	3	2.3	12	9.2	5	3.8

Source: - SPSS output 2023

The survey result in the above table 4.4 above shows that the mean and standard deviation of Leadership commitment on assessing project quality implementation in Addis ketema sub city

health centers. The overall leadership mean score computed from the five statement is 3.974 (SD=0.93834) which indicate high level of Leadership commitment on project quality implementation at Addis ketema sub city health centers

According to the given table above which represented Leadership commitment was practiced to a large extent in Addis ketema sub city health centers, The above table demonstrated that, the statement, The health centers leadership shares information about health facility service delivery status, The health centers senior leadership are receptive to new idea and The health centers leadership consistently participate in monitoring QI activities implementation with the highest mean shown by the ratings with a mean and standard deviation of M= 4.1077, SD=0.82824, M= 3.9923, SD=0.90216 and M= 3.9692, SD=0.9477 respectively .In general, the descriptive analysis showed comparatively a high standard deviation spread ranging from 0.82824 to 1.02863 respectively. It indicates that respondents were more nearby in their opinions to the responses given under Leadership commitment practices.

In addition to this the health centers leadership encourages learning that help all employees advance their knowledge and the CEO/Medical director are a primary driving force behind quality implementation efforts with the highest mean shown by the ratings with a mean and standard deviation of M= 3.9077, SD=0. 98395, M= 3.8923, SD=0. 1.02863 Respectively.

In general respondents highly agree that Leadership commitment is used to assess factors affecting project quality implementation in Addis ketema sub city health centers.

Leadership support or engagement in the process of QI project implementation was reported as a challenge by Christopher M., et al (2018) while Somatunga L C et al (2015) reported top management commitment as an independents variable that influence QI implementation program. If the gaps in the leadership engagement continue, it may affect successful implementation of the QI project implementation to the desired level.

4.3.2 Staff competency

Table 4.5 Staff competency

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
The health centers collects a wide range of data about the quality of care and services.	130	1.000	5.000	3.97692	.857845
The health centers staff get the data whenever they need	130	1.00	5.00	3.6462	1.02573
The health centers staff analyses the collected data and use the information for decision making about their work	130	1.00	5.00	3.5846	1.06955
The health centers continually tries to improve the accuracy and relevance of its data on the quality of care and services provided.	130	1.00	5.00	3.8538	.97338
The health centers continually tries to improve the timeliness of its data on the quality of care and services provided.	130	1.00	5.00	3.8462	.94386
The data generated by health centers departments are highly reliable and trust worthy	130	1.00	5.00	3.4923	1.13606
The health centers has assigned adequate number of staff for QI unit/directorate	130	1.00	5.00	3.7615	1.01006
Valid N (listwise)	130				
Aggregate mean and SD				3.7374	1.00235

	Strongly Agree		Agree		neutral		disagree		Strongly disagree	
	freq	%	Freq	%	freq	%	freq	%	freq	%
The health centers collect a wide range of data about the quality of care and services.	28	21.5	86	66.2	4	3.1	9	6.9	3	2.3
The health centers staff get the data whenever they need	18	13.8	77	59.2	12	9.2	17	13.1	6	4.6
The health centers staff analyses the collected data and use the information for decision making about their work	14	10.8	82	63.1	10	7.7	14	10.8	10	7.7
The health centers continually tries to improve the accuracy and relevance of its data on the quality of care and services provided.	27	20.8	78	60	9	6.9	11	8.5	5	3.8
The health centers continually tries to improve the timeliness of its data on the quality of care and services provided.	23.0	17.7	85.0	65.4	6.0	4.6	11.0	8.5	5.0	3.8
The data generated by health centers departments are highly reliable and trust worthy	16	12.3	72	55.4	13	10	18	13.8	11	8.5
The health centers has assigned adequate number of staff for QI unit/directorate	24	18.5	76	58.5	10	7.7	15	11.5	5	3.8

Source: - SPSS output 2023

The survey result in the above table 4.5 above shows that the mean and standard deviation of Staff competency on assessing project quality implementation in Addis ketema sub city health

centers. The overall Staff competency p mean score computed from the five statement is 3.7374 (SD=1.00235) which indicate high level of Staff competency to project quality implementation at Addis ketema sub city health centers

According to the given table above which represented Staff competency was practiced to a large extent in Addis ketema sub city health centers, The above table demonstrated that, the statement, The health centers collects a wide range of data about the quality of care and services, The health centers continually tries to improve the accuracy and relevance of its data on the quality of care and services provided, The health centers continually tries to improve the timeliness of its data on the quality of care and services provided and The health centers has assigned adequate number of staff for QI unit/directorate with the highest mean shown by the ratings with a mean and standard deviation of M= 3.97692, SD=0.857845, M= 3.8538, SD=0.97338, M= 3.8462, SD= 0.94386 and M= 3.7615, SD= 1.01006 respectively .In general, the descriptive analysis showed comparatively a high standard deviation spread ranging from 0. 857845 to 1.13606 respectively. It indicates that respondents were more nearby in their opinions to the responses given under Leadership commitment practices.

In addition to this the health centers has assigned adequate number of staff for QI unit/directorate, The health centers staff get the data whenever they need, The health centers staff analyses the collected data and use the information for decision making about their work and The data generated by health centers departments are highly reliable and trust worthy with the moderate mean shown by the ratings with a mean and standard deviation of M= 3.7615, SD=1.01006, M= 3.6462, SD=1.02573, M= 3.5846, SD=1.06955 and M= 3.4923, SD=1.13606 Respectively.

In general respondents highly agree that Staff competency is used to assess factors affecting project quality implementation in Addis ketema sub city health centers. Baernholdt, M. et al (2021) reported that project implementation requires the knowledge and skill of hospital staff to improve quality of care delivery. Therefore the health centers can consider this finding as an asset for their project implementation.

4.3.3 Positive Attitude toward QI implementation

Table 4.6 Positive Attitude toward QI implementation

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
I believe that quality improvement project implementation has improved patient quality of care	130	1.00	5.00	3.6538	1.21815
Quality improvement project improved the work environment of our health centers	130	1.00	5.00	3.7846	1.16795
Overall I am very satisfied with the work done by quality improvement project	130	1.00	5.00	3.5154	1.23411
The health centers allocated adequate time for implementation of improvement idea	130	1.00	5.00	3.7462	1.09482
Required material, space and equipment for implementation of change idea are available	130	1.00	5.00	3.3923	1.33234
Valid N (listwise)	130				
Aggregate mean and SD				3.62	1.2094

	Strongly Agree		Agree		neutral		disagree		Strongly disagree	
	freq	%	Freq	%	freq	%	freq	%	Freq	%
I believe that quality improvement project implementation has improved patient quality of care	33.0	25.4	57.0	43.8	12.0	9.2	18.0	13.8	10.0	7.7
Quality improvement project improved the work environment of our health centers	37.0	28.5	60.0	46.2	9.0	6.9	16.0	12.3	8.0	6.2
Overall I am very satisfied with the work done by quality improvement project	26.0	20.0	59.0	45.4	13.0	10.0	20.0	15.4	12.0	9.2
The health centers allocated adequate time for implementation of improvement idea	30.0	23.1	66.0	50.8	11.0	8.5	17.0	13.1	6.0	4.6
Required material, space and equipment for implementation of change idea are available	27.0	20.8	52.0	40.0	13.0	10.0	21.0	16.2	17.0	13.1

Source: - SPSS output 2023

The findings in the above table 4.5 indicate that with regard to Positive Attitude toward implementation practiced in in Addis ketema sub city health centers the result was found to be very significant as shown by an overall mean and standard deviation of M=3.62 SD=1.2094. As presented in the table, respondents believed that project quality implementation improved the work environment of our health centers with the highest mean shown by the ratings with a mean and standard deviation of M=3.7846, SD= 1.16795. Respondents also showed their response at a great extent to the remaining statements as can be seen from the above table. Moreover, the descriptive analysis presented that a high standard deviation range from 1.09482 to 1.33234. It

implies that respondents were more varied in their views to the responses specified under Positive Attitude toward QI implementation.

Positive Attitude towards project quality implementation to be effective its mean score should not be less than 2.5 as suggested by Bass and Avolio (1995 and 2004). The study has shown that the Positive Attitude toward implementation of project in Addis ketema sub city health centers expressed with mean score of M=3.62 SD=1.2094. Therefore, the mean score exceeds the minimum requirement set by the above mentioned authors and clearly indicates that Positive Attitude toward project quality implementation effective in Addis ketema sub city health centers.

In the given table above respondents stated that project quality implementation improved the work environment of our health centers having a high means of 3.7848, Overall I am very satisfied with the work done by quality improvement project with the second highest means of 3.7462 and believe that quality improvement project implementation has improved patient quality of care with a means of 3. 6538.

On the other hand Overall respondents were very satisfied with the work done by quality improvement project having a means of 3.5154 and required material, space and equipment for implementation of change idea are available with a mean of 3.3923. In general respondents highly agree on Positive Attitude toward project quality implementation.

4.3.4 Team Work on Quality Improvement Project Implementation

Table 4.7 Team Work on Quality Improvement Project Implementation

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Patient needs are considered during QI planning process	130	1.00	5.00	3.4692	1.22752
The health centers QI team member have adequate knowledge on developing measurable aim	130	1.00	5.00	3.4846	1.33663
The health centers QI team member have the required skill to use the available QI tools	130	1.00	5.00	3.4923	1.26519
Physicians are adequately engaged on the QI implementation process	130	1.00	5.00	3.5462	1.17540
The QI team member involved in the improvement idea are aware of their individual responsibilities	130	1.00	5.00	3.8692	1.08826
The project leader for the improvement idea Places great emphasis on getting the work done.	130	1.00	5.00	3.4615	1.33035
The project leader has great confidence in the participants involved in the improvement idea	130	1.00	5.00	3.8769	1.12074
The health centers QI team has clear criteria for determining if change is an improvement	130	1.00	5.00	3.6692	1.24133
The change occurred from implementing change idea are discussed in team	130	1.00	5.00	3.6769	1.25886
Adequate budget is allocated for change idea implementation when requested by QI team	130	1.00	5.00	3.7154	1.17622
Valid N (listwise)	130				
Aggregate mean and STD					

	Strongly Agree		Agree		Neutral		disagree		Strongly disagree	
	freq	%	Freq	%	freq	%	freq	%	freq	%
Patient needs are considered during QI planning process	20	15.4	68	52.3	9	6.9	19	14.6	14	10.8
The health centers QI team member have adequate knowledge on developing measurable aim	31	23.8	53	40.8	10	7.7	20	15.4	16	12.3
The health centers QI team member have the required skill to use the available QI tools	28	21.5	55	42.3	12	9.2	23	17.7	12	9.2
Physicians are adequately engaged on the QI implementation process	24	18.5	62	47.7	15	11.5	19	14.6	10	7.7
The QI team member involved in the improvement idea are aware of their individual responsibilities	37	28.5	65	50	8	6.2	14	10.8	6	4.6
The project leader for the improvement idea Places great emphasis on getting the work done.	29	22.3	54	41.5	12	9.2	18	13.8	17	13.1
The project leader has great confidence in the participants involved in	40	30.8	61	46.9	9	6.9	13	10	7	5.4

the improvement idea									
The health centers QI team has clear criteria for determining if change is an improvement	34	26.2	58	44.6	11	8.5	15	11.5	12	9.2
The change occurred from implementing change idea are discussed in team	38	29.2	52	40	10	7.7	20	15.4	10	7.7
Adequate budget is allocated for change idea implementation when requested by QI team	32	24.6	64	49.2	8	6.2	17	13.1	9	6.9

Source: - SPSS output 2023

The level of team work on project quality implementation process was assessed by a total of ten statements. According to the finding, the project leader has great confidence in the participants involved in the improvement idea (mean score 3.8769) and The QI team member involved in the improvement idea are aware of their individual responsibilities (mean score 3.8692). Likewise Adequate budget is allocated for change idea implementation when requested by QI team (mean score 3.7154), The change occurred from implementing change idea are discussed in team (mean score 3.6792) and the health centers QI team has clear criteria for determining if change is an improvement (mean score 3.6692) and Physicians are adequately engaged on the QI implementation process (mean score 3.5462). However moderate level of the health centers QI team member have the required skill to use the available QI tools (mean score 3.4923) and moderate the health centers QI team member have adequate knowledge on developing measurable aim (mean score 3.4846) are reported.

In addition to this, Patient needs are considered during QI planning process with a means of 3.4692 and the project leader for the implementation idea Places great emphasis on getting the work done with a means of 3. 4615 are items with moderately agreed by the respondents.

Physician play significant role in healthcare service provision. Ovretveit, J., & Gustafson, D. (2002) reported physician involvement on project implementation among factors necessary to motivate and sustain quality implementation. If gaps in physician engagement are not addressed, it will have negative repercussions on QI implementation and its sustainability.

4.4. Correlation Analysis

In order to decide the relationship between independent variables of the study with improved project implementation and to evaluate strength of this relationship, the product moment correlation coefficient was used. The product moment correlation coefficient is the most widely used method of measuring the degree of relationship between two variables (Kothari, 2004). This coefficient assumes that there is linear relationship between the two variables. Positive values of "r" indicate positive correlation between the two variables (i.e., changes in both variables take place in the statement direction), whereas negative values of 'r' indicate negative correlation i.e., changes in the two variables taking place in the opposite directions. A zero value of 'r' indicates that there is no association between the two variables. According to Bartz (2009) a correlation coefficient enables to quantify the strength of the linear relationship between variables. This coefficient is usually denoted by 'r' and can take only the value from -1 to +1.Ifr = +1 there is perfect positive relationship between variables. Table 4.9 shows interpretation of R range.

Table 4. 8. Interpretation of R

Range of R	Description
1.00	Perfect relationship
0.80 or higher	Very strong
0.6 to 0.8	Strong
0.4 to 0.6	Moderate
0.2 to 0.4	Low
0.2 or lower	Very low
0.00	No relationship at all

Source: Bartz, (2009)

Table 4.9. Correlations analysis result

Variables		Leadership commitment	Staff competency	Attitude toward QI	Team Work on QIPI	improved project implementation
Leadership commitment	Pearson Correlation	1	.448**	.356**	.416**	.523**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	130	130	130	130	130
Staff competency	Pearson Correlation	.448**	1	.437**	.483**	.607**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	130	130	130	130	130
Attitude toward QI	Pearson Correlation	.356**	.437**	1	.536**	.637**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	130	130	130	130	130
Team Work on QIPI	Pearson Correlation	.416**	.483**	.536**	1	.712**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	130	130	130	130	130
improved project implementation	Pearson Correlation	.523**	.607**	.637**	.712**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	130	130	130	130	130

**. Correlation is significant at the 0.01 level (2-tailed).

Source: Own survey, 2023

As indicated in Table 4.9 the relationship among all the variables was found by using Pearson's correlation coefficient. The correlation value r = 0.523 shows that there is a moderate relationship between Staff competency and Improved Project Implementation Addis ketema sub city health centers, and the p-valueshowed that the relationship is significant.

Regarding to Improved Project Implementation and Leadership commitment, r=0.607, which shows a strong relationship between the two variables, and the p-value indicates that the relationship is significant. When Coming to the relationship of Improved Project Implementation with Attitude toward QI implementation, the r=0.637 showed a strong relationship between the two variables, also p-value shows that the relationship issignificant.

The value of r=0.712 for Improved Project Implementation and Team Work on Quality Improvement Project Implementation shows a strong relationship, and the p-value indicates a significant relationship between them. The result of correlation analysis shows that all study variables have positive and significant relationship with Improved Project Implementation age of customers in Addis ketema sub city health centers.

CHAPTER FIVE
SUMMARY OF FINDINGS CONCLUSION AND RECOMMENDATIONS

5.1 Summery

This research was undertaken to explore the relationship between Leadership commitment and Improved Project Implementation, Staff competency and Improved Project Implementation positive Attitude toward QI implementation and Improved Project Implementation and Team Work on Quality Improvement Project Implementation and Improved Project Implementation. The most important finding was of course that Leadership commitment, positive Attitude toward QI implementation and Team Work on Quality Improvement Project Implementation was important for Assess quality improvement project implementation in Addis ketema sub city health centers. The finding from the inferential analysis indicates that Leadership commitment and Staff competency has a positive effect on Improved Project Implementation. In addition to this Improved Project Implementation positive Attitude toward QI implementation and Team Work on Quality Improvement Project Implementation has also a positive effect on Improved Project Implementation proved by the analysis. In this section, each of these relationships are discussed in some detail demonstrating that these finding were consistent with the expected out comes and identifying potential reason why these findings may have been seen. It is supreme importance to ensure that people actually Project Implementation to use the system.

➢ The sample size of 137 questionnaires was distributed and 130 responses have correctly filled and returned which accounted 95% of response rate.

➢ Majority of the respondents 74% are males and the majority of this respondents 64 (49.2%) were in the age range of 26-35 years. On the other hand the majority of respondents 64 (49.2%) were bachelor's degree holders and 55(42.3 %) of them have well experienced for 6-12 years

➢ The result of the aggregate mean of Leadership commitment related items was 3.974 with standard deviation 0.984, which lies between the range of [3.5 - 4.49] and it felt high mean range section and Leadership commitment in order to use improved project implementation.

➢ The result of the aggregate mean of all Staff competency related items was 3.7374 and standard deviation of 1.00235 which felt average/moderate/ mean range section.

➢ The aggregate mean of all Positive Attitude toward QI implementation related items was 3.62 with standard deviation 1.2094, it felt average/high/ mean range section and showed Positive Attitude toward QI implementation of improved project implementation were high level.

➢ The aggregate mean of all Team Work on Quality Improvement Project Implementation related items was 3.867 with standard deviation 1.219, it felt average/moderate/ mean range section and showed Team Work on Quality Improvement Project Implementation of improved project implementation were moderate level according to views of respondents

➢ The result of correlation analysis shows that there is a strong positive significant relationship between three independent variables (Leadership commitment, positive Attitude toward QI implementation,
Team work on Project quality Implementation) and improved project implementation. The rest independent variables Staff competency had a moderate strong positive significant relationship improved project implementation

➢ All the variables were found by using Pearson's correlation coefficient. The correlation value r = 0.523 shows that there is a moderate relationship between Staff competency and improved project implementation, and the p-value showed that the relationship is significant.

➢ Regarding to project implementation and Leadership commitment, r=0.607, which shows a strong relationship between the two variables, and the p-value indicates that the relationship is significant. When Coming to the relationship of improved project implementation with positive Attitude toward QI implementation, the r=0.637 showed a strong relationship between the two variables, also p-value shows that the relationship is significant. The value of r=0.712 for improved project implementation and Team Work on Quality Improvement Project Implementation shows a strong relationship, and the p-value indicates a significant relationship between them. The result of correlation analysis shows that all study variables have positive and significant relationship with improved project implementation in the study area

➢ Team Work on Quality Improvement Project Implementation) had significant effect on the dependent variable (improved project implementation) in in Addis ketema sub city health centers.

5.2 Conclusion

The aim of his study was to assess factors affecting project quality implementation in Addis ketema sub city health centers. This study was undertaken to assess factors leadership commitment, Staff competency, positive Attitude toward project quality implementation, Team Work on Quality Improvement Project Implementation and project quality implementation.

The frequency of meeting to follow QI project implementation varies which indicate that there were health centers that meet too much frequent every two week while there are also health centers that meet every quarter. The QI team members have least influence on preparing project goal and resource allocation.

The respondents perceive that the QI team members have the required competency (knowledge and skills) to execute project quality implementation and they have positive attitude toward implementation of the project. The QI team has high satisfaction on the work done by the QI project as well. There is also high level of team work on QI project implementation. Generally there is good practice in data collection and making it available for use even though there is gap in using the generated evidence for decision making.

The health centers leader's and physician engagement on QI project implementation were not adequate. The lowest mean score were reported for resource (budget, time, staff adequacy, material, space equipment) availability for QI project implementation.

5.3 Recommendations

Based on the study finding and conclusion the following recommendation were made

► Close follow up of QI project implementation is very important factors. However frequency of meeting to monitor QI project performance widely varies across health centers. Therefore the Addis ketema sub city health centers may work to standardize it through strengthening supportive follow up.

► The QI Unit or team member's involvement on preparing the project goal and resource allocation is limited. The health center management recommended empowering the QI unit on preparation of the project goal by consulting them before making final decision.

► One of the study finding is the collected data are not adequately used for decision making and there is a gap in sustaining QI project implementation achievements. Therefore effort should be made by both QI unit and Addis ketema sub city health centers management to make use

of evidence generated for decision making and sustaining positive gains obtained by implementing the QI project

► The study reveals that there were no adequate leadership engagement and resource allocation for QI project implementation. Therefore the Health center leadership recommended improving their engagement by encouraging new ideas, actively monitoring the QI project implementation and facilitating cross learning among employees. Furthermore they may improve resource allocation too.

► Addis Ketema Sub city health centers recommended continuing providing QI training to sustain the current high level of staff competency to execute QI and find a way to increase physician engagement on QI project implementation.

► It would be good if the future research focus in the area of what motivate and demotivate staff to implement QI, the contribution of QI project implementation in improving patient level care and factors that affect sustainability of QI initiative in health care.

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APPENDIX

ST. MARY'S UNIVERSITY

SCHOOL OF GRADUATE STUDIES

DEPARTMENT OF PROJECT MANAGEMENT

QUESTIONNAIRE TO BE FILLED BY RESPONDENTS

Dear respondent

I am carrying out a research & in this regard, I need your truthful & valuable opinion through this questionnaire. My research interest is in the (Assessment of quality improvement project implementation in Addis ketema sub city health centerss.) you can help me on current research project by completing the attached questionnaire. I request 10 to 15 minutes of your time to fill these questioners. It is being distributed to you purely for academic purpose and all the responses will be secret. Your neutral choices will be highly appreciated and make this valuable research. Please read the instructions carefully and answer all the questions.

Yours faithfully

By: Tsion Alemayehu

Mobile: +251913912292

Advisor: Maru Eshete (Phd)

Directions for filling the questionnaire

There is no right and wrong answer of the options provided. Therefore, you are kindly requested to fill your real opinion regarding each question. Your response is utilized only for the purpose of this survey.

➢ Please put a "√" mark on your choice in the space provided

➢ No need of writing your name

Part (1):-Demographic factor related questions

1. **Gender.**
a)   Female56 ☐
b) Male 74 ☐

2. **Age group**

a) 18-25 years old   25   ☐   34c) 36 -45 years old   ☐

b) 26 - 35 years old   64   ☐

e) Above 45 years old 7   ☐

3. Educational Qualification

a) 12 certificate and below   ☐   8 e) above masters   ☐

b) 20 College diploma   ☐

c) 64 Bachelor degree   ☐

d) 26 Master   ☐

4. Work experience project management

a) Below 1 years 12   ☐

b) 1-3 years   24   ☐

c) 3-6 years   55   ☐

d) 6-12 years 29   ☐

e) Above 12 years 10   ☐

5. Marital Status

a)   Single 32   ☐

b)   Married 86   ☐

c)   Divorce 12   ☐

 Part (1):-**Question related to (Independent Variables)**

Please you are kindly asked to indicate the extent to which you agree or disagree with each statement and put a Tick mark (√) in a box to the correspondent number.

The response scale for the question gives as follows. 1= Strongly Disagree, 2= Disagree, 3= Neutral, 4= Agree, 5= Strongly Agree

1. Leadership commitment

Questions	Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
The health centers senior leadership are receptive to new idea					

The CEO/Medical director is/are a primary driving force behind quality improvement efforts.						
The health centers leadership shares information/ dataabout health facility service delivery status						
The health centers leadership consistently participate in monitoring QI activities implementation						
The health centers leadership encourages learning that help all employees advance their knowledge						

2. Staff competency

Questions	Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
The health centers collects a wide range of data about the quality of care and services.	33	57	12	18	10
The hospital staff get the data they need whenever they need					
The health centers staff analyses the collected data and use the information for decision making about their work					
The health centers continually tries to improve the accuracy and relevance of its data on the quality of care andservices provided.					
The health centers continually tries to improve the timeliness of its data on the quality of care and services provided.					
The data generated by health centers departments are highly reliable and trust worthy					
The hospital has assigned adequate number of staff for QI unit/directorate					

3. positive Attitude toward QI implementation

Questions	Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
I believe that quality improvement project implementation has improved patient quality of care	33	57	12	18	10
Quality improvement project improved the work environment of our health centers	37	60	9	16	8
Overall I am very satisfied with the work done by quality improvement project	26	59	13	20	12
The health centers allocated adequate time for implementation of improvement idea	30	66	11	17	6
Required material, space and equipment for implementation of change idea are available	27	52	13	21	17

4. Team Work on Quality Improvement Project Implementation

Questions	Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
Patient needs are considered during QI planning process	20	68	9	19	14
The health centers QI team member have adequate knowledge on developing measurable aim	31	53	10	20	16
The health centers QI team member have the required skill to use the available QI tools	28	55	13	22	12
Physicians are adequately engaged on the QI implementation process	24	62	15	19	10
The QI team member involved in the improvement idea are aware of their individual	37	65	8	14	6

responsibilities					
The project leader for the improvement idea Places great emphasis on getting the work done.	29	54	12	18	17
The project leader has great confidence in the participants involved in the improvement idea	40	61	9	13	7
The health centers QI team has clear criteria for determining if change is an improvement	34	58	11	15	12
The change occurred from implementing change idea are discussed in team	38	52	10	20	10
Adequate budget is allocated for change idea implementation when requested by QI team	32	64	8	17	9

Thank you