

**THE RELATIONSHIP BETWEEN ISO CERTIFICATION AND SERVICE
DELIVERY: A CASE OF MOI TEACHING AND REFERRAL HOSPITAL,
ELDORET, KENYA**

BY

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DECLARATION

CANDIDATE

I hereby declare that this project is my original work and has not been submitted for a Degree or Diploma award in any university. No part of this thesis may be reproduced without the prior written permission of the author and/or Moi University.

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DEDICATION

I dedicate this work to my entire family for their understanding and support during the study period. Their support was beyond my expectations by understanding me while pursuing the master's degree course.

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First of all and most important of all I extend my gratitude to the Almighty God for providing me with strength, knowledge and vitality that helped make this project work a reality.

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ABSTRACT

To achieve competitive advantage through maintenance of quality, organizations must ensure that they achieve the highest possible standards in order for them to attract and maintain the consumers in the market. The main focus of ISO 9001:8000 is service delivery and is the most successful quality management system for many organizations including the health sector. The main purpose of this study was to determine the relationship between quality management systems and organizational performance at Moi Teaching and Referral Hospital, Eldoret. The specific objectives were to; find out the effects of ISO 9001:8000 certification on health care provision, financial management and development planning and propose strategies of enhancing the effectiveness of ISO 9001: 8000 certification on service delivery. The study utilized the descriptive survey design and adopted mixed research approach of data collection. There were 280 management employees in MTRH who formed the target population of this study. The study used Yamane (1967) formula to determine its sample size. Proportionate and simple random sampling techniques were used to obtain the 165 respondents. Data was collected by use of questionnaires and interview schedules. The collected data was analyzed using both descriptive and inferential statistics such as frequencies, percentages, and Pearson Correlation analysis. The study found out that ISO certification was positively linked to service delivery (health care provision, financial and human resource management and development planning) and that there was need to review on the competencies of staff members and provide scholarships to its members for acquisition of skills. The study recommends that there was need for provision of training of employees at MTRH to enable them acquire skills in the various hospital departments and therefore effectively implement hospital strategic plan which enhances the implementation of ISO standards and that there is need for the hospital management to determine and provide resources for the infrastructure development especially for hospital equipment and facilities which ensures that there is better and improved service to the customers. The findings of this study will guide the policy makers in Moi Teaching and Referral Hospital and related institutions and other various organizations and industries to know the role the success factors play in shaping standardization practices, how they affect performance and what strategies to use in order to remain competitive and achieve sustainable growth and performance.

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DEFINITION OF TERMS

ISO: refers to international organization for standards. It is a mark of quality and a step towards international standards. According to Magoha (2008), the process of ISO certification represents an international consensus on good management practices with the aim of ensuring quality service delivery to clients.

ISO certification has become a widespread practice as organizations increasingly work to conform to the international standards. The standards place strong emphasis on process control and continuous improvement which are some of the key characteristics that an organization must possess to be recognized as a leading player

Standardization Architecture: This is the system, which determines, controls, and guarantees that the goods and services domestically produced or traded in a country are safe, compatible, and fit for local consumption or export.

Standardization: This could be defined in a general way as an activity aiming to apply an ordered system to repetitive functions that take place in the context of industry, technology, science and the economy.

Standards and Technical Regulations: This is defined as what can (or cannot) be exchanged, and outline the procedures under which such exchanges are or are not permissible. Wilson (2001) discusses two broad categories of standards; product and process standards. Product standards define quality, safety and authenticity that goods should possess such as minimum nutrition content of a food item, maximum pesticide residues on an agricultural product, and performance requirements for pieces of furniture or machinery).

Process standards: Refer to the conditions under which products are produced, packaged or refined.

Quality: The degree of excellence of a thing (Webster's Dictionary). The totality of features and characteristics that satisfy needs" (American Society for Quality), Fitness for use, that is usability (Deming).

LIST OF ACRONYMS & ABBREVIATIONS

ANOVA	Analysis of Variance
ISO	International Organization for Standardization
KAM	Kenya Association of Manufacturers
KEBS	Kenya Bureau of Standards
MTRH	Moi Teaching and Referral Hospital
QMS	Quality Management Systems
SCAC	State Corporations Advisory Committee
SDOs	Standards developing organizations
SI	International System of units
SMEs	Matter Experts (SMEs)
SMEs	Small Micro Enterprises
SOPs	Standard Operating Procedures
SWOT	Strength, Weakness, Opportunities and Threats
TBT	Technical Barriers to Trade
TQM	Total Quality Management
WTO	World Trade Organization

CHAPTER ONE

INTRODUCTION TO THE STUDY

1.0 Overview

This chapter will deal with background of the study. It covers the statement of the problem, purpose, objectives of the study, research hypotheses, significance, scope and the limitations of the study.

1.1 Background of the Study

To compete in today's turbulent competitive business environment and global economy, organizations are focusing on the satisfaction of customers' needs as a means of obtaining advantage, and even survival (Lai, Weerakoon & Cheng, 2002). A major strategic change that many organizations are striving to achieve customer satisfaction is through emphasis on quality products and services. A greater need exists for shrewder investment in infrastructure and process standardization for business success (Mendel, 2001).

In a global economy, without standardization and its results; standards, technical standards and specifications, interchanges would become exceedingly difficult. Standardization can then stimulate international trade by eliminating obstacles arising from different national practices (Nadvi & Wältring, 2004). Standards are important for the promotion of economic efficiency as they provide a basis for reducing information-related transaction costs (Nadvi & Wältring, 2004).

The quest to be competitive has led many organizations to change how they operate or produce their goods and services. To achieve competitive advantage through maintenance of quality, the organizations both in the public and private sectors must ensure that they

achieve the highest possible standards in order for them to attract and maintain the consumers in the market (Lai, Weerakoon & Cheng, 2002).

Standardization constitutes a mechanism of coordination and an instrument of regulation comparable to other instruments such as public regulations, markets, and hierarchies or formal organizations (Antonelli, 1994; Brunsson & Jacobsson, 2000). It has been crucial for the development of the industrial society (Blind, 2004). The development of standards and technical rules by institutions given authority to do so by both the private and public sectors is an essential element of the technological and economic infrastructure of a nation, and greatly influences its competitive ability and the strategies of companies (Blind, 2004).

Currently, the main concern of any organization; be it manufacturing or service one is to reach the world class excellence through high quality products and services, customer satisfaction, and cost reduction with profit optimization (Arauz & Suzuki, 2004). Management system standards provide a model for businesses to follow when developing and implementing management systems. The standards provide frameworks for an organization to follow in managing its processes, so its products or services meet the objectives it has set (Raisinghani *et al.* 2005). Objectives might cover customer service, environmental targets or legislation.

Many health care administrators are increasingly showing concern for delivering high quality care in which both the customer (patients) and providers (employees) are satisfied while maintaining a strong financial environment (Love et al., 2008). This represents a shift in management theory from the 1990s when cost cutting and the bottom line

dominated concerns in the health care industry (Brown, 2002). Further, surveys with nurses have indicated that they exhibit loyalty to patients but often do not feel the same level of loyalty to their employer because they feel hospital executives are not in touch with the demands of patient care (Curran, 2001). These findings highlight the importance of creating engaged employees and the important role of administrators and other leaders in this process.

Implementing a quality management system that conforms to standardization entails documenting operating procedures, training, internal auditing, and corrective action procedures. It also requires that procedures to improve existing procedures be implemented (Karapetrovic & Willborn, 1998). Proponents claim that quality programs such as ISO 9001 improve both management practices and production processes, and that these improvements translate into increased sales and employment. The latter benefits are magnified if customers interpret the adoption of quality programs as a signal of high quality products or services (Karapetrovic & Willborn, 1998).

Total quality management (TQM) is an organizational wide management philosophy of continuously improving the quality of the products, services or processes by focusing on the customers' needs and expectations to enhance customer satisfaction and firm performance (Kaynak, 2003). There are mixed results about the relationship between total quality management practices and organizational performance (Nair, 2006; Sadikoglu & Zehir, 2010).

KEBS is a statutory body of the Government of Kenya, established by an act of Parliament in 1974, Cap 496 of the Laws of Kenya, The Standards Act. It is the custodian

of Kenya's national quality assurance system. The mandate of KEBS is to promote standardization in commerce and industry, provide testing and calibration facilities, control the use of standardization marks, undertake educational work in standardization, assist in the implementation and practical application of standards and maintain and 5 management is a critical component in the successful management of organizations (Rezaei, Celik & Baalousha, 2014). ISO 9001 certification is the most successful quality management system for many organizations including the health sector such as Moi Teaching and referral Hospital. This study will therefore ratify the relationship between quality management systems and organizational performance at Moi Teaching and Referral Hospital, Eldoret.

1.2 Statement of the Problem

Globalization and technological advancement means that organizations today must be competitive than ever before in order to survive, grow and prosper. Such competitiveness can be achieved through being standardized (Lai, Weerakoon & Cheng, 2002). A major strategic change that organizations should strive to achieve is through emphasis on quality products and services hence the need for firms to come up with strategies for standardization practice.

Studies have found that standardization is positively connected with operational and management performance, (Phan, Abdallah & Matsui, 2011; Ittner & Larcker (1997) society results, (Obeng & Ugboro, 2008) customer results, and market performance (Macinati, 2008). Cognizant of the importance of standardization and consequently certification (especially ISO 9001:2008), the government of Kenya issued a directive in 2010 that all public agencies should begin the process of ISO 9001:2008 certification and

ensure that they are fully certified by 2012 (Vision 2030, www.kebs.org). Many organizations have since spent a lot of resources in an attempt to implement this directive in Kenya.

However from reviewed literature, most recent studies on standardization have come from international scholars. For instance, the United Kingdom research of Mann and Kehoe (1994) noted that quality certification or standardization was associated with improved business performance at the operational level, while Buttle's (1996) survey of 1,220 certified UK companies found that improving operations as well as marketing gains were claimed by most of the firms following quality certification. Similar findings were found by Casadesus, Heras and Ochoa (2000) study of 500 Spanish firms. In Singapore, Quazi et al., (1998) found that in addition to marketing gains there were improvements in product quality.

Similarly studies have shown that certification was significantly correlated with quality results, improved communication within the organization; improved product quality; increased process efficiency; improved human resource management; reduction in production costs; increased market share and improved export potential especially reduction of defective products and customer complaints., enhanced worker productivity and workers' attention to detail, (Sun; 1999, Tan & Lim-Teck Sia; 2001,. Naveh & Erez; 2006, Easton & Jarrell; 1998; Hendricks and Singhal; 1996, 1997, 2001a, 2001b). The main focus of ISO 9001:8000 is service delivery. The foregone analysis confirms that limited studies have been done which directly connects standardization practice in Kenyan firms and performance. The Moi Teaching and Referral Hospital is ISO 9001:8000 certified. Service delivery encompasses; health care provision, financial

management and development planning among others. While many institutions have spent a lot of resources in an attempt to implement this directive, not much has been done to confirm benefits associated with this requirement in Kenya. This study therefore attempted to understand the connection that exists between certification and service delivery at MTRH.

1.3 Purpose of Study

The general objective of the research was to determine the relationship between quality management systems and organizational performance at Moi Teaching and Referral Hospital, Eldoret. This is attributed to the fact that the Hospital is ISO 9001:8000 certified.

1.4 The Specific Objectives

The following were the specific objectives of this study

- i. To find out the effects of ISO 9001:8000 certification on health care provision at MTRH.
- ii. To determine the influence of ISO 9001:8000 certification on financial management at MTRH.
- iii. To establish the effects of ISO 9001:8000 certification on development planning at MTRH.
- iv. To propose strategies of enhancing the effectiveness of ISO 9001: 8000 certification on service delivery at MTRH.

1.5 Research Hypotheses

The following research hypotheses were formulated and tested in this study;

HO₁: There is no significant relationship between ISO 9001:8000 certification and health care provision.

HO₂: There is no significant relationship between ISO 9001:8000 certification and financial management.

HO₃: There is no significant relationship between ISO 9001:8000 certification and development planning.

1.6 Significance of the Study

The study will offer valuable contributions from both a theoretical and practical standpoint. From a theoretical standpoint, it contributes to the general understanding of the effects of Standardization practice on service delivery. To the organizations, the study will guide the policy makers in various organizations and industries to know the role success factors play in shaping standardization practices, how they affect performance and what strategies to use in order to remain competitive, achieve sustainable growth and performance. The findings of the study will also serve as a benchmark to other organizations who intend to adopt standardization. It will enable them to better understand the role and effects of standardization on development and performance of organizations, private and public sectors.

The study will be useful to the government in policy making regarding standardization and other regulatory requirements in future. The study will also reveal inadequacies and gaps in the standardization practices, information that was useful to the policy makers to

identify business opportunities for improvement. The research findings and gaps of this study will also serve as a stepping stone for new and further research in future; researchers, research institutes and students in the field of management who want to know more about standardization practices. The study will provide additional knowledge to the already existing literature on standardization practice. The study will make a significant contribution to the existing body of knowledge in the field of Quality Management Systems.

1.7 Scope of the Study

The study was about standardization practices in Kenya. The study focused more on the effects of standardization practice (ISO 9001 certification) on health care provision, financial management and development planning. In addition, strategies of enhancing the effectiveness of ISO 9001 certification on service delivery were also focused. The focus was on the employees of Moi Teaching and Referral Hospital in Eldoret, Kenya. This study was limited to the firms' employees where questionnaires and interview schedule was used to collect data. This was relevant in collecting the data required as time and distance are the limiting factors. The study was carried out between the months of August 2014 to November, 2014.

1.8 Assumptions of the Study

This study assumed that the respondents involved in the study will give honest information which reflects the actual facts on the ground.

1.9 Limitation of the Study

The researcher relied on self-report from respondents which carries their own biases. Relying on self-report can be problematic and may threaten the veracity and truthfulness of the response. In order to remove these biases, the researcher employed triangulation where data was collected by use of questionnaires and interview schedules.

CHAPTER TWO

LITERATURE REVIEW

2.1 Overview

This chapter presents literature related to the study, theoretical and conceptual framework.

2.2 Concept of Standardization

Standardization may be defined, generically, as an activity aimed at organizing applications and operations, which repeatedly take place in areas of industry, technology, science and the economy (Dale, 2002). Standardization was first conceived at the beginning of the twentieth century, as a means to limit the uneconomical diversity of components, parts and supplies in order to favor their interchangeability, which in turn would facilitate mass production and the repair and maintenance of products and services (Dale, 2002). Standardization, however, has gone further than this and has come to be applied to the very management processes and systems by which products and services are produced (Heras-Saizarbitoria & Boiral, 2013).

Standards have become an increasingly powerful force in the protection of public health, safety, environment; the development and commercialization of new technologies and the facilitation of national and international commerce. Standards are universally used that they are often taken for granted. Standards are fundamental to the economy and vital to world commerce, govern the design, operation, manufacture, and use of nearly everything that mankind produces. (Global Standards - Building Blocks for the Future, 1992). Currently, an estimated 80 percent of world merchandise trade is affected by

standards or regulations that reference or incorporate standards (National Academy of Sciences, March 27, 2003).

Standards are not only important for consumers but they are also critical underpinnings for business. Standards, including codes of practice and guides as well as formal standards, support compatibility and drive down costs through use of common parts, specifications and methods. They can help open markets, create new industries and realize the potential of new technologies (United Kingdom National Standardization Strategic Framework, 2003).

Standardization can improve worker safety through the identification and elimination of potentially hazardous practices, development of a formal corrective action process, and institutionalization of routine audits and management reviews (Brenner, Fairris & Ruser 2004). Standardization is also more transparent than relying on a producer's reputation and it conveys standardized information about the capabilities of a producer that may not be obtainable elsewhere. It reduces search costs for global suppliers and hence reduces technical barriers to trade (Jaffee 2004). Standards are also an important instrument in private sector development and in allowing developing countries to integrate into global supply chains (Jaffee 2004). The enhanced capacity to meet with new health and safety standards, rather than eroding Kenya's comparative advantage, can create new forms of competitive advantages, and therefore new trade, growth and employment (Jaffee, 2004).

Standardization activities are more and more complex and omnibus and the context where they are developed are under constant change and evolution. Globalization has radically changed the competitive landscape and process flows of business (Muhoho,

2006). Regional and economic integration has led to increased competition in the price sensitive Kenyan Economic industry.

Some studies have found that standardization and certification is positively associated with operational performance management (Phan, Abdallah & Matsui, 2011; Ittner & Larcker (1997) society results (Obeng & Ugboro, 2008) customer results, and market performance (Macinati, 2008). The primary development goal for any country is to achieve broad-based, sustainable improvement in the standards of the quality of life for its citizens (World Bank, 2006). A country's standardization architecture includes the procedures, strategies, people and infrastructure for identifying, developing, implementing, enforcing, and redesigning standards and technical regulations (including service or product performance directives, quality specifications and assurances, certification requirements, accreditation, and metrology systems to meet public safety and other socio-economic objectives; World Bank, 2006). In Kenya the body concerned with standardization is the Kenya Bureau of Standards (www.kebs.org).

Sun, (1999) investigated ISO 9001 certification in Norwegian companies and found that it was significantly correlated with quality results, especially reduction of defective products and customer complaints. Tan and Lim-Teck Sia (2001) investigated the benefits of ISO 9001 among a sample of 100 Malaysian companies. The study found a number of benefits: improved communication within the organization; improved product quality; increased process efficiency; improved human resource management; reduction in production costs; increased market share and improved export potential. Naveh and Erez (2006) deduced from survey data that standardization adoption enhances worker productivity and workers' attention to detail, but impedes worker innovation, a number of

event studies found out that financial performance, as measured by stock price and operating income, improves after firms win a quality award or implement Total Quality Management programs (Easton and Jarrell 1998; Hendricks and Singhal 1996, 1997, 2001a, 2001b).

In a competitive world economy, ignoring the importance of standards can be a costly strategy for industry and government. Companies and entire industries may become less efficient. Transactions may become more costly in and resources necessary for buyer-seller negotiations. Markets can fragment as divergent requirements for products and services are developed and imposed. Standards promote efficiency in domestic and international markets. By adhering to agreed upon standards, businesses can use widely accepted requirements and specifications to negotiate deals for products or services, avoiding contract ambiguities that might otherwise undermine such transactions (Erel & Gosh, 1997).

Changes in the environment have led to dynamism which has led to constant appraisal with new technologies hence the need for standardization of goods and services. Certification is required to ensure that organizations meet the minimum quality standards that are acceptable world over. Many organizations worldwide are now striving to ensure that they get certified to ensure that they retain their customers as well as having an opportunity to compete globally (Erel & Gosh, 1997).

A growing number of organizations are recognizing improved quality as the key to survival. The notion of quality as a competitive tool has been around for several years; however, today it is receiving much more attention especially with the introduction of

quality standards. ISO is having a network of more than 160 member countries all over the world. The national standards institutions of countries represent country for governing the accreditation framework (Erel & Gosh, 1997).

In this period of fierce global competition, a consumer does not have to tolerate poor quality products or services. People are at the heart of every quality improvement program; as a result organization needs to have mechanisms that ensure that they have the best quality for goods and services. In this dynamic and changing environment, one way to create growth and sustain performance is to innovate (Higgins, 1996). Any certified organization is supposed to have an effective Quality System and achieve maximum customer satisfaction, profit, employee motivation, improvements and minimum rejections, reworks, customer complaints and problems. In this dynamic and changing environment, one way to create quality and sustain performance is to innovate (Higgins, 1996).

At present, there is a large number of international and national standards whose aim is to order and systematize, among other things, the implementation of business management systems in relation to a wide variety of functions and operations, such as quality improvement (ISO 9000, QS 9000, EAQF, VDA,), environmental impact (ISO 14000 and EMAS), occupational safety (OHSAS 18001), corporate social responsibility (SA 8000, AA 1000 or the ISO CSR or UNE 165010 projects), Research, Development and Innovation (RDI) activities (the experimental standard UNE 166000 EX) and activities related to management of human resources (the Investors in People standard). There are also other quality systems, such as Zero Defects, Total Quality Management, and national quality award named Malcolm Baldrige National Quality Award or MBNQA, and the Six

Sigma approach (Vokurka, 2003). They were all instituted to award those producers of goods and services that met the highest level of standards. The most important principle in all systems is customer focus; how customers perceive quality and what their quality expectations are (Raisinghani *et al.*, 2005). All of these standards have very similar methodologies, which include creation, structure and implementation processes, plus verification by a third party (Raisinghani *et al.* 2005).

The primary role of any government is to maximise on the welfare of its citizens and its development goal is to achieve broad based, sustainable improvement in the standards of the quality of life for its citizens (AAPAM, 2005).

Kenyan companies have embraced standardization as a management tool to compete and enhance performance in provision of services to both local and international clients (Wanambisi, 2010). Maiyo (2009) carried out a study on the effects of ISO 9001:2000 Certification on the performance of registered companies, he found out that ISO 9001:2000 had a great impact in organizations that were certified as it led to improved organizational performance. Kungu (2010) on implementation of ISO 9001:2008 quality Management systems at Total Kenya Ltd concluded that there was overall quality improvement in the organization with the implementation of the quality.

Companies that are certified maintain the quality management systems that will enable it to meet its quality standards relating to the processes and activities for delivering goods and services, by providing standard operating procedures (SOPs) for development, implementation, and management of quality management systems (Ndirangu, 2011). There are number of benefits which include efficient operations, customer satisfaction,

improvement of financial results, and satisfaction of stakeholders, sustainability, continual improvement, international recognition, improved quality and image. Ndirangu (2011) carried out a study on the strategic value of ISO certification among state owned enterprises in Kenya and concluded that the certification is an important strategic initiative for all organizations as the main drive to increase efficiency and productivity in all areas of operations which in turn leads to improved customers confidence.

The ISO 9000 certification or quality management system has its own chapter due its strong emphasis in customer satisfaction and the importance of QMSs to improve organizational performance in all aspects (Chan, 1998). The ISO 9000 series of standards is a non-governmental organization established to promote the development of standardization and related activities. The goal is to facilitate the international exchange of goods and services, and to develop cooperation in the spheres of intellectual, scientific, technological and economic activity (Bhuiyan & Alam, 2005). It establishes a clear document system throughout the organization, a common language across the organization and common identifiers for customers or patients (Cochran, 2002).

The Moi Teaching and Referral Hospital located in Eldoret, Kenya - home to Kenya's fourth international airport - has nearly 100 years of history having been founded in 1917 as the Native Cottage hospital with a bed capacity of 60. It is the second largest referral facility in Kenya and tasked with handling complex diseases and establishing policies. Currently, it has a bed capacity of 550 serving the larger Western and Nyanza provinces in Kenya and its surrounding areas of Kapenguria, Kapsowar, Kitale, Nandi, Kapsabet and Tambach, as well as offering medical education through its association with Moi

University, a major development. Moi teaching and referral hospital was ISO certified in 2008 (www.mtrh.or.ke).

2.3 Standardization, Innovation, Research and Development

A strong link between standardization and innovation exists: on the one hand, standardization fosters innovation by accelerating its access to both domestic and global markets, and on the other hand, innovation strengthens a country's industry's competitiveness, bringing new export opportunities and economic growth, hence contributing to the recovery of a nation's economy (Stern, 2003).

If innovative technologies are to generate return on investment, create jobs and have a broad impact on global society, it is vital that the technologies can access global markets early. It is now widely agreed that the best tool to ensure this is standardization, addressed at the earliest possible stage (Stern, 2003). With today's levels of global competition, the traditional view of product development that entails a sequential process starting with research, continuing into development, through to production and distribution is no longer valid. Today, research, prototyping and standardization are very much overlapping processes (Stern, 2003).

2.4 Effects of standards on Service Delivery

ISO 9000 has been the most commonly implemented quality innovation by US and European organizations in the last decade (The International Standards Organization survey of ISO 9000, 2000). It requires that organizations have verifiable routines and procedures in place for product design, manufacture, delivery, service and support. Vloeberghs & Bellens (1996) also argued that strong senior management commitment

had a positive effect on ISO 9000 implementation. Additionally, the cross-functional management team is also an important factor for successful ISO 9000 implementation. One of the reasons why a team is important is that quality management is a collective activity which transcends both individuals and departments (Stamatis, 1995).

Under the ISO 9000 standard, an organization must monitor strictly the sequence of steps it takes for the completion of a job (Cole 1999, Brunsson *et al.*, 2000). For this purpose, it must follow process documentation; no shortcuts are supposed to take place. To guarantee compliance with the standard's requirements, third-party auditors evaluate a supplier's procedures and carry out site visits twice a year to verify compliance. The end-result is supposed to be an improvement in the organization's performance.

It is also important to empower employees, giving them the power to make decisions and take corrective actions where necessary to get the job done. Managements need to look at the firm's benchmark partners to recognize its own weaknesses and take appropriate actions to improve efficiency. The ISO 9001: 8000 certification has its own chapter due its strong emphasis in customer satisfaction and the importance of quality management systems to improve organizational performance in all aspects (Chan, 2000). The ISO can be a safe way to get and offer quality. The quality offered by the establishment can meet or not the customer's expectation but one important advantage for the establishment is having the certification of the establishment as a whole, from top to bottom after the firm has been submitted to hard quality procedures. ISO certification is identified as an important factor in implementing continuous quality improvement and total quality management and in promoting integration in health care systems. Certification and accreditation has also been identified as an important factor in promoting patient safety

and error reduction in health care organizations (Tutuncu, 2007). Each management practice, especially ISO 9000, may have special characteristics, which make it different from other organizational practices (Naveh *et al.*, 2004).

In a study by (Macinati, 2007) on the relationship between quality management systems and organizational performance in the Italian National Health Service, the results showed that the outcome subjective performance was positively related to quality management variables, but there was a lack of a significant statistical relationship between financial performance and quality management.

The ISO 9000 family of standards has been developed to assist any organization in all sectors regardless of size, type and activity to implement and operate effective quality management systems (EN ISO 9000:2005, 2005). The application of international standards benefits manufacturers, service providers, users, consumers and regulators as well as supports sustainable development. Certification based on international standards gives confidence and facilitates access to world markets, and its popularity continues today. According to the ISO Survey (2009), 'up to the end of December 2008, at least 982,832 ISO 9001 certificates had been issued in 176 countries and economies' and the 2008 total represents an increase by 3% over 2007. Services have significantly increased their share of certificates, with service providers accounting for 40% of all ISO 9001 certificates compared to 32% in 2007. To improve competitiveness around the world, ISO 9000 has been widely adopted as a quality management system, but with mixed success (Kuo *et al.*, 2009). Despite the numerical success of ISO 9000, the certification is much criticized, as it is not a risk-free undertaking. ISO 9000 certification does not guarantee improved performance due to the high explicit and implicit costs associated with its

implementation (Van der Wiele *et al.*, 2005). Lately, various studies have confirmed that ISO 9000 certification is too expensive, too time-consuming, resource-consuming, too formalized and impersonal, and that costs are greater than the benefits derived (Bhuiyan & Adam, 2005; Casadesus & Karapetrovic, 2005).

2.5 Effects of Standards on Financial Management

There is a multitude of variables that could influence a company's business financial performance. Thus, it is very important to define a group of variables which must reflect the impact of quality management system implementation over company financial performance (Heras *et al.*, 2002). The studies carried out in this area and the conclusions made so far are of a contradictory nature (Sampaio, *et al.*, 2009). Some authors conclude that there is a positive relationship between ISO 9001 certification and companies' financial improvements. Musa *et al.* (2007) examined the long-term impact of ISO 9000 certification on business performance. The study compared the monthly stock returns and variability of the returns of ISO 9000 certified and non-ISO 9000 certified firms traded on the Istanbul Stock Exchange from January 1997 to September 2005. The results of the analysis of annual two-year, three-year, and four-year averages of monthly stock returns indicated that ISO 9000 certified firms generally had higher returns and lower variability of returns than non-ISO 9000 certified firms.

Dimara *et al.*, (2004) examined the impact of the implementation of a quality management system over a company's financial performance in a framework of strategic orientation and concluded that if all the firms under investigation were pooled together, there would be no significant difference in their financial performance indicators after a period of six years following the implementation of ISO 9000. However, if the firms

were examined separately according to their strategic orientation, in firms pursuing a cost leadership strategy a statistically significant growth of financial profitability indicators would be noticed, while in firms pursuing a market differentiation strategy a statistically significant growth of their turnover and market share would be observed. Thus, strategic orientation is a moderating factor influencing the relationship between ISO 9000 certification benefits and a company's financial performance.

However, as it has already been stated, various studies confirmed that ISO 9000 certifications are too expensive, too time-consuming, resource consuming, too formalized and impersonal, and that costs are greater than the benefits derived (Bhuiyan & Adam, 2005; Casadesus & Karapetrovic, 2005). Despite the definite benefits of ISO 9001, its main flaw is the reliance on third-party audits that waste a company's resources (Dearing, 2007). Wu and Lui (2010) proposed measurement indicators and a relationship model for the evaluation of ISO 9000 certified companies. The evaluated indicators are comprised of five perspectives: finance, customer, internal processes, learning and growing and corporate mission. A causal relationship is found to exist among the five perspectives. The analysis of the effect of ISO 9000 certification on corporate performance showed that ISO certification positively enhanced all five proposed performance perspectives.

2.5.1 Relationship between Standards and Kenya's Economy

Trade is a crucial driver of growth (Stern, 2003). For Kenya to achieve the double-digit economic growth envisaged in Vision 2030, Kenya must be able to respond to local and global market demands. Kenya, just like many African countries, is confronted by a myriad of challenges in improving its capacity to meet production and quality standards

which are obligatory to access foreign markets, especially the European Union which is one of Kenya's biggest trading partners (Stern, 2003).

International standards offer Kenya convenient solutions that will not only respond to the local and global market demands, but also be a panacea to the technological problems that it encounters. By progressively and consistently implementing these standards, Kenya benefits in the following ways: Conformity assessment has become part and parcel of world trade. Many products require testing and subsequent compliance to respective standards or regulations before getting access to certain markets. Use of standards like ISO 17025, ISO 17020 and ISO Guide 65 represent international consensus and their use helps in consistency and coherence of conformity assessment worldwide and so facilitates cross-border trade (U.N.I.D.O., 2013).

No country can successfully develop without addressing the critical issue of demand and supply on energy. The recent population census held in Kenya in 2010 shows that the Kenyan population has been increasing on average by one million per year (Census 2010). The recent spate of terrorist attacks in Kenya has had a negative impact on tourism leading to the cancellation of hotel bookings and scaring investors (U.N.I.D.O, 2013).

The publication of the ISO standard on risk management (ISO 31000:2009) presents Kenya (both the government and the business community) with an opportunity to focus on all potential risks to avert future crises if this standard is implemented. ISO 31000 is a must-have solution for all organizations and the whole of society (Wright, 2011). It is in no doubt that standards offer practical solutions to technological problems. The active

participation and interest of every developed country in ISO's work means that international standards represent international consensus on optimum technological solutions to standardization problems (U.N.I.D.O., 2006). This is achieved by making each activity within the overall process such as design, development, manufacturing and supply, more effective and efficient.

Kenya's export market heavily relies on agricultural commodities namely: horticulture, tea, coffee, fish and meat. A critical understanding of the link between trade, international standards and export competitiveness was key to unlocking Kenya's potential for economic Growth (Stern, 2003) notes that addressing the effect of product standards both as barriers to trade and opportunities to expand market access is likely to be one area where action will have a high rate of return.

To participate effectively in global trade, African countries must develop the capacity to meet international standards. This, in itself, is a formidable challenge (Wilson and Abiola, 2003). Kenya has to surmount this challenge in order to achieve sustainable double-digit growth in its economy as envisaged in the economic blueprint (Kenya Vision, 2030).

2.6 Nature of Standards Architecture in Kenya

The main agencies involved in standardization in Kenya are Kenya Bureau of Standards (KEBS), under the Ministry of Industrialization and Enterprise Development, Kenya Plant Health Inspectorate Services (KEPHIS), under the MOAGR and Rural Development, and Kenya Department of Fisheries (DFR) and Kenya Department of Veterinary Services (DVS), under the Ministry of Livestock and Fisheries (World Bank, 2005).

The national economic need drives standardization. Kenya standards play a pivotal role in the economic and social development. At present, the subjects of standardization activity are: (KEBs 2013)

- National standards body;
- Technical committees on standardization;
- Developers of standards.

2.7 Constraints in Implementation of Standards

For Kenya to fully utilize the immense practical solutions to economic and technological problems that standards offer in terms of responding to local and global market demands, securing access to world markets, certain specific challenges and constraints need to be addressed (Stern, 2003):

Kenya has to actively participate in all standard setting forums. This will enhance its capacity to challenge and defend country positions. The inability of African countries to participate in these meetings has turned most of the African nations into standard takers (Stern, 2003). Financial constraints coupled with limited capacity to provide credible information based on research needed to articulate and defend Kenya's interests, has made Kenya vulnerable to changes especially when these changes have protectionist intentions (World bank 2005).

Cost of compliance. Most of the Kenyan industries are small and medium-sized enterprises, compliance to certain standards, for example ISO 22000, H.A.C.C.P., has a heavy cost implication and complying with international standards can undermine the S.M.E.s in Kenya in their access to foreign markets. Moreover, compliance may

accompany further upgrading of production processes and equipment which complicates the whole state of affairs (World Bank 2005).

An effective Standardization infrastructure is required to meet the measurement challenges required to meet health, safety and environmental considerations, increased need to implement Compliance to Standards interventions to facilitate value addition to our locally sold products, exports, regional production (integration) and market access initiatives. Standardization is a must in all our processes (KEBS/UNIDO/01)

The decision whether to standardize does not depend on managerial discretion alone. Certain external factors (such as environmental, market, and industry); internal (for example, organizational structure and processes) factors may limit the degree of standardization that a firm is able to apply (Boddewyn, Soehl & Picard 1986). Such factors are responsible for mandatory adaptations, defined as the adaptations a company is obliged to make, because of either legislation and allied governmental regulations or inescapable and uncontrollable marketplace realities (Hill & Still, 1984).

2.8 Standards Development and Quality Assurance

Kenya Bureau of Standards (KEBS) is the public organization responsible for developing, setting and implementation of standards in Kenya. An overview of its basic functions is developed below.

Kenya Bureau of Standards (KEBS) is a state corporation established in 1974 through an Act of parliament, the Standards Act Cap 496 Laws of Kenya, to promote standardization in commerce and industry, to provide testing and calibration facilities, to assist in the implementation and practical application of standards and to maintain and disseminate

International System of units (www.kebs.org). It is a public organization, whose relationship with the private sector is structure through the mechanism of the Technical Committee System (TCS) for standards development It is also mandated to undertake educational work in standardization and control the use of standardization marks and distinct marks (www.kebs.org).

2.8.1 Enforcement of Standards

Under the Standards Act Cap 496, national standards become mandatory after publication in the official Gazette. Inspectors appointed by the Act enforce the set standards. KEBS officers visit producers and supermarkets for collection of samples and inspections (www.kebs.org). Imported products must also comply with local standards or approved regional or international standards. New imported products are subject to inspection and testing prior to the first shipment, and before pre inspection certificates are issued. KEBS inspectors do random inspections of following consignments at the ports of entry into Kenya. KEBS inspectors also scrutinize all compliance certificates received for imports before customs are notified and consignments released (www.kebs.org).

KEBS carries out pre-export verification of conformity (PVoC) of all products imported into the country that have an impact on the health and safety of Kenyans. PVoC is a conformity assessment procedure based on Article 5 of the WTO/TBT Agreement (www.kenyapvoc.com).

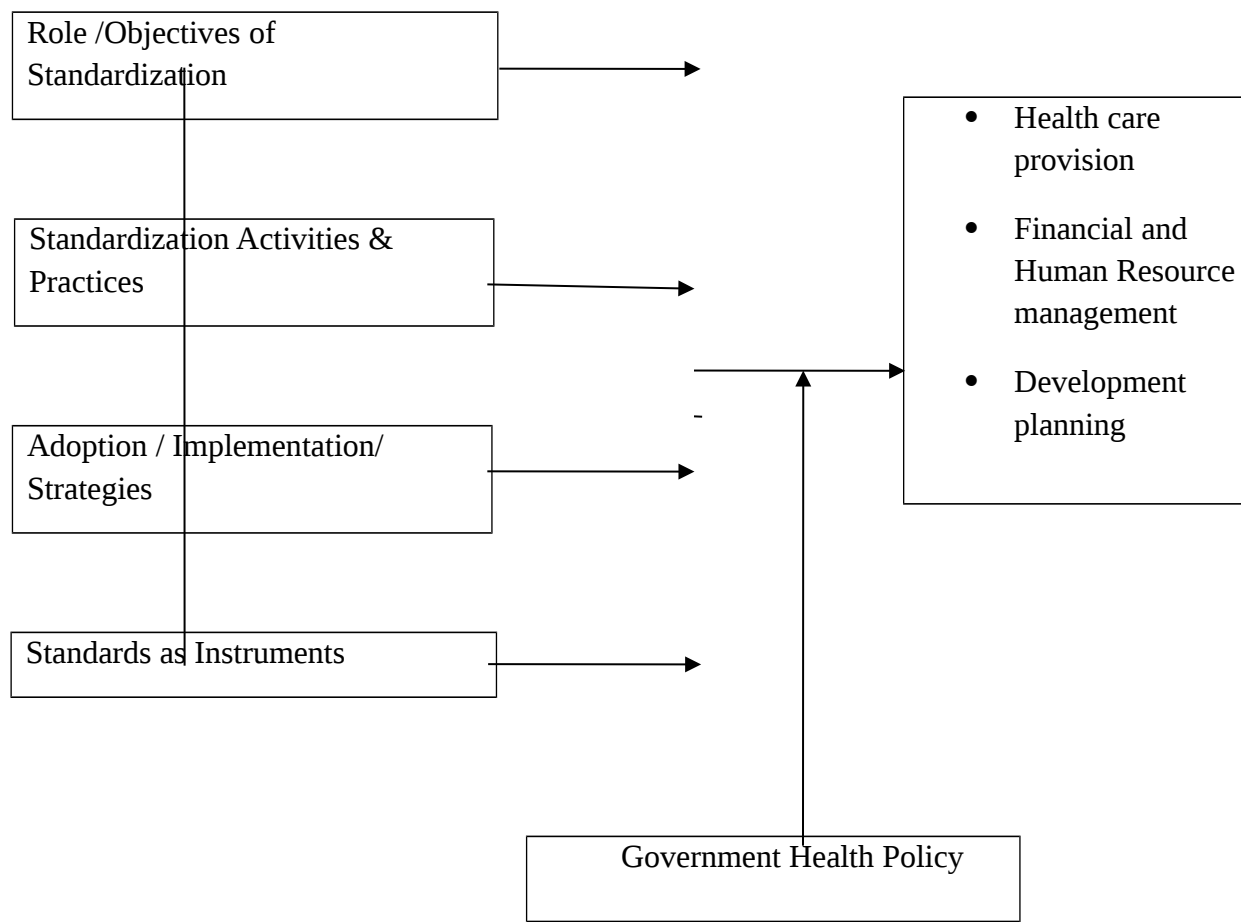
KEBS has a product quality certification scheme (Diamond Mark) that is widely recognized in the region, but not for extra-regional trade. This quality certification scheme involves both product certification and some additional checking beyond

technical specifications and into quality standards, sometimes made mandatory by Law. KEBS has also a calibration mark scheme and a safety mark scheme. KEBS now has testing facilities in different producing district centers, and along key border posts (www.kebs.org).

KEBS assists Kenyan industries in promoting and developing organized in-plant standardization through training programs and seminars. It assists manufacturers, exporters and importers in the fields of quality assurance, formulation of standards, measurements and calibration, ISO management systems, and quality standards for exports (www.kebs.org).

2.9 Conceptual Framework

The researcher prepared a conceptual framework that guided this study. In the framework, the standardization process (independent variable) is likely to influence strategic planning (dependent variable).

Independent Variable**Dependent Variable****ISO Certification****Service Delivery****Figure 2.1 Conceptual Frame work**

Source: Researchers work, 2014

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.0 Overview

This chapter presents research methodology of the study; it covered research study area, research design, target population, selection of sample, methods of data collection, analysis and presentations, limitations, delimitation of the study and ethical considerations.

3.1 Study Area

This study was carried out in Moi Teaching and Referral Hospital situated in Eldoret town, Uasin Gishu County of Northern Region in Kenya. Eldoret is the headquarters of Uasin Gishu County; it is renowned as a hub for cereals and maize products and often referred to as the bread basket of Kenya and home of champions especially long distance running. The town houses head offices of various businesses, organisations, firms and industries in all sectors of the county. This study was limited to the hospital's officers. This involved collection of data from 280 management employees on the effects of Standardization practices on service delivery. This was relevant in collecting the required data as time and distance are the limiting factors that inhibit collecting the data from all the medical service organization across the country.

3.2 Research Design

According to Sekaran & Roger (2011), research design is a master plan that specifies the methods and procedures for collecting and analyzing the needed information. Cooper and Schindler (2006) argue that research design constitutes the blue print for the collection,

measurement and analysis of the data to achieve fore stated objectives. It's a structure for investigating so as to obtain answers to research questions and for testing hypothesis (Kothari, 2004). It refers to the method that was used to carry out the research. The study utilized the descriptive survey design and adopted mixed research approach. This is a method of collecting information by both interviewing and administering questionnaires to a sample of individuals (Orodho, 2003). This was appropriate in enabling data to be presented in a meaningful form, thereby helping to offer ideas for further probe and research and help make certain simple decisions. The advantage of mixed methods ensures that advantages of both approaches in research are utilized.

3.3 Target Population

Saunders, Lewis and Thornhill (2003) and Kothari (2008), all described a population as the total collection of elements about which one wish to make inferences. The target population refers to the entire group of individuals or objects to which a researcher is interested in generalizing the conclusions. According to Ngechu (2004), a population is a well-defined set of people, services, elements, events and group of things or households that are being investigated. The study population is the accessible population in which the researcher can apply the conclusions. There are 280 management employees in Moi teaching and Referral hospital who formed the target population of this study.

This study was limited to the facility's offices in Eldoret. This involved collecting data from all employees on the effects of standardization on service delivery on the facility. This was relevant in collecting the data required as time and distance are the limiting factors that inhibit data collection from all the service organization across the country. In order to obtain views aimed at investigating the effects of standardization practices on

service delivery; the staff were selected from the hospitals officers and administered with questionnaires. Creswel (2009), explain that the target population should have some observable characteristics to which the researcher intends to generalize the results of the study. The population was divided into three employees' cadres of management

3.4 Sample Size and Sampling Techniques

3.4.1 Sample size

Cooper and Schindler (2006) maintain that if well chosen, samples of about 10% of a population can often give good reliability. According to Kombo and Tromp (2006) a sample size of 10% - 20% of the target population using stratified sampling is usually appropriate. Yamane (1967) gave a sample size formula. This study used Yamane (1967) formula to determine its sample size. The formula is given as:

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

Where

n- The sample size

N - The population size

e - The acceptable sampling error

Therefore:

$$n = \frac{280}{1 + 280(0.05)^2} = 165$$

3.4.2 Sampling Techniques

Sampling involves any procedure that draws conclusion based on measurement of a portion of the population (Kothari, 2004). When the population is heterogeneous, Sekaran

(1992) and Kothari (2004) recommends stratified random sampling since the method increases sample statistical efficiencies, provides adequate data for analyzing the various sub populations and enables different methods to be used depending on the characteristic of the stratum. The sample was developed using proportionate sampling strategy where the size of each stratum is proportionate to the population size of the stratum for better precision.

The MTRH management cadres were treated as clusters. The top management, middle level management and lower level management were treated as strata. Finally, simple random sampling was used to pick actual respondents from each stratum and cluster to form the sample. Table 3.4 shows the sample size of the study.

Table 3.1: Sample size determination

Management level	Target Population	Sample size	Percentage
Top	70	41	25%
Middle Level	70	41	25%
Lower Level	140	83	50%
Total	280	165	100%

3.5 Research Instruments

According to Kombo and Tromp (2006), social science commonly uses questionnaires, interview schedules, observational forms and standardized test as research instruments. This study used both quantitative and qualitative data collection techniques. It used` both questionnaires to collect quantitative data and interview schedule to collect qualitative data that was relevant to this study.

3.5.1 Questionnaires

Primary data was gathered directly from the employees' cadres. The data was collected by use of a closed ended questionnaire. The survey questionnaire was administered to each member of the sample population. The use of questionnaire is preferred because it ensures confidentiality, saves time and is easy to administer, Kothari, (2005). The questionnaire had close-ended questions. The close-ended questions provided structured responses to facilitate tangible recommendations. The selection of this tool was guided by the nature of the data collected and the objectives of the study. The questionnaire had five sections. The first section contained questions on the bio-data of the respondents; the second section contain questions on the effects of ISO 9001:8000 certification on health care provision; the third section solicited information on the influence of ISO 9001:8000 certification on financial management; The fourth section had questions on the effects of ISO 9001:8000 certification on development planning while the fifth section dealt with strategies of enhancing the effectiveness of ISO 9001: 8000 certification on service delivery. The last section deals with elements of standardization.

The closed ended questions was used to test the rating of various attributes and this helps in reducing the number of related responses in order to obtain more varied responses. A five point Likert scale as "1" denoted as Strongly Disagree (SD), "2" denoted as Disagree (D), "3" denoted as Neutral (N) "4" denoted as Agree (A) "5" denoted as Strongly Agree (SA) was used to rate level of concurrence on a particular item in the questionnaire. The questionnaire was carefully designed and developed on the basis of the research objectives and hypothesis and was pilot tested using 20 management level employees in Kenyatta National Hospital. This is because the hospital shares the same status and

characteristics as Moi Teaching and Referral Hospital. The questionnaire was self-administered by drop and pick method by the researchers through hand delivery and courier. This was done in order to enhance its validity and accuracy of data to be collected for the study.

3.5.2 Interview Schedule

Interview schedule was administered to the Finance Manager, the deputy director in charge of financial planning and management and deputy director clinical services. This allowed the researcher to obtain extra information on effects of ISO 9001:8000 certification on the general service delivery in the hospital.

3.6 Validity and Reliability of the Research Instruments

This section covers how the validity and reliability of the research instruments was ascertained.

3.6.1 Validity of the Research Instruments

Validity refers to the accuracy, correctness, meaningfulness of inferences and soundness of results of conclusion, which are based on the research findings (Kothari, 2008; Dane 1990; Creswel (2009). The researcher sought expert opinion on content and construct validity. Comments solicited from them were used to improve the research instrument before commencing data collection. Moreover, the instrument was also piloted. This piloting improved the validity of the instrument. Piloting is important to establish the content validity of the instrument and to improve questions, formats and scales. Content is a non-statistical type of validity that involves the systematic examination of the test content to determine whether it covers a representative sample of behavior domain to be

measured (Anastasi and Urbina, 1997). Content validity evidence involves the degree to which the content of the test matches a content domain associated with the construct. A test has content validity built into it by careful selection of which items to include (Anastasi and Urbina 1997). Items are chosen so that they comply with the test specification which is drawn up through a thorough examination of subject domain. The content validity of a test can be improved by using a panel of experts to review the test specifications and the selection of items, Foxcroft et al (2004). The experts were able to review the items and comment on whether the items cover a representative sample of the behavior domain. To test the validity of the instruments used in the study, the questionnaire was availed to supervisors together with a panel of experienced researchers of Moi University to review the instruments. The results from the piloting together with the comments from the experts were incorporated in the final instrument revisions to improve its validity.

3.6.2 Reliability of Research Instrument

Reliability is a measure of the degree to which a research instrument yields consistent results after repeated trials (Neuman, 2000; Bork & Gall, 1993). To determine the reliability of the instrument, questionnaires were piloted on using 20 management level employees in Kenyatta National Hospital. This is because the hospital shares the same status and characteristics as Moi Teaching and Referral Hospital. Cronbach Alpha Coefficient was used to test on the reliability of the instruments. A correlation coefficient of equal or more than 0.50 was considered adequate to allow the researcher proceed with the study (Orodho 2009). In this study a reliability coefficient of 0.78 was obtained indicating that the instruments were reliable and there were adopted for data collection.

3.7 Data Collection Procedures

The researcher obtained a research permit from the National Council for Science, Technology and Innovations (NACOSTI) before embarking on data collection. Further reconnaissance survey was conducted in the hospital to seek permission from the management on the exact dates of data collection. Questionnaires were administered to the respondents while a 30 minute interview was conducted with finance manager and the deputy director in-charge of financial planning and management. Once the questionnaires had been filled, the researcher collected them immediately for data analysis.

3.8 Data Analysis

According to Mugenda & Mugenda (2003), data analysis is the process of bringing order, structure and meaning to the mass of information collected. This study used both quantitative and qualitative methods of data analysis. Quantitative data was analysed using descriptive and inferential statistical methods. Descriptive statistics such as mean, standard deviation and measures of central tendency was used to describe the basic features of the data and to provide simple summaries about the sample and the measures. Objectives one, two and three used descriptive statistics such as percentages and frequencies as well as Pearson Correlation analysis to establish the relationship between the independent and the dependent variables (Hair et al, 2005). Objective four was analyzed by use of frequencies and percentages. The data was presented using tables, graphs and charts to give a clear picture of the research findings at a glance.

3.9 Ethical Considerations

In addition to conceptualizing the writing process of the thesis, a researcher needs to anticipate the ethical issues that may arise during a study (Hesse-Bieber & Leavey, 2006).

Research does involve collecting data from people, about people (Punch, 2005). Researchers need to protect their research participants; develop trust with them; promote the integrity of research: guard against misconduct and impropriety that might reflect on the researcher and university; and cope with new, challenging problems (Israel, 2006). The following ethical issues helped to enhance ethics during the study:

First the researcher sought for permission from the relevant authorities before conducting research. The respondents participation was voluntary and free and no promises of benefits for participation. The respondents were assured of privacy and confidentiality of the information obtained from them.

The data collected was used purely for academic purposes and therefore an introduction letter from the university was obtained and issued to the respondents to assure them of the same. Informed consent from each research participant was obtained and utmost privacy and confidentiality was maintained at all levels of the study. Anonymity was attached to the questionnaire and given to the respondents during their participation. Participant's privacy and safety was of primary concern. The whole research process was under the tutelage of my able supervisors.

CHAPTER FOUR

PRESENTATION OF RESULTS, INTERPRETATION AND DISCUSSION

4.1 Overview

This chapter presents the results of data analysis. The study determined the relationship between quality management systems and organizational performance at Moi Teaching and Referral Hospital, Eldoret. The section is divided into five major sections with the first section having the bio-data of the respondents; the second section deals with effects of ISO 9001:8000 certification on health care provision. The third section is on the influence of ISO 9001:8000 certification on financial management and the fourth section deals with the effects of ISO 9001:8000 certification on development planning while the last section deals with strategies of enhancing the effectiveness of ISO 9001: 8000 certification on service delivery. Data collected were analyzed using descriptive and inferential statistics. The chapter opens with a demographic description of the participants involved in the study.

4.2 Demographic Description of Respondents

A total of 152 out of 165 respondents completed and returned the questionnaires. The return rate for the questionnaires used in data analysis was 92.1% which was therefore considered sufficient enough to avail the required information and therefore acceptable. Some of the demographic information gathered from participants included; age, gender, working experience and qualifications.

4.2.1 Age of the Respondents

The respondents were asked to indicate their age bracket in the questionnaire. The results are presented in Figure 4.1

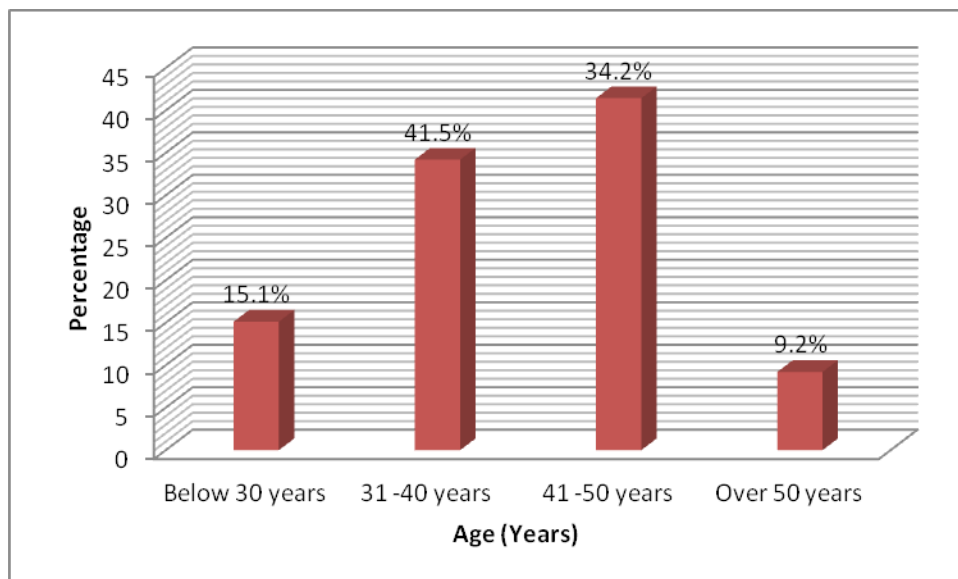


Figure 4.1: Age Bracket of the Respondents

Figure 4.1 shows that 63(41.5%) respondents were aged 41-50 years, 52(34.2%) respondents were aged 31 -40 years, 23(15.1%) respondents were aged below 30 years while 14(9.2%) respondents were aged over 50 years. The study findings showed that most of the management employees at MTRH were aged 41-50 years.

4.2.2 Gender of the Respondents

In addition the respondents were asked to indicate their gender. The results are shown in figure 4.2.

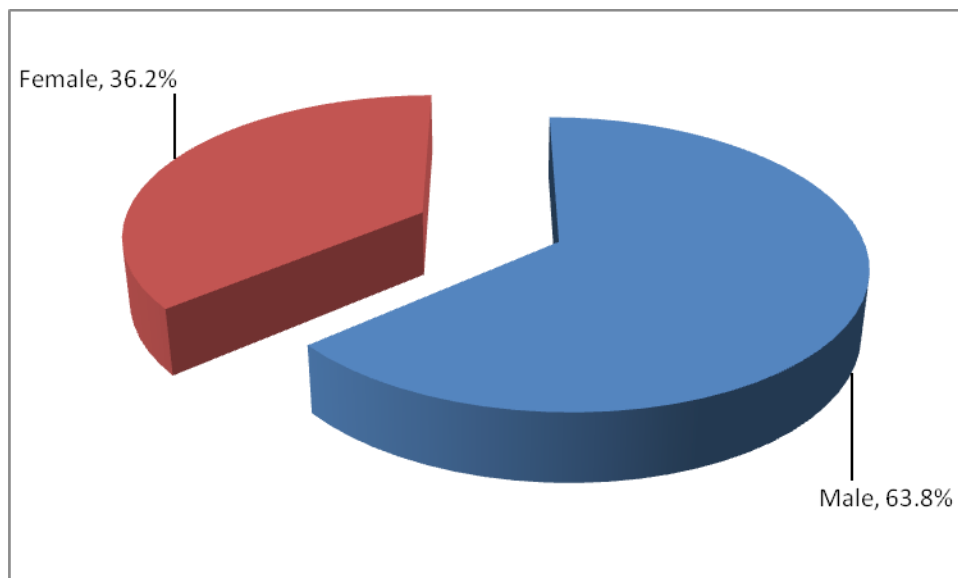


Figure 4.2: Gender of Respondents

As shown in Figure 4.2, 97(63.8%) respondents were male while 55(36.2%) respondents were female. The study findings indicated that majority (63.8%) of management employees in MTRH were male as compared to their female counterparts. This implies that there is gender disparity in management of MTRH.

4.2.3. Qualifications of the Respondents

Further, the respondents were asked to indicate their level of qualifications in the questionnaire. The results are as shown in Figure 4.3.

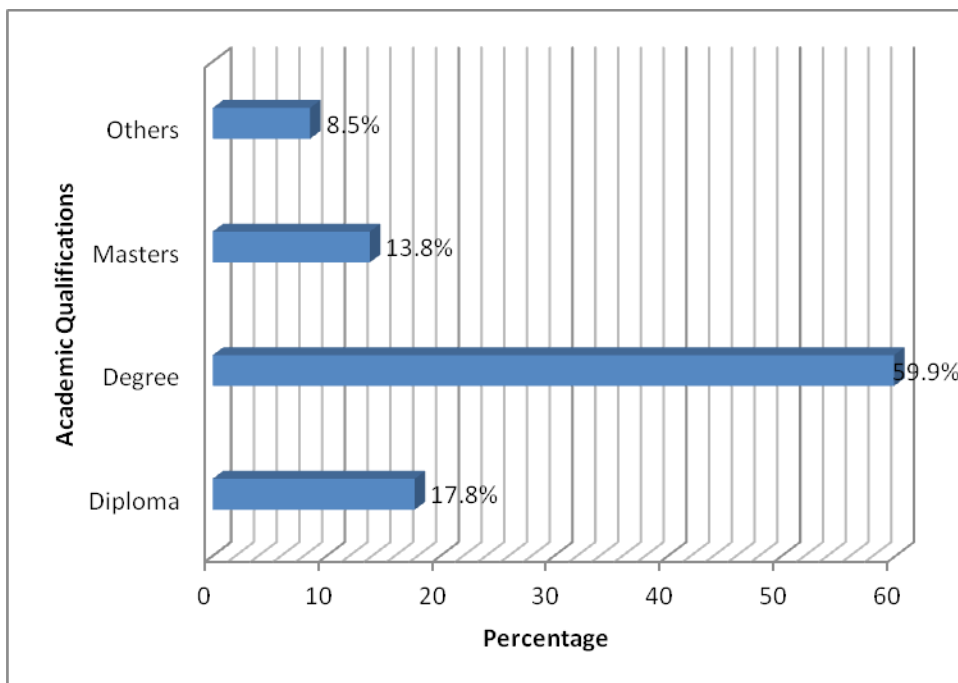


Figure 4.3: Academic Qualifications of the Respondents

Figure 4.3 shows that 91(59.9%) respondents had degrees, 27(17.8%) respondents were diploma holders, 21(13.8%) respondents were masters holders while 13(8.6%) respondents had other qualifications which included PhDs. The findings imply that the hospital has qualified management staff and therefore are able to improve on service delivery at the organization since they understand the ISO 9000: 8001 implementation process.

4.2.4. Working Experience

Similarly, the respondents were asked to indicate their working experience in the questionnaire. The results are as shown in Figure 4.4.

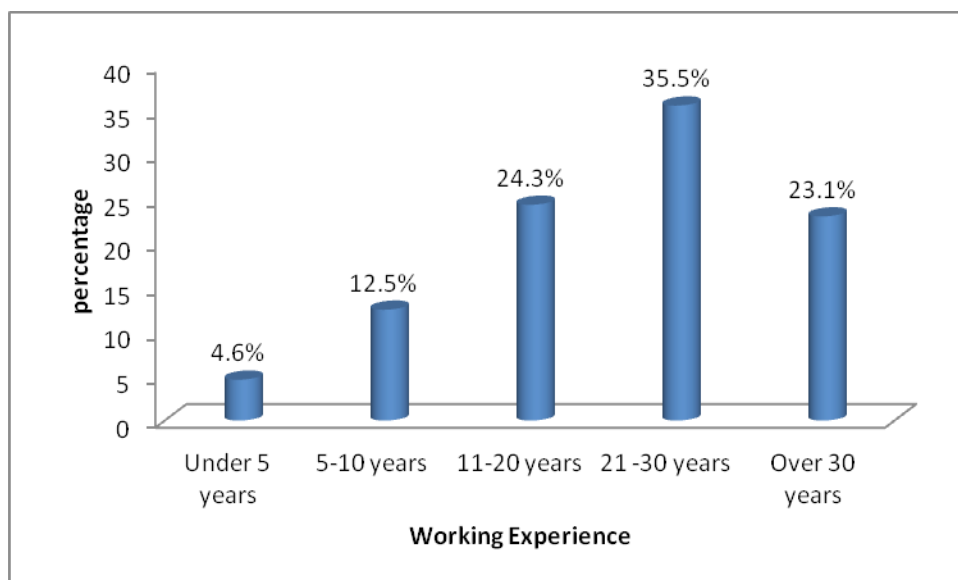


Figure 4.4: Working Experience of the Respondents

Figure 4.4 shows that 54(35.5%) respondents had a working experience of 21-30 years, 37(24.3%) respondents had a working experience of 11-20 years and 35(23.1%) respondents had a working experience of over 30 years while 7(4.6%) respondents had a working experience of less than 5 years. The study findings indicated that majority of the respondents had a working experience of over 10 years and therefore were able to effectively manage the organization leading to effective service delivery.

4.3 Effects of ISO 9001:8000 certification on health care provision

The first objective of this study was to find out the effects of ISO 9001:8000 certification on health care provision at MTRH. To achieve this objective, the respondents were asked to rate in a five likert scale their level of agreement on questions related to effects of ISO 9001:8000 certification on health care provision. The results are as presented in Table 4.1.

Table 4.1: Effects of ISO 9001:8000 Certification on Health Care Provision

Statement	SD	D	UD	A	SA
-----------	----	---	----	---	----

	F	%	F	%	F	%	F	%	F	%
Employees in the hospital are involved in decision making process for better health care	45	29.6	37	24.3	12	7.9	32	21.1	26	17.1
The certification has made customers more satisfied with improved health care provision in the hospital	10	6.6	15	9.9	9	5.9	56	36.8	62	40.8
Patients in the hospital feel more safer due to improved security measures in the hospital	1	0.7	9	5.9	4	2.6	61	40.1	77	50.7
The certification of the hospital has seen reduction in health care errors	6	3.9	19	12.5	17	11.2	57	37.5	53	34.9
The certification of the hospital has enabled the management to focus on customer needs	14	9.2	14	9.2	4	2.6	49	32.2	71	46.7

Source: Field Data, 2014

Table 4.1 shows that 45(29.6%) respondents strongly disagreed with the statement that employees in the hospital are involved in decision making process for better health care, 37(24.3%) respondents disagreed with the statement and 32(21.1%) respondents agreed with the statement, 26(17.1%) respondents strongly agreed with the statement while 12(7.9%) respondents were undecided on the statement. The study findings shows that a majority of the management staff in MTRH believed that employees in the hospital were not involved in decision making process. Health care organizations that provide a good working environment which enhances the service capability of staff through empowered decision making leads to more satisfied staff who are more likely to remain loyal to the organization and provide a higher level of care resulting in higher patient satisfaction (Peltier & Dahl, 2009).

Further, 62(40.8%) management staff strongly agreed with the statement that the ISO 9000: 8001 certification had made customers more satisfied with improved health care provision in the hospital, 56(36.8%) respondents agreed with the statement, 15(9.9%) respondents disagreed with the statement, 10(6.6%) respondents strongly disagreed with the statement while 9(5.9%) respondents were undecided on the statement. It emerged from the responses that a majority (77.6%) of the management staff at MTRH believed that certification of the hospital has improved health care services making customers to be more satisfied and therefore improving customer base in the hospital. Improved services make customers to demonstrate greater satisfaction (Poksinska *et al.*, 2006).

Similarly, 77(50.7%) of the respondents strongly agreed with the statement that patients in the hospital feel more safer due to improved security measures in the hospital, 61(40.1%) management staff members agreed with the statement, 10(6.6%) management staff members were in disagreement with the statement while 4(2.6%) were undecided on the statement. This shows that 90.8% of the management staff at MTRH was of the view that due to certification, there was improved security service at the hospital making patients to feel more secure and have more confidence with the security staff. Having a culture that promotes safety within the organization is an important and necessary precursor to improving the insufficiencies in patient safety (Pronovost & Sexton, 2005). Total Quality Management (TQM) is based on the premise that customers should be the focus of the organization.

In addition, 57(37.5%) management staff members agreed with the statement that the certification of the hospital has seen reduction in health care errors, 53(34.9%) respondents strongly agreed with the statement, 19(12.5%) respondents disagreed with

the statement and 17(11.2%) respondents were undecided with the statement while 6(3.9%) respondents strongly disagreed with the statement. The study findings suggested that a majority (72.4%) of the management staff members at the hospital indicated that certification has increased staff responsibility and this can be attributed to the training that the hospital offers to its staff members through seminars, workshops, and in-service courses. This was found to be in agreement with the arguments of Brenner, Fairris and Ruser (2004) who indicated that standardization can improve worker safety through the identification and elimination of potentially hazardous practices, development of a formal corrective action process, and institutionalization of routine audits and management reviews.

On the statement that the certification of the hospital has enabled the management to focus on customer needs, 71(46.7%) respondents strongly agreed with the statement, 49(32.2%) respondents agreed with the statement, 28(18.4%) respondents were in disagreement with the statement while 4(2.6%) respondents were undecided on the statement. The study findings indicated that 78.9% of the management staff at MTRH were of the opinion that certification has enabled the management to focus on customer needs increasing on profitability of the organization. To focus on customer needs the organization should strive to meet customer requirements and exceed customer expectations. This could be done by communication throughout the organization, measuring customer satisfaction and systematically managing customer relationships. Ensuring a balanced approach and acting on findings is vital. Moreover, when top management is deeply involved and committed, the customer is found to demonstrate

greater satisfaction (Poksinska *et al.*, 2006; Sampaio, *et al.*, 2009; Wahid & Corner, 2009).

On interviewing the Finance Manager and the deputy director clinical services the effects of adoption of ISO 9001:8000 certification, the respondents retorted,

The hospital has seen the improvement on service delivery and has promoted patient safety and reduced the risk of adverse procedures and medical errors in the hospital.

Patient safety has improved with ISO certification. This concurs with (Tutuncu & Erbil, 2006).

4.4 The Influence of ISO 9001:8000 Certification on Financial Management

The second objective of this study was to determine the influence of ISO 9001:8000 certification on financial management at MTRH. To achieve this objective, the management staffs at MTRH were requested to indicate their level of agreement on a five likert scale questions on the influence of ISO 9001:8000 certification on financial management. Their responses were tabulated and the results are presented in Table 4.2.

Table 4.2: The Influence of ISO 9001:8000 Certification on Financial Management

Statement	SD		D		UD		A		SA	
	F	%	F	%	F	%	F	%	F	%
The financial management has improved in the hospital since the introduction of ISO	12	7.9	19	12.5	6	3.9	51	33.6	64	42.1
The Hospital's financial profitability has drastically improved since the introduction of ISO	0	0.0	13	8.6	11	7.2	65	42.8	63	41.4
ISO certifications are too expensive lowering the hospitals' profitability	71	46.7	49	32.2	19	12.5	10	6.6	3	2.0
The costs of certification are higher than the benefits derived	42	27.6	57	37.5	8	5.3	26	17.1	19	12.5
ISO certification has enhanced productivity of all staff members	24	15.8	12	7.9	0	0.0	72	47.4	44	28.9
The hospitals' financial performance has increased and changed over time	8	5.3	20	13.2	7	4.6	81	53.3	37	24.3

Source: Field Data, 2014

Table 4.2 shows that 64(42.1%) respondents strongly agreed with the statement that the financial management has improved in the hospital since the introduction of ISO, 51(33.6%) respondents agreed with the statement, 19(12.5%) respondents disagreed with the statement, 12(7.9%) respondents strongly disagreed with the statement while 6(3.9%) respondents were undecided on the statement. The study findings indicated that a majority (75.7%) of the management staffs at MTRH believed that the institutional financial base has improved due to the adoption and implementation of ISO standards.

Further, 65(42.8%) respondents agreed that the Hospital's financial profitability has drastically improved since the introduction of ISO, 63(41.4%) respondents strongly disagreed with the statement, 13(8.6%) respondents were in disagreement with the statement while 11(7.2%) respondents were undecided on the statement. It can therefore be shown that a majority (84.2%) of the management staffs at MTRH were of the view that the implementation of ISO standardization in the hospital has seen the profitability of the hospital increasing due to increased client base and reduced expenses. This was found to concur with a study in Denmark where it was found out that ISO certified companies seem to have significantly high rate of return than non-certified companies (Haversjo, 2000).

On the statement that ISO certifications are too expensive lowering the hospitals' profitability, 71(46.7%) respondents strongly disagreed with the statement, 49(32.2%) respondents disagreed with the statement, 19(12.5%) respondents were undecided on the statement, 10(6.6%) respondents agreed with the statement while 3(2.0%) respondents strongly disagreed with the statement. It emerged from the study findings that a majority (78.9%) of the management staffs at MTRH the implementation of ISO standards is not expensive and is associated with increased profitability of the hospital.

Similarly, 57(37.5%) respondents disagreed with the statement that the costs of certification are higher than the benefits derived, 42(27.5%) respondents strongly disagreed with the statement and 26(17.1%) respondents agreed with the statement, 19(12.5%) respondents strongly agreed with the statement while on the other hand 8(5.3%) respondents were undecided on the statement. This shows that the benefits of certification are much higher than the costs involved in its implementation. This implies

that ISO certification is associated with high benefits as opposed to the costs involved as cited by Haversjo (2000).

Further, 72(47.4%) respondents agreed with the statement that ISO certification has enhanced productivity of all staff members, 44(28.9%) respondents strongly agreed with the statement, 24(15.8%) respondents strongly disagreed with the statement while 12(7.9%) respondents disagreed with the statement. From the responses it can be inferred that a majority (76.3%) of the management staff at believed that ISO certification has enhanced productivity of all staff members. This is attributed to the fact that each segment in the hospital performs specific functions and therefore each staff member has specific responsibilities which he/she is responsible for. Quality programs such as ISO 9001:8000 improve both management practices and production (Levine & Toffel, 2008).

In addition, 81(53.3%) respondents agreed with the statement that the hospitals' financial performance has increased and changed over time, 37(24.3%) respondents strongly agreed with the statement, 20(13.2%) respondents disagreed with the statement, 8(5.3%) respondents strongly disagreed with the statement while 7(4.6%) respondents were undecided on the statement. It emerged from the study that a majority (77.6%) of the management staff at MTRH indicated the hospitals' financial performance has increased and changed over time with the implementation of ISO 9001:8000 standards. This was also supported by the findings Haversjo, (2000) who found out that certification is associated with improved profitability.

On interviewing finance manager and the deputy director in charge of financial planning and management, it emerged that since the hospital was certified, there has been

increased profitability within the hospital. Further, it emerged that the hospital's strategic plan had enabled both short term and long term strategies to be attained within the stipulated periods helping in enhancing service quality and maintenance of ISO certification standards.

4.5 Effects of ISO 9001:8000 Certification on Development Planning

The third objective of this study was to establish the effects of ISO 9001:8000 certification on development planning at MTRH. To achieve this objective, the management staffs at MTRH were requested to indicate their level of agreement on a five likert scale questions on the influence of ISO 9001:8000 certification on development planning. Their responses were tabulated and the results are presented in Table 4.3.

Table 4.3: Effects of ISO 9001:8000 Certification on Development Planning

Statement	SD		D		UD		A		SA	
	F	%	F	%	F	%	F	%	F	%
The ISO certification has enabled the management to effectively analyze the organization's current planning systems	20	13.2	17	11.2	0	0.0	76	50.0	39	25.7
ISO certification has enabled the realization of objectives of the hospital as contained in the strategic plan.	24	15.8	19	12.5	21	13.8	47	30.9	41	27.0
The development plans of the hospital are usually reviewed on quarterly basis in line with ISO standards.	9	5.9	15	9.9	8	5.3	56	36.8	64	42.1
There has been effective implementation of strategic plan of the hospital since the introduction of ISO 9001: 8000.	0	0.0	34	22.4	11	7.2	79	52.0	28	18.4
The management oftenly measures and monitors the actual results against the planned hospital objectives.	9	5.9	27	17.8	12	7.9	81	53.3	23	15.1
Top level management is committed to the development and are involved in the implementation of Hospitals' quality management system.	4	2.6	19	12.5	0	0.0	92	60.5	37	24.3
The management usually conducts feedback surveys in order to find out the customer's current and future needs and expectations.	12	7.9	39	25.7	19	12.5	60	39.5	22	14.5
There is allocation of responsibilities within the hospital to enable the establishment of effective processes of achieving the hospital's objectives.	6	3.9	22	14.5	3	2.0	52	34.2	69	45.4
There is appropriate resources allocation in all the hospital's departments to ensure the implementation of the strategic plan.	1	0.7	8	5.3	16	10.5	95	62.5	32	21.1

Source: Field Data, 2014

Table 4.3 shows that 76(50.0%) respondents agreed with the statement that ISO certification had enabled the hospital management to effectively analyze the organization's current planning systems, 39(25.7%) respondents strongly agreed with the statement, 20(13.2%) respondents strongly disagreed with the statement while 17(11.2%) respondents disagreed with the statement. The study findings showed that majority (75.7%) of management staff members at MTRH believed that they usually analyze the organization's planning system in order to effectively implement the ISO standards. Bibby, Austin, and Bouchlaghem (2003) identified possible improvement mechanisms for maintenance of ISO 9001:8000 certification standards as the improvement of the planning process.

Similarly, 47(30.9%) respondents agreed with the statement that ISO certification has enabled the realization of objectives of the hospital as contained in the strategic plan, 41(27.0%) respondents strongly agreed with the statement, 24(15.8%) respondents strongly disagreed with the statement while 21(13.8%) respondents were in disagreement with the statement. It can therefore be shown that most (57.9%) of the management staff members at MTRH were of the opinion that ISO certification has enabled the realization of objectives of the hospital as contained in the strategic plan. This implies that the certification of the hospital has made the realization of strategic plan to be accomplished.

In addition, 78.9% of the management staff at MTRH believed that the development plans of the hospital are usually reviewed on quarterly basis in line with ISO standards, 15.8% of the respondents disagreed with the statement while 5.3% of the respondents were undecided on the statement. This implies that the ISO standards needs review of

hospital's development plans on quarterly basis which according to the results are usually done at the hospital.

On the statement that there has been effective implementation of strategic plan of the hospital since the introduction of ISO 9001: 8000, 70.4% respondents were in agreement with the statement, 22.4% respondents were in disagreement with the statement while 7.2% respondents were undecided on the statement. The study findings suggested that strategic plan implementation is always associated with adoption of ISO 9001:8000 certification on service delivery.

In addition, 68.4% respondents agreed with the statement that the hospital management oftenly measures and monitors the actual results against the planned hospital objectives, 23.8% respondents were in disagreement with the statement while 7.9% respondents were undecided on the statement. The study findings suggested that a majority (68.4%) of the management staff at MTRH usually measure and monitor planned hospital objectives against the results achieved.

Similarly, 84.8% of the respondents were in agreement with the statement that top level hospital management is committed to the development and are involved in the implementation of Hospitals' quality management system while 15.1% of the respondents were in disagreement with the statement. It emerged therefore that a majority of the management staff at MTRH were of the view that the hospital's management was committed to development and have adopted and implemented various quality management systems in the hospital. These quality management systems include the implementation of ISO standards and hospital's strategic plan.

Further, 54.0% of the respondents were in agreement with the statement that the hospital management usually conducts feedback surveys in order to find out the customer's current and future needs and expectations, 33.6% of the respondents were in disagreement with the statement while 12.5% respondents were undecided on the statement. It seems therefore that most (54.0%) of the management staffs at MTRH reported that they usually conducts feedback surveys in order to find out the customer's current and future needs and expectations. These surveys are usually done through the use of questionnaires and verbal communication to the hospital clients.

Further, 79.6% respondents were in agreement with the statement that there was allocation of responsibilities within the hospital which enabled the establishment of effective processes of achieving the hospital's objectives, 18.4% respondents were in disagreement with the statement while 2.0% respondents were undecided on the statement. The study shows that a majority (79.6%) of the management staff at MTRH believed that the hospital has allocated responsibilities to various departments enabling effective service delivery.

Similarly, 83.6% of the respondents were in agreement with the statement that there was appropriate resources allocation in all the hospital's departments to ensure the implementation of the strategic plan, 6.0% respondents were in disagreement with the statement while 10.5% respondents were undecided on the statement. The study findings shows that majority (83.6%) of the management staff members at MTRH were of the view that the hospital allocates adequate resources for the implementation of the hospital's strategic plan which has the hospital's mission, vision and objectives.

On interviewing the deputy director in charge of planning and administration, it emerged that the hospital certification had enhanced effective implementation of the hospital's strategic plans in order to maintain the ISO 90001:8000 standards

4.6 Strategies of Enhancing the Effectiveness of ISO 9001: 8000 Certification on Service Delivery

The fourth objective of this study was to propose strategies of enhancing the effectiveness of ISO 9001: 8000 certification on service delivery at MTRH. To achieve this objective, the management staffs at MTRH were requested to indicate their level of agreement on a five likert scale questions on the strategies of enhancing the effectiveness of ISO 9001: 8000 certification on service delivery. Their responses were tabulated and the results are presented in Table 4.4.

Table 4.4: Strategies of Enhancing the Effectiveness of ISO 9001: 8000 Certification on Service Delivery

Strategy	SD		D		UD		A		SA	
	F	%	F	%	F	%	F	%	F	%
There is need to review on the competencies of staff members and provide scholarships to its members for acquisition of skills	0	0.0	9	5.9	7	4.6	101	66.4	35	23.0
There is need to determine and provide resources for the infrastructure ensuring better quality health care for its customers	17	11.2	13	8.6	0	0.0	69	45.4	53	34.9
There is need to look at the conditions under which work is performed and ensure that this is appropriate for meeting customers' requirements.	4	2.6	7	4.6	8	5.3	73	48.0	60	39.5
There is need for to have the monitoring of customer perception on service delivery in the hospital	0	0.0	9	5.9	11	7.2	53	34.9	79	52.0
There is need for regular internal audits in all departments to ensure that sure that things are going as planned	2	1.3	17	11.2	3	2.0	58	38.2	72	47.4
There is need for review of systems, policies, procedures and processes in the hospital to be in line with ISO 9001:8000 standards.	17	11.2	0	0.0	9	5.9	82	53.9	44	28.9
There is need for the hospital to have good communication channels where all staff members understand what is happening on daily basis in the hospital.	0	0.0	9	5.9	0	0.0	111	73.0	32	21.0

Source: Field Data, 2014

Table 4.4 shows that 101(66.4%) respondents agreed with the statement that there is need for the hospital management to review on the competencies of its staff members and provide scholarships to its members for acquisition of skills in the various hospital departments, 35(23.0%) respondents strongly agreed with the statement, 9(5.9%) respondents disagreed with the statement while 7(4.6%) respondents were undecided on the statement. From the responses, it emerged that majority (89.4%) of the management staff members at MTRH cited that there was need for provision of training of employees to enable them acquire skills in the various hospital departments and therefore effectively implementing hospital strategic plan which enhances the implementation of ISO standards.

Further, 69(45.4%) respondents agreed with the statement that there need to determine and provide resources for the infrastructure (hospital equipments and facilities) ensuring better quality health care for its customers, 53(34.9%) respondents strongly agreed with the statement, 17(11.2%) respondents strongly disagreed with the statement while 13(8.6%) respondents disagreed with the statement. The study findings shows that majority (80.3%) of the management staff members at MTRH recommended that the hospital management needs to determine and provide resources for the infrastructure development especially for hospital equipments and facilities which ensures that there is better and improved service to the customers.

Similarly, 73(48.0%) respondents agreed with the statement that there was need to look at the conditions under which work at the hospital was performed to ensure that it met customers' requirements and satisfaction, 60(39.5%) respondents strongly agreed with the statement, 11(7.2%) respondents were in disagreement with the statement while 8(5.3%)

respondents were undecided on the statement. It emerged from the study findings that majority (87.5%) of the management staff members were of the view that there was need for ensuring that working conditions within the hospital conform with the ISO standards which makes customers more satisfied with services offered.

In addition, 79(52.0%) respondents strongly agreed with the statement that there is need to have the monitoring of customer perception on service delivery in the hospital, 53(34.9%) respondents agreed with the statement 11(7.2%) respondents were undecided on the statement while 9(5.9%) respondents were in disagreement with the statement. From the study findings it can be shown a majority (86.9%) of the management staff members at MTRH customers' perception on service delivery was important and therefore there was need for its monitoring. The best way to satisfy patients is by viewing employees as internal customers and that by understanding and meeting employees' needs, wants, expectations, and concerns their level of satisfaction will increase thereby leading to better quality of care and higher patient satisfaction (O'Neill, 2005).

In addition, 72(47.4%) respondents strongly agreed with the statement that there is need for regular internal audits in all departments to ensure that sure that things were going as planned, 58(38.2%) respondents agreed with the statement, 17(11.2%) respondents disagreed with the statement while 3(2.0%) were undecided. It emerged from the study findings that a majority of the management staff members at 85.6% were of the view that the hospital needed departmental audits for effective service delivery.

Further, 82.8% of the management staff members were in agreement with the statement that there was need for review of systems, policies, procedures and processes in the

hospital to be in line with ISO 9001:8000 standards, 11.2% respondents were in disagreement while 5.9% respondents were undecided on the statement. The study findings suggested that a majority of the management staff members at MTRH believed that systems, policies, procedures and processes in the hospital needed to be reviewed in order to be in line with ISO 9001:8000 standards which aims at improving service delivery in the hospital.

In addition, 94.0% of the respondents were in agreement that there is need for the hospital to have good communication channels where all staff members understand what the happening on daily basis while 5.9% respondents were in disagreement with the statement. This implies that a majority (94.0%) of the management staff were of the view that the hospital needs an improved communication procedures and channels which aims at improving service delivery.

4.7 Correlation between Independent and Dependent Variables

In order to understand the relationships that exists between the independent and dependent variables correlation analysis was employed. Pearson Correlation Coefficient (simply r) was used to establish the potential relationship between independent variable (ISO certification) and dependent variables (service delivery). Where when $r = (+) 1$, it indicates perfect positive correlation and when it is $(-) 1$, it indicates perfect negative correlation, meaning thereby that variations in independent variable (x) explain 100% of the variations in the dependent variable (y). This implies that for a unit change in independent variable (ISO certification) and there happens to be a constant change in the dependent variables in the same direction, then correlation is termed as perfect positive. But if such change occurs in opposite direction, the correlation is termed as perfect

negative. The value of ‘*r*’ nearer +1 or -1 indicates high degree of correlation between the two variables. The results of data analysis are presented in Table 4.5.

Table 4.5: Correlation between Independent and Dependent Variables

		ISO Certificatio n	Health Care Provision.	Financial Managemen t	Developme nt Planning
ISO Certification	Pearson Correlation	1			
	Sig. (2-tailed)	0			
Health care provision.	Pearson Correlation	.787**	1		
	Sig. (2-tailed)	0.000			
Financial Management	Pearson Correlation	.693**	.702**	1	
	Sig. (2-tailed)	0.000	0.000	0	
Development Planning	Pearson Correlation	.501**	.704**	.684**	1
	Sig. (2-tailed)	0.000	0.000	0.000	0.01

** Correlation is significant at the 0.05 level (2-tailed).

The Table 4.5 shows that health care provision was positively correlated with ISO 9001:8000 certification of the hospital ($r=.787$). However, this illustrates a strong positive correlation. This demonstrates that certification of the hospital has seen the improvement of health care provision. The null hypothesis which stated that: “There is no significant relationship between ISO 9001:8000 certification and health care provision” was failed to be accepted and the alternative accepted indicating that there was a significant relationship between ISO certification and health care provision. The study was found to

correspond with the findings of Okibo (2013) on the effectiveness of ISO 9001:2008 certification on service delivery of public universities in Kenya who found out that ISO certification had a positive influence on service delivery in public universities.

In addition, financial management was positively and strongly correlated with ISO 9001:8000 certification of the hospital ($r=.693$). The null hypothesis which stated that; “There is no significant relationship between ISO 9001:8000 certification and financial management” was therefore failed to be accepted and the alternative accepted implying that there was a positive and significant relationship between ISO 9001:8000 certification and financial management of the hospital. This implies that the adoption and implementation of ISO 9001:8000 standards by MTRH has seen the improvement in financial management which in turn leads to high profitability of the hospital. This agreed with the findings of Corbett, Montes-Sancho, & Kirsch, (2005) on publicly traded manufacturing companies in the United States from 1987-1997 and found that there was a significant financial benefit three years after certification. Further Sharma, (2005) showed that financial improvement of manufacturing companies was driven by operating efficiency and companies that were interested in quality management benefited from ISO 9001 certification.

Further, the study findings indicated that there was a positive correlation between ISO certification and development planning ($r=.501$). However, this demonstrates a moderate positive correlation. This illustrates that certification of the hospital has seen the improvement of development planning. The null hypothesis which stated that: “There is no significant relationship between ISO 9001:8000 certification and development planning” was rejected and the alternate accepted indicating that there was a significant

relationship between ISO certification and development planning in MTRH. The foregone results clearly indicate that there were significant positive outcomes in service delivery that had been experienced in the Moi Teaching and Referral Hospital as a consequence of ISO certification. This implies that the efforts that had been laid by the hospital in certification had bore fruits in service deliver.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Overview

This chapter is divided into three major sections, namely the summary of the findings, conclusions and recommendations. These divisions were informed by the purpose of the study and the results.

5.2 Summary of the Findings

This section presents the summary of the research process starting with purpose, problem statement, objectives, literature review, methodology, data analysis and interpretation. The chapter also contains conclusion and recommendations. The purpose of the study was to determine the relationship between quality management systems and organizational performance at Moi Teaching and Referral Hospital, Eldoret. This was attributed to the fact that MTRH is ISO 9001:8000 certified.

The research used descriptive survey design employing mixed methodology and targeted 280 management employees. Data was collected using questionnaires and Interview schedule. The analysis involved descriptive and inferential statistics. Data was presented in form of tables, figures and charts. The analysis of data revealed the following;

5.2.1 Effects of ISO 9001:8000 Certification on Health Care Provision

The study findings shows that a majority of the management staff in MTRH believed that employees in the hospital were not involved in decision making process. Further, a majority (77.6%) of the management staff believed that certification of the hospital has

improved health care services making customers to be more satisfied and therefore improving customer base in the hospital. Similarly, 90.8% of the management was of the view that due to certification, there was improved security service at the hospital making patients to feel more secure and have more confidence with the security staff.

In addition, the study findings suggested that a majority (72.4%) of the management staff members at the hospital indicated that certification has increased staff responsibility and this can be attributed to the training that the hospital offers to its staff members through seminars, workshops, and in-service courses. This was found to be in agreement with the arguments of Brenner, Fairris and Ruser (2004) who indicated that standardization can improve worker safety through the identification and elimination of potentially hazardous practices, development of a formal corrective action process, and institutionalization of routine audits and management reviews. In addition, 78.9% of the management were of the opinion that certification has enabled the management to focus on customer needs increasing on profitability of the organization. To focus on customer needs the organization should strive to meet customer requirements and exceed customer expectations. This could be done by communication throughout the organization, measuring customer satisfaction and systematically managing customer relationships. Ensuring a balanced approach and acting on findings is vital. Moreover, when top management is deeply involved and committed, the customer is found to demonstrate greater satisfaction (Poksinska *et al.*, 2006; Sampaio, *et al.*, 2009; Wahid & Corner, 2009).

5.2.2 The Influence of ISO 9001:8000 Certification on Financial Management

The study findings indicated that a majority (75.7%) of the management staffs at MTRH believed that the institutional financial base has improved due to the adoption and implementation of ISO standards. Further, majority (84.2%) of the management staffs at MTRH were of the view that the implementation of ISO standardization in the hospital has seen the profitability of the hospital increasing due to increased client base and reduced expenses. In addition, majority (78.9%) of the management staffs at MTRH the implementation of ISO standards is not expensive and is associated with increased profitability of the hospital.

Similarly, the benefits of certification are much higher than the costs involved in its implementation. This implies that ISO certification is associated with high benefits as opposed to the costs involved. Further, majority (76.3%) of the management staff at believed that ISO certification has enhanced productivity of all staff members. This is attributed to the fact that each segment in the hospital performs specific functions and therefore each staff member has specific responsibilities which he/she is responsible for. In addition, it emerged from the study that a majority (77.6%) of the management staff at MTRH the implementation of ISO 9001:8000 standards.

5.2.3 Effects of ISO 9001:8000 Certification on Development Planning

The study findings showed that majority (75.7%) of management staff members at MTRH believed that they usually analyze the organization's planning system in order to effectively implement the ISO standards. Similarly, most (57.9%) of the management staff members at MTRH were of the opinion that ISO certification has enabled the realization of objectives of the hospital as contained in the strategic plan. This implies

that the certification of the hospital has made the realization of strategic plan to be accomplished. In addition, 78.9% of the management staff believed that the development plans of the hospital are usually reviewed on quarterly basis in line with ISO standards. The study findings suggested that strategic plan implementation is always associated with adoption of ISO 9001:8000 certification on service delivery.

In addition, the study findings suggested that a majority (68.4%) of the management staff at MTRH usually measure and monitor planned hospital objectives against the results achieved. Similarly, a majority (84.8%) of the management staff were of the view that the hospital's management was committed to development and have adopted and implemented various quality management systems in the hospital. These quality management systems include the implementation of ISO standards and hospital's strategic plan. Further, most (54.0%) of the management staffs at MTRH reported that they usually conduct feedback surveys in order to find out the customer's current and future needs and expectations. These surveys are usually done through the use of questionnaires and verbal communication to the hospital clients.

Further, majority (79.6%) of the management staff at MTRH believed that the hospital has allocated responsibilities to various departments enabling effective service delivery. Similarly, majority (83.6%) of the management staff members were of the view that the hospital allocates adequate resources for the implementation of the hospital's strategic plan which has the hospital's mission, vision and objectives.

5.2.3 Strategies of Enhancing the Effectiveness of ISO 9001: 8000

Certification on Service Delivery

The study findings showed that majority (89.4%) of the management staff members cited that there was need for provision of training of employees to enable them acquire skills in the various hospital departments and therefore effectively implementing hospital strategic plan which enhances the implementation of ISO standards.

Further, majority (80.3%) of the management staff members recommended that the hospital management needs to determine and provide resources for the infrastructure development especially for hospital equipments and facilities which ensures that there is better and improved service to the customers. Similarly, majority (87.5%) of the management staff members were of the view that there was need for ensuring that working conditions within the hospital conform with the ISO standards which makes customers more satisfied with services offered.

In addition, majority (86.9%) of the management staff members reported that customers' perception on service delivery was important and therefore there was need for its monitoring. Further, majority of the management staff members at 85.6% were of the view that the hospital needed departmental audits for effective service delivery.

In addition, majority of the management staff members at MTRH believed that systems, policies, procedures and processes in the hospital needed to be reviewed in order to be in line with ISO 9001:8000 standards which aims at improving service delivery in the hospital. Further, majority (94.0%) of the management staff were of the view that the

hospital needs an improved communication procedures and channels which aims at improving service delivery.

5.3 Conclusion

The following conclusions were made based on the study findings;

The study findings concluded that there was a significant relationship between ISO certification and health care provision. This implies that certification has a positive influence on service delivery in MTRH.

It was further concluded that there was a positive and significant relationship between ISO 9001:8000 certification and financial management of the hospital. This implies that the adoption and implementation of ISO 9001:8000 standards by MTRH had seen the improvement in financial management which in turn leads to improved profitability of the hospital.

Further, the study findings indicated that there was a significant relationship between ISO certification and development planning in MTRH.

5.4 Recommendations of the Study

The following are the recommendations of this study;

- i. There was need for provisions of training for employees at MTRH to enable them acquire skills in the various hospital departments and therefore effectively implementing hospital strategic plan which enhances the implementation of ISO standards.
- ii. There is need for the hospital management needs to determine and provide resources for the infrastructure development especially for hospital equipments

and facilities which ensures that there is better and improved service to the customers.

- iii. Customers' perception on service delivery is important and therefore there is need for monitoring of how customers perceive the services provided by the hospital.
- iv. In addition, systems, policies, procedures and processes in the hospital needed to be reviewed in order to be in line with ISO 9001:8000 standards which aims at improving service delivery in the hospital.
- v. The hospital management needs an improved communication procedures and channels which aim at improving service delivery.

5.5 Suggestions for Further Research

The following suggestions are made for further research;

- i. There is need for a comparative study on service delivery in certified and un-certified hospitals in Kenya.
- ii. There is need for a study on the relationship between certification and implementation of strategic plans in organizations.

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APPENDICES

APPENDIX 1: INTRODUCTORY LETTER

Dear Participant,

RE: PARTICIPATION IN THIS STUDY:

I am a post graduate student pursuing a master of Business Administration Degree programme in the school of Business and Economics, Moi University. I am currently conducting research on “**The Relationship between Quality Management Systems and Organizational Performance in Moi Teaching & Referral Hospital, Eldoret**”. I kindly request you to participate in this study. Your response to the items in the questionnaire was treated with utmost confidentiality, and will not be used for any other purposes except this study. You are free to withdraw from this study at any time you deem fit. You may also request the researcher to inform you about the findings of this study.

Thank you very much for accepting to participate in this study. Please sign in the space provided on this letter if you accept to be a respondent in this study.

Yours faithfully,

Mary Ngeny

Participant

Date

APPENDIX II: RESEARCH QUESTIONNAIRES

This questionnaire is purely meant for academic research. Please fill in responses as truthfully as you can.

PART A: BACKGROUND INFORMATION

Instructions: please fill in responses by use of a tick in the brackets against the appropriate item.

1. Age:

- (a) Below 30 years (b) 31 -40 years
 (c) 41 -50 years (d) Over 50 years

2. Gender

- (a) Male (b) Female

3. Qualification

- (a) Diploma (b) Degree
 (c) Masters (d) Any other (specify).....

4. Working Experience

- (a) Under 5 years (b) 5-10 years
 (c) 11-20 years (d) 21-30 years
 (e) Over 30 years

Section B: Effects of ISO 9001:8000 Certification on Health Care Provision

The following are statements about effects of ISO 9001:8000 certification on health care provision in your institution. Please respond to the extent to which each statement applies to your institution by ticking the appropriate code. Please respond appropriately to the extent to which each is applicable, where **1-Strongly Disagree, 2-Disagree; 3-Undecided; 4-Agree; 5-Strongly Agree.**

Statement	SD	D	UD	A	SA
Employees in the hospital are involved in decision making process for better health care					
The certification has made customers more satisfied with improved health care provision in the hospital					
Patients in the hospital feel more safer due to improved security measures in the hospital					
The certification of the hospital has seen reduction in health care errors					
The certification of the hospital has enabled the management to focus on customer needs					

Section C: Effects of ISO 9001:8000 Certification on Financial Management

Statement	SD	D	UD	A	SA
The financial management has improved in the hospital since the introduction of ISO					
The Hospital's financial profitability has drastically improved since the introduction of ISO					
ISO certifications are too expensive lowering the hospitals' profitability					
The costs of certification are higher than the benefits derived					
ISO certification has enhanced productivity of all staff members					
The hospitals' financial performance has increased and changed over time					

Section D: Effects of ISO 9001:8000 Certification on Development Planning

Statement	SD	D	UD	A	SA
The ISO certification has enabled the hospital management to effectively analyze the organization's current planning systems					
ISO certification has enabled the realization of objectives of the hospital as contained in the strategic plan.					
The hospitals' set targets are achieved on yearly basis.					
The development plans of the hospital are usually reviewed on quarterly basis in line with ISO standards.					
There has been effective implementation of strategic plan of the hospital since the introduction of ISO 9001: 8000.					
The hospital management oftenly measures and monitors the actual results against the planned hospital objectives.					
Top level hospital management is committed to the development and are involved in the implementation of Hospitals' quality management system.					
The hospital management usually conducts feedback surveys in order to find out the customer's current and future needs and expectations.					
There is allocation of responsibilities within the hospital to enable the establishment of effective processes of achieving the hospital's objectives.					
The hospital management usually reviews the operation of hospital system at regular intervals and improves where necessary.					
There is appropriate resources allocation in all the hospital's departments to ensure the implementation of the strategic plan.					

Section E: Strategies of enhancing the effectiveness of ISO 9001: 8000 certification on service delivery.

Statement	SD	D	UD	A	SA
There is need for the hospital management to review on the competencies of its staff members and provide scholarships to					

its members for acquisition of skills in the various hospital departments					
The hospital management needs to determine and provide resources for the infrastructure (hospital equipments and facilities) ensuring better quality health care for its customers					
There is need for the hospital management to look at the conditions under which work is performed and ensure that this is appropriate for meeting customers' requirements.					
There is need for the hospital management to make sure at each stage that its staff members understand their roles and are competent to carry out tasks in line with the organizations' policies and procedures.					
There is need for the hospital management to have the monitoring of customer perception on service delivery in the hospital					
There is need for regular internal audits in all departments to ensure that sure that things are going as planned					
The Hospital's procedures and products should be measured and monitored to ensure that they are meeting the customer's requirements.					
There is need for review of systems, policies, procedures and processes in the hospital to be in line with ISO 9001:8000 standards.					
There is need for the hospital to have good communication channels where all staff members understand what is happening on daily basis in the hospital.					

Section F: Elements of Standardization

Statement	SD	D	UD	A	SA
Standards are used in the hospital as instruments of service delivery					
There is increased financial performance in the hospital					
There is realization of hospital's strategic plans					
The roles and objectives of standardization are clear					
The implementation of ISO 9001:8000 is clearly done					
Standardization activities & practices are clearly defined and operationalized					

APPENDIX III: INTERVIEW GUIDE

1. Since the introduction of ISO certification in the hospital, what effects has it had on service delivery?

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2. What Strategies have you put in place to enhance the effectiveness of ISO 9001: 8000 certification on service delivery?

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