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**EFFECTS OF TOTAL QUALITY MANAGEMENT PRINCIPLES ON
EMPLOYEE PERFORMANCE: A CASE OF AGA KHAN UNIVERSITY
HOSPITAL, NAIROBI.**

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MBA-HCM/102911**

**DISSERTATION SUBMITTED IN PARTIAL RECOGNITION FOR THE
AWARD OF MASTER'S IN BUSINESS ADMINISTRATION IN
HEALTHCARE MANAGEMENT.**

**STRATHMORE BUSINESS SCHOOL
STRATHMORE UNIVERSITY
NAIROBI, KENYA.**

APRIL 2021.

DECLARATION

I declare that this work has not been previously submitted or approved for the award of a degree in this or any other university. The thesis does not contain previously published or written material by another person except where due reference is made.

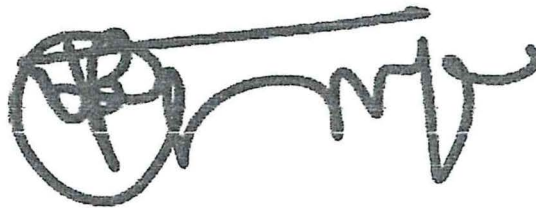
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ABSTRACT

Private healthcare institutions continually seek to provide a harmonious working environment where employees can express their best attributes. Healthcare institutions are always trying to maximise employee output to maximise profits and compete in a competitive market. One way of maximising employee output is through the application of Total Quality Management (TQM). The main objective of this study was to assess the effect of Total Quality Management principles on healthcare personnel's performance and output at AKUHN. The specific objectives of this research were to determine the extent to which employee involvement affects the performance of healthcare staff at AKUHN and establish the extent to which teamwork affects the performance of healthcare staff at AKUHN. The study utilized a descriptive design and a positivism paradigm linked to a quantitative technique to address the research objectives. A purposive sample of 132 participants was recruited to participate in this study. Structured online questionnaires were utilized in data collection. The collected data were analyzed using SPSS and Microsoft Excel software. Descriptive statistics were used to summarize the variable, while regression analysis assessed the relationship between the dependent and independent variables. The analysis findings indicated a significant positive relationship between teamwork and employee performance. Employee involvement had a positive but insignificant relationship with employee performance. This study was limited to only one institution, and only two TQM principles among the eight studied elsewhere. The study findings add to the pool of knowledge about the effects of TQM principles on employee performance for quality healthcare service. Future research could consider expanding the study scope to get an accurate representation of the subject matter.

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LIST OF ABBREVIATIONS

AKUH	Aga Khan University Hospital
AKUHN	Aga Khan University Hospital, Nairobi
ISO	International Organization for Standardization
JCIA	Joint Commission International Accreditation
KIPPRA	Kenya Institute for Policy Research & Analysis
MOH	Ministry of Health
TQM	Total Quality Management
SPSS	Statistical Package for the Social Sciences
WHO	World Health Organization

CHAPTER ONE: INTRODUCTION

This chapter covers the background to the study, Total quality management in healthcare, total quality management and employee performance, the private healthcare sector in Kenya, significance of the study, study objectives, research questions, study scope and significance of the study.

1.1. Background to the study

Total quality management (TQM) is anchored on all organisational members' participation and integrating all systems towards enhancing performance and productivity (Nahler, 2009). Total quality management seeks continuous improvement of all administrative processes, products, and services (Nestor). These processes include all activities necessary to design, develop, and implement a product or service integrated into the system and its performance (Sadikoglu & Olcay, 2014).

Total quality management originated in the 1950s and has steadily become more popular since the 1980s (Kumar, Singh, Kumar, & Antil, 2016). Crosby defined steps for quality improvement in 1979, including zero-defect philosophy (Crosby, 1979). Ishikawa emphasized the importance of quality circles as a method of achieving continuous improvement. Deming proposed the fourteen principles of quality improvement in organisations in 1986, and finally, in the same year (Deming, 1986), Juran pointed out the importance of both the technical and managerial aspects of TQM (Martínez-Lorente, Dewhurst, & Dale, 1998).

There is no consensus on the total number of principles. However, there are mainly eight fundamental principles of total quality management universally agreed upon (Asif, Awan, Khan, & Ahmad, 2013). They include top leadership and management commitment, customer focus, total employee involvement, teamwork, continuous improvement, communication, factual decision-making, and a process-centred approach.

The first principle is top leadership and management commitment. An organisation's top leadership and management are responsible for providing strategic direction, planning, directing, and coordinating all functions and activities. It ensures the achievement of organisational goals and objectives.

Top leadership and management are tasked to adopt a strategic quality plan, which forms quality performance and service delivery (Oakland, 2014). The second principle is customer focus. Customer focus emphasizes that the consumer is the ultimate determinant of all organisational performance and output. In TQM, customer satisfaction is the product of all quality management processes. The level of customer satisfaction determines any company strategy (Mittal & Frennea, 2010).

The third principle is continuous improvement. Continuous improvement is a series of activities geared towards improving internal and external performance matrices (Alolayyan, Ali, & Idris, 2016). Continuous improvement helps organisations improve performance and reduce waste associated with system failure and redundancy (Hughes, 2008).

The fourth principle, which is employee involvement, entails getting all employees to actively participate in all organisational activities to attain total quality (Al-Shdaifat, 2015). Every employee should be involved in working towards the common goals laid down by an organisation. TQM focuses on the entire organizational unit hence requires ownership across the continuum (Aized, 2012).

Teamwork, which is the fifth principle, is a collaboration between employees throughout an organization. The partnership is among employees, customers and suppliers and focuses on attaining organisational goals and objectives (Hoonakker et al., 2000). Employees who work in teams report higher job satisfaction, output, and less absenteeism (Nielsen & Randall, 2012). This principle highlights the need for team members to complement each other's skillset to improve performance (Nielsen & Randall, 2012).

The sixth principle is communication. Communication as a principle of TQM is concerned with communicating the organisation's mission, vision and goals to the various stakeholders. Communication is essential because it helps with interdepartmental planning and coordination. Therefore, effective communication is key to any TQM strategy (Choudhary & Rathore, 2013).

The seventh principle is fact-based decision-making. Fact-based decision-making refers to using data and analytics to guide the TQM strategy and ensure it works for the organisation. It focuses on an organisation need to continuously collect data to improve its decision-making process (Sadikoglu & Olcay, 2014)

An eighth principle is a process-centred approach. The process-centred system is a series of steps that take inputs and convert them into outputs that deliver value to a customer. TQM requires process thinking, and strategies should be developed based on internal or external customers (Al-Ibrahim, 2014).

Employee performance is an individual's work achievement after applying the necessary effort on the job through meaningful work and an engaging profile (Pradhan & Jena, 2017). Some organisations perform better because they efficiently get the best out of their employees and improve organisational performance.

Employee performance is the cornerstone of any organisation, and this key resource output determines its success (Ali et al., 2018). Consequently, modern-day organisations continually focus on improving employee productivity, maximizing their workforce to maintain its competitive advantage (Wangombe, Wambui, Muthura, Kamau, & Jackson, 2013).

This study focused on two principles, TQM principles of teamwork and employee involvement. The two principles were selected for study to represent the eight due to time limitations. However, teamwork and employee involvement in hospital or healthcare service delivery give a good snapshot of the inclusion more others for efficient and effective performance and service delivery (Mohamed, 2015).

In healthcare, the quality of teamwork is directly associated with the quality and safety of healthcare delivery systems. Healthcare delivery involves multiple professional roles that are configured into different structures and perform various functions (Nielsen & Randall, 2012). These needs teamwork and involvement to create a harmonious and healthy organizational image by providing and offering high customer service (Rosen et al., 2018).

These two principles were selected for study due to their critical role in healthcare management and service delivery. Employee involvement and teamwork make an integral part of healthcare service delivery (Sanyal & Hisam, 2018)

1.2. Total Quality Management in Healthcare

Total quality management gained prominence in the 1980s, and its success in the manufacturing industry encouraged healthcare managers to examine its applicability in the healthcare sector. As a result, the TQM principles were implemented in the healthcare sector to improve outcomes, reduce medical errors, and increase healthcare delivery (McConnell, Chang, Maddox, Wholey, & Lindrooth, 2014).

Recently, healthcare organisations have adopted TQM principles to improve efficiency and quality healthcare delivery (Mosadeghrad, 2014). The successful implementation of TQM principles in the manufacturing industry has motivated attempts to apply them in the healthcare sector. TQM principles in healthcare improve patient satisfaction, increase productivity, increase employee motivation, and improve organisational performance (El-Tohamy & Al Raoush, 2015).

Effective TQM implementation enables healthcare organisations to identify customer requirements, deliver appropriate care, improve processes and practices, and reduce medical errors' frequency and severity. These activities lead to high productivity, quality healthcare services, patient satisfaction, and increased productivity (Rajan & Kumar, 2017). In addition, increased globalization, liberalization and harsh business conditions have brought about new challenges and opportunities in the healthcare sector.

It prompted the sector's leading players to promote quality in their products, while competitive economic forces witnessed in businesses today are forcing the healthcare sector to utilise new management methods geared towards continued cost-effectiveness and competence (Mohamed, 2015).

Although TQM is a relatively new healthcare management phenomenon, it has been adopted in many healthcare practices by many healthcare-providing institutions. The increased attention to quality is due to increased governmental regulations, customer influence, and hospital management initiatives (Faloudah et al., 2015). In addition, the healthcare market is changing from producer-oriented to customer-oriented due to increased customer influence (Mohamed, 2015).

Quality performance is considered one of healthcare organizations' approaches to improving their competitive advantage in healthcare service delivery (WHO, 2018). High disease incidences, rising costs of healthcare provision, increased competitive pressures, and turnovers are some of the factors that have driven healthcare organisations to learn to improve performance and subsequent higher quality care, better patient experience, and lower costs (Kieny et al., 2017).

Total quality management has emerged as a possible solution to improve the competence and effectiveness of healthcare provision, and it is also becoming more and more important for the thriving health sector (Awuor & Kinuthia, 2013). Healthcare systems are approaching patients as customers who needs the utmost care.

Patients are a unique type of customer whose needs are very intricate due to the care processes involved. Total quality management emphasizes improved customer satisfaction and offers the prospect of a higher combination of internal quality measures and conformity to specifications. Therefore, TQM can be an essential tool for hospitals' competitive strategy in a quality healthcare system.

Hospitals in competitive markets are more likely to differentiate themselves from their competitors based on excellent service quality. Good quality services include medical services such as diagnosis, surgery, medicines, and treatment and indirect operations such as administration and cost management (Patel, 2009).

1.3. Total Quality Management and Employee Performance

Human resources comprise a critical component in the provision of healthcare services in the country. Any healthcare services' success is determined mainly by adequate personnel who are knowledgeable and motivated to deliver excellent services to the patients (Elarabi & Johari, 2014). Therefore, high-quality healthcare service is of great strategic importance in managing service organisations (Al-Shdaifat, 2015).

Healthcare provision in Sub-Saharan Africa and Kenya is, to no small extent, affected by inadequate human resources. The World Health Organization describes healthcare systems in six components referred to as building blocks: service delivery, healthcare workforce, health information systems, medicines and technologies, financing, and leadership/governance (WHO, 2007).

Human performance factors can either positively or negatively influence organisational performance and vice versa. Organisational performance results from work processes, group communication and interaction, corporate culture, image, policies, leadership, climate for innovation and creativity (Tinuke, 2012). Poor governance and human resource challenges are the main reasons for ineffective healthcare service provision (Oleribe et al., 2019).

The introduction of total quality management in healthcare and hospital systems contributes to better healthcare personnel and other support services (Patel, 2009). Successful TQM implementation among healthcare employees could largely contribute to superior outcomes, including improved healthcare, quality, performance, patient satisfaction, reduced operating costs of healthcare institutions, employee satisfaction, and patient safety (Salaheldin, Fathi, & Shawaheen, 2015).

1.4. Private Health Sector in Kenya

The healthcare sector in Kenya comprises the public system where the Ministry of Health(MOH) and parastatals are the significant players, and the private sector includes not-for-profit organizations, NGOs and Faith-Based organizations(Muga, Kizito, Mbayah, & Gakuruh, 2005). The public health sector accounts for about 50% of the over 4,700 health facilities countrywide. It has proved to be overwhelming for a country confronted by the ever-increasing population, global and local economic downturn and increasing global disease burden, among others to meet its public demands (Achoki et al., 2019).

The private health sector is one of the country's fast-growing sectors, complementing the existing public health sector. The public sector is overwhelmed in meeting the health needs of the increasing population (Awuor & Kinuthia, 2013). Private healthcare includes all those healthcare providers outside the public sector.

One of the causes of the rapid growth of private health care facilities has been the lack of adequate quality public healthcare services (Nairobi et al., 2013). The introduction of user fees by public hospitals and the healthcare reforms that relaxed licensing and regulation of private healthcare providers promoted the growth of this sector (Badru & Wainaina, 2018).

According to economic orientation, the private health sector is classified as either for-profit and not-for-profit, by ownership, by type of facility or by the therapeutic system (Nairobi et al., 2013). For example, Aga Khan University Hospital (AKUHN) is a level 5 private healthcare facility that provides tertiary and secondary healthcare services (AKUH, 2020). The institution was recently upgraded to a teaching hospital in response to the healthcare needs of people in Kenya and the people East African region. The hospital applies the principles of total quality management across all sections in its healthcare service delivery.

Other non-governmental healthcare organisations considered private include the Family Planning Association of Kenya, Kenya AIDS NGOs Consortium (KANCO), AMREF, The Red Cross Society of Kenya, Centre for Health Solutions, and many more supporting healthcare initiatives in the country (MOH, 2014). Sole proprietors own the for-profit health care facilities, partnerships, companies, and parastatals, and the firm's objectives are presumed to be profit maximization.

Many health care facilities are in urban areas, and Nairobi County is well-endowed with such facilities (Awuor & Kinuthia, 2013). There are more than 25 private hospitals in Nairobi County alone, some at levels 4 and 5. Several private primary healthcare facilities and hospitals at levels 2 and 3 (Barnes et al., 2010).

The Aga Khan University Hospital (AKUH) in Nairobi became the first hospital in East Africa to receive the well-regarded Joint Commission International (JCI) accreditation. The Joint Commission is responsible for certification. It is an independent, not for profit organisation that accredits and certifies healthcare organisations in the USA (Shawan, 2021). The Joint Commission International is an affiliate of The Joint Commission that provides leadership in healthcare accreditation outside the USA (Algahtani, Aldarmahi, Manlangit, & Shirah, 2017).

The Joint Commission International develops quality standards in collaboration with accredited hospitals and experts in quality and safety. To this day, only one other institution has received provisional accreditation that is Gertrude children's hospital. Aga Khan has been recertified three times and is the reason why this research focused on aga khan university hospital (Owino, 2018).

1.5 Problem Statement

Healthcare personnel play a significant role in ensuring the effective and efficient provision of healthcare services (Yousef & Yousef, 2017). Generally, hospitals and healthcare facilities face poor performance and inadequate staffing, especially frontline healthcare like doctors, nurses, and allied healthcare staff (WHO, 2006).

Research conducted amongst various service industries, including healthcare providers, show a positive relationship between practical TQM principles and employee performance (Al-Qahtani et al., 2015). To maximize resources, an organisation should actively seek management solutions to improve employee productivity.

Outside healthcare, majorly in the manufacturing industry, institutions have seen a drastic improvement in employee productivity when applying TQM principles. However, this has not been proven in the healthcare industry (Mohamed, 2015). Many previous studies on TQM in Kenya's healthcare systems have emphasized applying TQM principles in Kenya's healthcare (Wamuyu, 2015). The effects of TQM on operational performance in private hospitals (Mohamed, 2015).

Some have looked at the influence of TQM principles on quality healthcare in private health facilities (Nairobi et al., 2013). TQM practices and service delivery of public hospitals and primary healthcare facilities in Mombasa County questioned applying the principles in public institutions (Badru & Wainaina, 2018). Another research investigated TQM practices in selected private hospitals in Nairobi County (Awour & Kinuthia, 2013).

The emphasis is on TQM's influence on health service delivery by respective institutions in previous studies. In addition, there are limited studies on the effects of TQM principles on employee performance. This study will help answer the following questions: to what extent do TQM principles affect health care staff in private hospitals in Nairobi, Kenya, regarding their performance.

1.6. Study Objectives

Main objective

- i. To assess the effect of Total Quality Management principles on healthcare personnel's performance and output at AKUHN.

Specific Objectives

- i. To determine the extent to which employee involvement affects the performance of healthcare staff at AKUHN.
- ii. To establish the extent to which teamwork affects the performance of healthcare staff at AKUHN.

1.7. Research questions

- i. To what extent does employee involvement affect healthcare employee performance at AKUHN?
- ii. What is the effect of teamwork on the performance of healthcare staff at AKUHN?

1.8. Scope of the study

The study was based on Aga Khan University Hospital, Nairobi, and only involved hospital staff in direct healthcare service provision. There are numerous private hospitals and health facilities in Kenya, but AKUH was selected as a case study. The hospital has intensively integrated the two principles of teamwork and employee involvement in its recent JCIA and other international accreditations.

The study was limited to assessing the TQM principles of employee involvement and teamwork on employee performance. Only the two TQM principles were studied due to their relevance and applicability in hospital and healthcare service provision. Time limitation for scope expansion to include the other six principles impedes a broader area covering all eight TQM principles.

1.9. Significance of the study

This study helped in the management of private hospitals and healthcare employees in the country, and it also helped hospital management better understand the effects of the TQM principles on employee's performance. The study also highlighted the importance of TQM principles in enhancing employee performance for effective, efficient, and quality healthcare service provision.

The study helped the hospital management formulate relevant policies to incorporate employee involvement and teamwork for better employee performance and service delivery.

The research generated new knowledge of TQM principles' effects on employee performance, aiding management planning for TQM's future healthcare institutions.

The study will also be helpful to researchers who would like to undertake further research in the area under study through previous studies, theoretical literature, and research tools used in this study.

CHAPTER TWO: LITERATURE REVIEW

2.1. Introduction

This chapter presents a review of relevant literature on the impact of total quality management practices on employee performance presented by various scholars, researchers, authors, analysts. Significant theoretical and empirical aspects are discussed in relevance to the study objectives. The conceptual framework of the study is in this chapter.

2.2. Theoretical Foundation of Total Quality Management in Hospital and Healthcare Management

In many research studies, theoretical frameworks form a foundation of all knowledge. A theoretical framework serves as a structure and supports the study's rationale, the problem statement, purpose, significance, and research questions. In addition, it provides a *grounding or anchor* for the literature review, methods, and analysis (Osanloo & Grant, 2016).

Some several theories and models explain the adoption, implementation, and outcomes of total quality management. This study will adopt the Deming approach to TQM and the systems theory of management.

2.2.1. Demings' approach to TQM

Edward Deming is one of the strongest proponents of quality management and has contributed significantly to the Japanese economy's rapid revitalisation after World War II (Deming, 1986). Deming's approach to TQM proposed 14 points as principles. First, he emphasized the need for top management to ensure a change of process and systems occur. Second, he proposed that management commitment, positive corporate culture, employee education and training, a proper communication system is paramount to successful TQM implementation (Oruma, 2014).

Deming (1986) emphasized the importance of identifying and measuring customer requirements, creating supplier partnerships, using functional teams to identify and solve quality problems, enhancing employee skills, employee participation, and pursuing continuous improvement. Deming highlighted the need to improve the employee's skill and participation to maximize performance. He argued that quality was an integral part of the staff and operations within the organisation.

Deming's knowledge introduced to the world of management is utilized in healthcare organisations keen on maximizing employee performance (Wamuyu, 2015). Deming's approach to total quality management offered management principles for improving businesses or organisations (Laing, 2000). This approach emphasizes the employee as part of the integral system key to organisational success (Health, 2013). The approach highlights that organizational management processes and employees play a significant role in its success alongside customers (Laing, 2000). His approach highlighted the critical components of an organisation's success, pointing out that focusing on the different elements will lead to long-term success (Terry, 1996). The theory supports the study objectives on the effects of employee involvement and teamwork on performance. The approach aligns with study objectives because TQM principles of employee involvement and teamwork are essential components that, if well aligned, will lead to the best employee performance and work output.

2.2.2. Systems theory of management

The systems theory states that, like living organisms, organisations comprise numerous component subsystems that must work together in harmony for the more extensive system to succeed (Lai & Huili Lin, 2017). Furthermore, the theory states that the success of an organisation depends on various factors, including synergy, interdependence and interrelations between various subsystems in the organisation (Mele et al., 2010).

The theory states that organisations are open social systems that must interact with the environment to ensure success. Furthermore, this theory states that the organisation relies on its environment to provide key stakeholders, including suppliers, customers, employees and the governing bodies, and that interactions among these subsystems are critical to an organisation's success (Lai & Huili Lin, 2017).

Employees make up vital subsystems within an organisation; departments, workgroups, business units, facilities, and individual employees can be considered an organisation (Mele, Pels, & Polese, 2010). In addition, the TQM principles of employee involvement and teamwork highlight employees as a critical subsystem that interacts with the organization's environment to enhance the organisation's success (Ooko & Odundo, 2013). The systems theory highlights the need to create a collaborative group dynamic in the workplace, improving the odds of success within an organisation (Sideras, 2017).

In addition, the systems theory assesses the system's overall effectiveness rather than the effectiveness of the subsystems (Rana & Chopra, 2019). It, however, highlights that success depends on the interaction of the various subsystems (Ingram, 2018). Synergy results in a combined output resulting from two or more people working together. This collaboration and teamwork can result in an atmosphere of creativity and innovation, encouraging employees at different levels of the organisation to develop new ideas and initiatives to improve job performance (Nielsen & Randall, 2012).

This theory aids in highlighting the employee as a critical subsystem, and its interaction with other subsystems is key to ensuring an organisation's success. It points out the importance of the employee as a fundamental component of the organisation (Lai & HuiLi Lin, 2017). The systems theory aligns itself with study objectives by emphasizing the interrelationship and interdependence of the various systems towards improving the whole.

The systems theory supports the practical application and implementation of employee involvement and teamwork principles due to its emphasis on synergy, interrelations, and interdependence of the various sub-systems for improved performance and output.

2.3. Empirical Literature Studies on the Impact of TQM Principles.

2.3.1. Total Quality Management Principles in Healthcare Management

Various terms describe total quality management principles that contribute to organisational performance and ultimate outcomes. In some literature, the principles are referred to as practices, concepts, elements, factors, and variables (Chepkech, 2014). All the above notwithstanding, total quality management principles ensure organisational best management, performance, and outcomes (Talib, Rahman, & Azam, 2011).

There are mainly eight cited principles of effective TQM implementation. They include top leadership and management commitment, customer focus, total employee involvement, teamwork, continuous improvement, communication, factual decision-making, and a process-centred approach. Successful TQM adoption and implementation require changes in structures, systems, and processes necessary to achieve improved business performance and employee behaviour (Sadikoglu & Olcay, 2014).

The principles, employee involvement, and teamwork highlight the employee and their performance as a critical organisation component. In selecting the two principles, the research assessed to what extent the principles play in improving the employee's performance and ultimately ensuring the organisation's success.

2.3.2. Employee Involvement

A study done by (Apostolou, 2000) showed that employees form important and foundational resources; they are the main contributors to an organisation's success. Therefore, a continual organisations commitment to its employees is regarded as a commitment to total quality. Furthermore, according to (Halis, R TWATI, & Hatis, 2017), employees should be acknowledged, recognized, and appreciated as crucial assets in the organisation. A study done by (Dale and Cooper, 1992) concluded that organisations should continuously monitor, motivate, and reward employees' involvement in quality management for ensuring an organisations success.

According to a study done by (Richardson, 1997), employee involvement in a system in which employees participated in organisational decision making by letting them take responsibility directly correlated to their success. It enabled learning, problem-solving, the systemic search for opportunities and continuous improvement within the organisation (Alolayyan et al., 2016). A study done by (Apostolou, 2000) showed that employee involvement involved empowering and delegating power to those closest to the process.

A study done by (Nielsen & Randall, 2012) concluded that organisations should aim to create a positive work environment based on trust, collaborative teamwork, operational excellence, operational customer service, and creative problem-solving. According to (Lawler *et al.*, 1992), quality management should focus on an individual and make everyone accountable for their performance and get them committed to the attainment of high quality and a highly motivated fashion

One approach to TQM is to ensure that everyone has a clear understanding of what is required, how their processes relate to the business and understand business and what is going on (Luburić, 2014).

2.3.3. Teamwork

A study in Australian manufacturing firms (Al-Shdaifat, 2015) showed that teamwork was linked to several positive organisational outcomes. An example, according to (Nielsen & Randall, 2012) employees who work in teams reported higher job satisfaction, higher job outputs, higher well-being, and less absenteeism than those who do not work in groups, while the quality of teamwork was associated with the quality and safety of care delivery systems.

A study done in Sauda Arabian hospitals by (Alqasimi, 2017) concluded that TQM is a critical factor in fully functioning healthcare process management and improvement. The study by (Alqasimi, 2017) also showed that a team or group would attain more significant results than a single individual. Furthermore, a study conducted by (Singer & Vogus, 2013) concluded that teamwork in healthcare settings has improved many outcomes such as positive interventions, fewer medical errors, and improved patient outcomes and is an inevitable component in healthcare practice.

According to (Rosen et al., 2018), healthcare delivery is inherently interdependent and sophisticated, and no one individual can assure patients receive the highest standard of care or protect the patient from all potential harms emanating from increasingly complex treatment. The study conducted in American hospitals by (Rosen et al., 2018) also concluded that teamwork is essential for overcoming divisions and strengthening the unity of purpose to improve quality output.

According to (Alqasimi, 2017) the most challenging part of TQM is to create an environment where all employees work as a team for a common purpose. (Awuor & Kinuthia, 2013) concluded that everyone throughout the organisation must work together to improve processes and execute them efficiently and effectively to realise the best outcomes. All institution's employees must contribute to recognise the overall organisation's vision (Halis et al., 2017).

According to a study done in Libyan Hospitals (Halis et al., 2017), teamwork is essential for enhancing total quality management implementation processes. The study also concluded that healthcare providers should emphasize strategies that enhance teams, discourage individualism, and apply the same concept to incentives and rewards at the departmental and individual levels.

Furthermore, a study done by (Sadikoglu & Olcay, 2014) concluded that the healthcare institution, through total quality management, should look to invest more in structured and evidence-based practices geared towards effective team management and coordination of healthcare services.

2.3.4. Employee Performance

There are several empirical studies on the implementation of total quality management and employee performance. For example, a survey of the impact of TQM on hospital performance in Jordanian hospitals found a positive relationship between TQM principles and hospital performance, especially in staff, work and system results (Alolayyan et al., 2016). In the same study, TQM principles positively impacted patient satisfaction, reduced costs, and medical errors.

A study conducted by (Gile, Van De Klundert, & Van De Broek, 2015) on the link between total quality management principles, healthcare professionals' performances, and patient outcomes observed that management practices are crucial for maintaining and sustaining the performance of healthcare professionals' performance and improving quality service outcomes in hospitals. In addition, this study concluded that applying the principles positively impacted employee performance, leading to long-term sustained results.

A study on the impact of applying TQM principles on overall hospital effectiveness on accredited Jordanian government hospitals found out that using TQM principles increases overall effectiveness in job performance among healthcare professionals (El-Tohamy & Al Raoush, 2015). In addition, empirical studies on the effects of TQM practices on public hospitals' performance affirmed that implementation of TQM practices positively influences employee relations, process management, and performance and outcomes of the sampled hospitals and healthcare facilities (Xiong, He, Deng, Zhang, & Zhang, 2017).

Studies by Talib (2012) investigating the relationship between TQM practices and quality performance among Indian service companies concurred that TQM practices such as quality systems, training, education, teamwork, and benchmarking showed a positive relationship with quality performance. In addition, a study by Pereira and Cister on TQM's contribution to patient safety in the hospital area found out that TQM practice contributes to better service and patient safety while in hospital (Pereira & Cister, 2016).

A study on TQM implementation in the Libyan healthcare industry recommended increased staff awareness concerning TQM principles through organised training, staff involvement in the establishment, processes, and implementation (Halis et al., 2017). In addition, their studies on TQM practices and service delivery in public and primary healthcare facilities in Mombasa, Kenya, employee involvement, customer focus, technology adoption, and continuous improvement positively and significantly affected employee performance and service delivery in the facilities under study (Badru & Wainaina, 2018).

A study on using TQM principles in improving patient safety and preventing medication errors in a general government hospital in Syria found out that it led to healthcare professionals' behavioural improvement. Healthcare professionals' improved behaviour led to efficient and enhanced handwritten prescriptions and a consequent decrease in errors related to administering doses recommended by global standards to improve patient safety (Yousef & Yousef, 2017).

Studies on the impact of TQM on bed occupancy and revenue from two tertiary hospitals in Mumbai affirmed that most of the service receivers were satisfied with the two health facilities' services under study. It led to the subsequent increase in bed occupancy and revenue for the two hospitals under study (Balasubramanian, 2013). It implies that the healthcare employees' performance was excellent, resulting from the effective implementation of TQM principles in the hospitals under study.

Studies on TQM principles and their results from two private hospitals in Nairobi County found that quality management systems were implemented, leading to accreditations by ISO and JCIA. The performance measurements resulting from TQM practices included patient satisfaction, bed occupancy, quality register, clinical audits, mortality, and morbidity. However, the studies also found that most employees were unaware of total quality management aspects in the surveyed two hospitals (Awuor & Kinuthia, 2013).

It recommended regular training to enable employees to understand more about implementing TQM principles for best performance and quality healthcare outcomes. A study on the effects of TQM practices on hospital operational efficiency concurred that the practices improved operational efficiency, which resulted in reduced operating costs, increased hospital profitability, enhanced sales, increased hospital competitiveness, and market (Mohamed, 2015).

2.4. Research Gap

Previous studies on TQM in healthcare have touched on its effects on quality healthcare and service provision performance in both public and private healthcare providing institutions. It is essential to delve into the impact of total quality management principles on employee performance. It is because employees who are well-informed and motivated will improve on individual performance and overall organisational performance.

The employee plays an essential role in the organization's success and needs to understand their role in implementing TQM principles, and it is crucial to obtain their view and understanding of TQM principles and their effect on their performance. Therefore, studies on the direct impact of TQM principles on employee performance in private hospitals are relevant to determine both positive and negative effects.

Previous studies have cited several challenges of implementing TQM in various healthcare-providing organisations, both public and private. The challenges, especially those related to employees, need to be addressed to successfully implement TQM principles and positive outcomes. Employees are determinants of the success of any organisation's measures aimed at improving performance and productivity.

Some studies in Kenya reveal that many employees in various organisations are not conversant with TQM principles. Some factors like employee involvement and teamwork, which usually must involve employees are not well-utilized by some organisations which use TQM. Therefore, more studies should be carried out on the utilisation and effects of all the eight principles on employee performance to give a clearer picture of implementation status.

Most studies on TQM application in hospitals and healthcare providers have been carried out in developed countries. Therefore, similar studies need similar studies, especially on TQM principles on healthcare employee performance in developing countries, Kenya included.

2.5. Conceptual Framework

The standard function of conceptualizing a study is describing hypotheses and propositions, defining variables, clarifying assumptions and limitations to help build a rationale for the studies (Adom et al., 2016). A framework in research is a structure that guides the researcher in defining the study process, study questions, methods for measurement, variables, and analysis.

A conceptual framework's role is to help describe, organize, and categorise concepts relevant to the study and define relationships among them (Rocco & Plakhotnik, 2009). A conceptual framework brings together several related concepts to explain or predict a given event or phenomena and give a broader understanding of the phenomenon of interest (Imenda, 2014).

This section discusses the conceptual framework for analyzing the effects of TQM principles of employee involvement and teamwork on employee performance, a case of Aga Khan University Hospital, Nairobi. In the context of this study, TQM principles of employee involvement and teamwork will be the independent variables. It is because the implementation of the principles will determine the performance of employees at the hospital facility. On the other hand, employee performance will be the dependent variable.

2.5.1. Conceptual Model

In the model, it demonstrates how independent variables (employee involvement and teamwork) affect the dependent variable(s), which is improved delivery performance

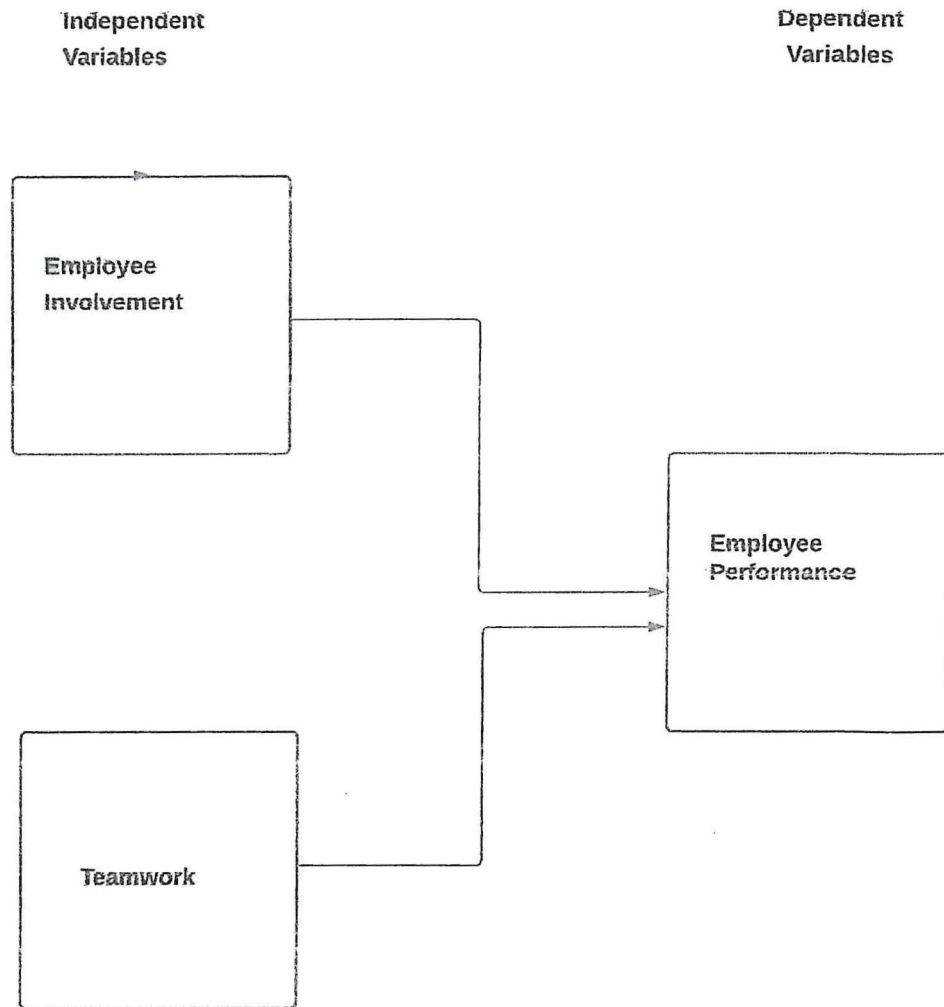


Figure 2.1 Conceptual framework

2.6. Chapter Summary

Many studies have been carried out on the influence, effect, or impact of total quality management on successful organisational operations, performance, and service quality. However, none has addressed the impact of TQM principles on individual employees' performance. It is, therefore, important that the ultimate result of performance and quality services is known. Furthermore, employees will determine the successful implementation of all TQM because they are the ones who implement them.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1. Introduction

In this chapter, a description of the research processes in data collection and measurement is detailed. It provided a blueprint of the methods used to answer the research questions and meet study objectives. The chapter will cover the research setting, target population, study design, sample size, data collection techniques, data analysis, ethical consideration, among others.

3.2. Research Design

The reliability and validity depend on the choice of the research design. Therefore, the researcher should take caution when selecting the research design during the study. According to Polit and Beck (2009), the research design is an overall plan to gather solutions to the research questions and solve various challenges to benefit from the evidence of the study. Using an inappropriate research design in a research study can lead to erroneous data that produce misleading findings.

The current research employed a descriptive design and a positivism paradigm linked to a quantitative research methodology to address the research objectives. Descriptive studies are concerned with the assessment of attitudes, demographics, opinions, procedures, and conditions. In this case, data was collected from a predetermined population regarding one or more variables (Silva, 2017). The survey collected data on the opinions and attitudes towards total quality management principles on employee performance.

3.3. Study Setting

Established in 1958, Aga Khan University Hospital is a private, not-for-profit institution that provides secondary and tertiary healthcare services. The hospital founded by His Highness, the Aga Khan, has branches in Karachi, Mumbai, Dar es salaam, Kisumu, Mombasa, and Nairobi. The hospital, managed by Aga Khan Health Services, is one of the most comprehensive not-for-profit healthcare in the developing world.

In response to healthcare needs in the region, AKUHN was upgraded to a tertiary centre. The hospital, whose core principles include quality, access, impact, and relevance, is a premier ambulatory care provider and quality in-patient services, including critical care, has several satellite or outreach clinics within Nairobi and its environs. In addition, the hospital has strengthened its collaboration and partnerships with the Ministry of Health and other universities in sharing experiences, strengthening healthcare provision, teaching, and research.

In recent years, the hospital has grown by expanding its services and upgrading its facilities. The expansion program emphasized introducing new diagnostic services, including the Pet CT and Cyclotron machine, raising healthcare quality to international standards. As a result, the hospital has had been accredited three times by the Joint Commission International (JCIA) based in the USA; the accreditation is awarded to hospitals that demonstrate the highest standards in patient safety and provide quality healthcare in line with international standards.

The first to be accredited by JCIA in Kenya was certified in July 2013, July 2016, and July 2019. Assessment by JCIA includes infection control, standards of physician practice, medication management, the safety of care, qualifications, and competencies of staff and physicians. This research focused on this setting because hospitals provide critical care services to patients and keep populations healthy. Also, when it comes to total quality management issues, more emphasis has been on business entities. Therefore, studies on adopting total quality management principles for effective employee performance and output in healthcare as a core business must be investigated.

3.4. Target Population

The target population included middle-level management staff and health workers who work in clinical areas at the hospital. They had team leaders, supervisors, faculty, residents, and permanent doctors. The target population comprises employees in middle-level management providing direct healthcare services to patients at the hospital. The target population was 440 staff. The departments were stratified into five primary strata: nursing managers, permanent nursing staff, university hospital faculty, Doctors, departmental heads and supervisors and residents.

3.4.1. Inclusion and Exclusion Criteria

The inclusion and exclusion criteria help in defining the research variables. Therefore, researchers need to define appropriate inclusion and exclusion criteria when designing a study. In addition, it avoids common errors such as using the same variable in determining inclusion and exclusion criteria and selecting variables as inclusion criteria that are not related to answering the research question (Patino & Ferreira, 2018).

3.4.2. Inclusion Criteria

The study included staff in middle management at the hospital. Team working in clinical areas and related departments who have worked in the hospital for more than one year were considered for the target population. It ensured that those selected for the study had some knowledge and understanding of the operations in the hospital's clinical areas. Specific departments and staff providing direct healthcare services to patients were also included.

3.4.3. Exclusion Criteria

All those that do not provide direct healthcare to patients, including support staff, were excluded from the study. Also, all the hospital's senior leadership (SLT), including the CEO, COO, Directors, and Chief Officers, were excluded from this study. It is because the middle-level managers oversee direct operations of the hospital that can give objective feedback on issues of involvement and teamwork. In addition, private practice doctors, Interns, and nurses on locums were excluded because they are not directly involved in the hospital's day to day operations.

3.5. Sampling Technique

Whether the methodology employed is qualitative or quantitative, sampling methods maximize efficiency and validity (Palinkas et al., 2015). A sample is a set of the source material from which the study sample is selected. The target population included clinical staff who were middle managers and supervisors. They were picked from the target population. Since this was a case study, a purposeful sampling technique was used. Purposeful sampling is used in identifying information-rich cases.

Purposive sampling is also necessary in homogenous cases to reduce variations. It involves the identification and selections of individuals or group that are knowledgeable, experienced, able and willing to participate (Chih-Pei & Chang, 2017). The researcher purposefully selected the five departments of study and developed a sampling frame from where to get a representative sample.

3.6. Sampling Frame

A sampling frame is appropriate for case studies. In this study, primary data of employees in each department of the study was obtained from the Human Resources departmental records.

3.7. Sampling Procedure

According to Mugenda and Mugenda, where time allows, a large sample should be taken. This enables the findings to represent the whole population (Mugenda & Mugenda, 2003). He further said that the sample size should not be less than 30% of the target population. Therefore, 30% of the target population was picked as a target population for the study. A proportionate number was selected from each category or department under study, where a sample size of 30% of the target population was picked as representative.

Department /Staff Category	Target Population	30% of the target population
Nursing managers	40	12
Permanent nursing staff	210	63
Faculty/permanent Doctors	78	23
Clinical heads/ department heads	22	7
Residents	90	27
Total	440	132

Table 3.1: Sample Size Frame

Source: Human Resources Department: AKUHN, 2020

3.8. Data Collection Methods

The study employed a structured questionnaire as the primary data collection tool. The questionnaire was objectively designed to address the critical research questions. The questionnaire was divided into sections that included demographics, employee involvement, teamwork, and performance. The construct under this section relates to teamwork, employee involvement and performance.

The second section of the questionnaire comprised the constructs of employee involvement, teamwork, and performance rating on a 5-point Likert scale. The participants were requested to indicate their level of agreement with each item to measure involvement, teamwork, and performance at AKUHN. The participants' emails were obtained, and questionnaires were mailed together with the information sheet and consent note to affirm their willingness to participate in this study.

3.8.1 Data Validity and Reliability

The reliability of a research instrument is how consistent the scores obtained have stability and equivalency. Consistency is achieved if a tool gives consistent results with repeated measurements of the same object. On the other hand, validity is the extent to which empirical measure adequately reflects the real meaning of the concept under consideration. The reliability and validity of the questionnaires were subjected to a pilot test to check whether it helped achieve the aim and objectives of the study.

The questionnaire was piloted among 5 participants. The pilot questionnaire was analyzed to test for reliability and validity. A Cronbach alpha of 0.70 was assumed for sufficient internal consistency in the questionnaire constructs. The results also helped in ensuring clarity and assisted in cleaning any ambiguity. It confirmed that the questions posed measure what they intended to measure.

3.9. Data Analysis

The collected data were coded, cleaned, and edited for completeness. After the cleaning, the data was collated and analyzed using Microsoft Excel version 2013 and the social science statistical software package (SPSS). Descriptive statistics were used to summarize each of the variables, that is, mean and standard deviation.

Regression analysis technique was employed to assess the relationship between the employee involvement, teamwork (independent variables) Employee performance (dependent variable). Data were presented using frequency tables, graphs, and pie charts. The mean shows the point of consensus, while the standard deviation indicates the variability of responses.

3.10. Ethical Considerations

The ethical issues to be considered in this study include written consent from study participants. The purpose of the research and its potential benefits and risks was explained to study participants, which enabled them to make informed consent, after which the participant signed an informed consent form. Private rooms were provided to the respondents to fill the questionnaires at their convenience. They were free to withdraw from the study at any time without any consequences.

Confidentiality was maintained at all stages of data collection, storage, and analysis. Only the principal investigator had access to questionnaires, and only numbers of participants were written on the questionnaires but not their names. A research permit and approval to carry out the study was obtained from the ethics research board of Strathmore University and clearance from the AKUHN research committee to carry out studies at the hospital.

CHAPTER FOUR: DATA ANALYSIS, FINDINGS, AND INTERPRETATIONS

4.1. Introduction

In this chapter, results were obtained to answer the research questions. The data was analyzed, interpreted, and discussed. The study's overall objective was to examine how TQM principles of employee involvement and teamwork affect employee performance at Aga University Hospital, Nairobi.

4.2. Response Rate

The study targeted 132 respondents at the hospital, and 109 out of 132 responded to the questionnaire. The total number of responses indicated an 83% response rate. This response is considered to be fit and reliable for the study. The results of the response rate are represented on the pie chart below:

	Frequency	Percentage(%)
Responded	109	83
Failed to Respond	23	17
	132	100

Table 4. 1: Response Rate

Source: Researcher (2020)

The above data shows that the response rate was sufficient at 83%. However, the other 17% of non-response was noteworthy. Some of the reasons for the non-response rate of 17% could have been due to lack of time to fill it and send it online. The sections under study are usually jam-packed with the patients and usually work in very stringent shifts.

Studies show that surveys of a health professional can be challenging due to declining response rates, especially among physicians(Cunningham et al., 2015)

4.3. Demographic Information

This section sought general demographic information of the respondents at the Aga Khan University Hospital, Nairobi. The data collected included gender, age, education level, and length of service. The findings of demographic data are presented below.

4.3.1. Respondents' Gender

Forty-eight males responded to the questionnaire, representing 44%, while sixty-one females responded, representing 56% of the total percentage. The figure below represents respondents according to gender:

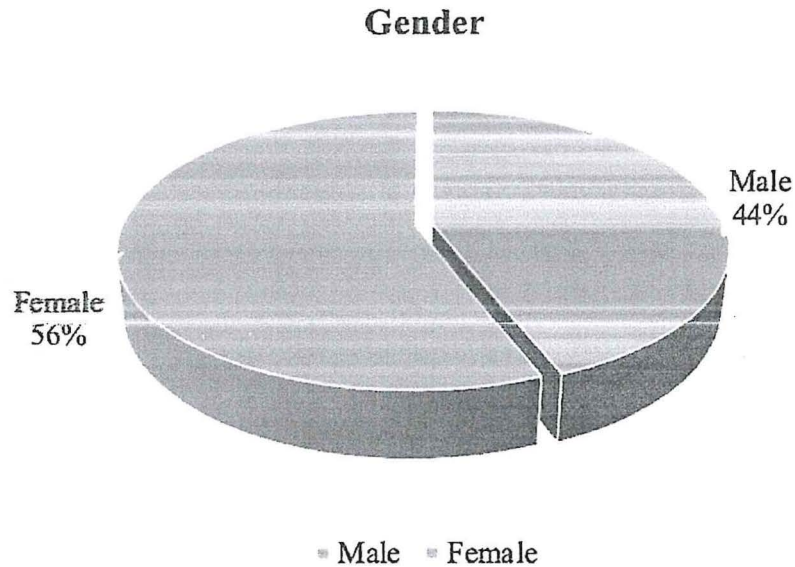


Figure 4. 1: Respondents' Gender

The above shows that more females responded to the survey than males. The variation could be due to more women being in the sections under study than men. It is more so given that the nursing sector has more females than males.

4.3.2. Respondents' Age Bracket

Concerning the age bracket, most respondents indicated that they were between 21-30 years. The responses were as follows: 21-30 years were 58(53.2%), 31-40 years were 44(40.4%), 41-50 years old were 6(5.8%), and above 50 years was only 1(0.9%). The responses are represented in the figure below:

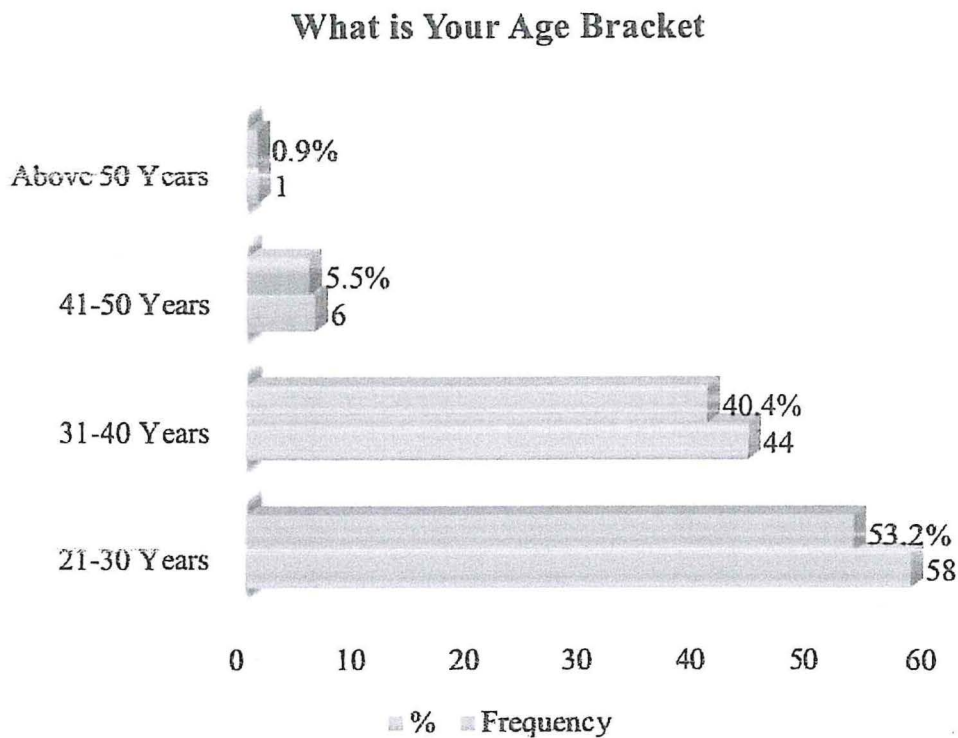


Figure 4. 2: Respondents' Age Bracket

From the above figure, it is apparent that most respondents were between the ages of 21-30 years old were 58(53.2%); between ages 31-40 were 44(40.4%); between the ages of 41-50 years, they were 6(5.85) and above 50 years was only 1(0.9%). Thus, it is evident from the above data that most of the employees at AKUHN are between the ages of 21 and 40. It is a clear indication that the organization's primary workforce is relatively youthful. From the above data, the relatively young age group could be very much technology savvy, increasing communication and teamwork(Sanyal & Hisam, 2018). On the other hand, the older employees could be more involved in performing organizational tasks due to their expertise and experience

4.3.3 Respondents' Education Level

Regarding the education level, most respondents were undergraduate degree holders at 60, representing 55%. These were followed by 26 with postgraduate degrees representing 26.60%. The rest of the respondents were 17 with a college diploma representing 15.60% and 2 Masters students with 1.8%.

Finally, one respondent indicated having had a postgraduate diploma, which was 0.90%. The table below represents the respondents' education level:

	Frequency	%
College diploma	17	15.60%
Masters student	2	1.8%
Post-graduate diploma	1	0.90%
Postgraduate degree	29	26.60%
Undergraduate degree	60	55%
Total	109	100%

Table 4. 2 Respondents' Education Level

From the above, more respondents had at least a degree which can contribute to more work knowledge hence involvement and teamwork.

4.3.4 Respondents' Years of Service

According to the data collected, forty-nine respondents (45%) worked in the hospital between 0 to 2 years. Forty-two respondents (38.50%) indicated to have worked with the organization between 3-5 years, twelve respondents (11%) have worked at AKUHN for between 6-8 years. One respondent (0.90%) had worked at the institution between 12-14 years, and five respondents (4.60%) had worked in the institution for over 15 years.

	Frequency	%
0-2 years	49	45%
12-14 years	1	0.90%
3-5 years	42	38.50%
6-8 years	12	11%
Over 15 years	5	4.60%
Total	109	100%

Most respondents have experience of between 0-5 years at 83.80%. The more experience, the more the involvement and vice versa. Employees who are relatively new in the organization might be less involved due to less experience on the job.

4.4. Existence of Quality Assurance Department

Data collected sought to find out whether the institution has a quality assurance section or department, 102 (93.6%) affirmed the existence of the department, 2(1.8%) said No., and 5(4.6%) said they Do not Know. The respondents' information is represented in the table below:

Knowledge of QA	Frequency	%
Don't know	5	4.6
No	2	1.8
Yes	102	93.6
Total	109	100

Table 4. 3: Existence of Quality Assurance

The above data shows that the hospital has a quality assurance department charged with dealing with quality assurance matters and meeting the institution's quality objectives.

4.5. Existence of Quality Objectives for Health Service Provision

Responses given to the question as to whether the institution has quality objectives for health service provision were as follows: Those who said Yes were 88(80.7%), No, 2(1.8%), and Do not Know 19(17.4%). The data is represented in the table below:

Health Services Provision	Frequency	%
Do not know	19	17.4%
No	2	1.8%
Yes	88	80.7%
Total	109	100%

Table 4. 4: Existence of Quality Objectives

4.5.1. The Quality Objectives at AKUHN

Respondents who affirmed the existence of quality objectives in the organisation gave varied responses that confirmed the same. The majority of respondents cited the existence of JCIA, CAP, SANAS, and ISO Standards as the available quality protocols. The other protocols available include patient safety, clinical audits, and DQIPS quality guidelines. The varied responses confirmed the existence of quality assurance policies, procedures, and objectives at AKUHN.

4.5.2. Existence of a Program for Implementing TQM

A question ascertaining the existence of a TQM implementation program in the organisation received 63 (57.8%) responses as Yes, 2(1.8%) responses as No. and 44(40.4%) responses as Do not know. The table below shows the responses:

TQM Implementation	Frequency	%
Do not know	44	40.4%
No	2	1.8%
Yes	63	57.8%
Total	109	100%

Table 4.5: Availability of TQM Implementation

It means that most respondents believe that there is a TQM implementation program in place at AKUHN. However, a sizeable percentage of 40.4% do not know the existence of such a program.

4.5.3. Duration of TQM Establishment in the Organization

Sixty-five respondents answered the question on the duration of the establishment of TQM in the organisation. It means that 44 people did not give their responses to the question.

The respondents reported the following. 55(84.62%) said that TQM had been established in the organisation for over three years; 4(6.15) said it is three years; 2(3.08%) said it is two years and 4(6.15) said it is one year. The responses are represented in the table below:

How long ago has TQM been established in your organisation?	Frequency	%
One year ago	4	6.15
Two years ago	2	3.08
Three years ago	4	6.15
Over three years ago	55	84.62
Total	65	100

Table 4. 6: Duration of TQM Establishment

The above data shows that most respondents affirm that TQM has been established in the organisation for over three years.

4.6. TQM Principles at AKUHN, Nairobi

There were two principles of employee involvement and teamwork that were used in the study. The two principles of employee involvement and teamwork considered strategic were used to show how they agreed or disagreed on their practice and effects on employee performance.

Respondents were asked to respond to each principle's effects on employee performance on a five-point Likert scale, where one meant strongly disagree, two meant disagree, three meant neutral, four meant to agree, and five meant strongly agree.

Descriptive analysis was done based on responses to each question, whereby the mean scores and standard deviations for each variable were computed. The results of the descriptive analysis are subsequently discussed.

4.7. Employee Involvement

Regarding employee involvement, the highest mean was 3.84, and the lowest was 2.81. presented in Table 4.8 below.

Employee Involvement	n	Mean	SD
All employees are trained in quality-related aspects of the hospital]	108	3.84	1.087
There is provision for a safe working environment and regular efforts to improve employees' working conditions	109	3.7	1.059
There is an organisation-wide delegation of authority to all employees to encourage quality performance and output	109	3.64	1.076
There is regular feedback regarding employee performance	107	3.63	1.024
All employees are encouraged to participate and involved in making decisions related to quality performance and output	107	3.5	1.085
Employees are made to feel like part of the organisation and are loyal and committed to duty	109	3.27	1.191
Employees are recognised and motivated with both	108	2.92	1.231

monetary and non-monetary incentives for quality performance			
Employees are given regular incentives and motivated for quality service provision	109	2.88	1.152
Every employee is motivated and given incentives for improved performance	107	2.81	1.074

Table 4. 7: Employee Involvement at AKUHN

Source: Survey Data (2020)

Respondents generally agreed in table 4.8 that all employees at AKUHN are trained in quality-related aspects with a mean score of 3.84 and a standard deviation of 1.087. In addition, respondents generally agreed that there is a safe and conducive working environment, and there are regular efforts to improve working conditions, with a mean score of 3.7 and a standard deviation of 1.059.

The existence of organisation-wide authority delegation to all employees to encourage quality performance and respondents confirmed output with a mean score of 3.64 and a standard deviation of 1.076. Regular feedback on employee performance and employee encouragement to participate and involvement in decision making and the quality performance had responses with mean scores of 3.63 and 3.5, respectively.

The same had standard deviations of 1.024 and 1.085, respectively. On whether employees are made to feel like part of an overall organisation, are loyal, and committed to duty, responses with a mean score of 3.27 and a standard deviation of 1.191 were received. Factors including employee incentives, recognition, and motivations resulting from quality performance and improvement received mean scores of 2.92, 2.88, and 2.81, respectively. These translated to standard deviations of 1.231, 1.52, and 1.074, respectively.

The above data generally shows that the total quality management principle of employee involvement in improving employee performance is practised at the Aga Khan University Hospital, Nairobi.

4.8. Teamwork at AKUHN, Nairobi

The highest mean score on the effects of teamwork on employee performance was 4.13, with a standard deviation of 0.904. On the other hand, the lowest mean score was 3.57, with a standard deviation of 1.1. The data is represented in the table below:

Teamwork	n	Mean	SD
All employees are encouraged to work as a team in achieving the laid-down goals and objectives	109	4.13	0.904
Employees are encouraged to support each other in executing various organisational functions	109	3.93	0.979
The management encourages both individuals and departments to work together for the realisation of laid-down goals and objectives	108	3.9	1.041
Employees have a culture of stepping in for and supporting each other in ensuring that there continuity and non-disruption of services, especially in cases of emergencies	109	3.84	1.029
The various duties, tasks, and functions are performed jointly and interdependently for better outcomes	109	3.83	1.008
The culture of employee support for each other for better performance and service delivery is encouraged and supported at the hospital	109	3.72	1.195
All organisational duties, tasks, and processes are carried out by all employees as a team	109	3.72	1.01
All hospital departments are well-coordinated and organised for the delivery of quality healthcare services	109	3.67	1.046
All hospital employees are always prompt, punctual, and timely in ensuring quality healthcare services and outcomes	107	3.57	1.1

Table 4. 8: Teamwork at AKUHNN

The above shows that all employees are encouraged to work as a team in achieving the set goals and objectives, and they support each other in executing various organisational functions. The mean scores for the above issues were 4.13 and 3.93, with standard deviations of 0.904 and 0.979, respectively.

Regarding employee encouragement by management to work as a team and employee culture of support for each other in performing the given duties, especially in emergency times, the mean scores were 3.9 and 3.84, while standard deviations were

1.041 and 1.029, respectively. Respondents affirmed with mean scores of 3.83 and 3.72 that they perform their duties jointly and interdependently and support each other in job performance and service delivery.

The respective standard deviations were 1.008 and 1.195. It was further affirmed that employees perform all duties, tasks, and processes as a team, and all departments are well organised and coordinated for quality healthcare service delivery. These received mean scores of 3.72 and 3.67 with respective standard deviations of 1.01 and 1.046. Regarding promptness, punctuality, and timeliness of employees in providing quality healthcare for best outcomes, responses received a mean score of 3.57 and a standard deviation of 1.1, respectively.

The above data shows that teamwork is employed at AKUHN as a total quality management principle meant to improve employee work performance

4.9. Employee Performance at AKUHN, Nairobi

The following responses regarding employee involvement and teamwork on job performance are shown in table 4.10.

Performance	n	Mean	SD
There is improved work performance when colleagues step out for each other and support each other for business and continuity and service delivery	109	4.29	0.853
Being part of the team, support from colleagues and management has helped me improve on my work performance, whereby I do better	109	4.09	0.845
A conducive work environment, regular feedback, and communication plays a crucial role in my job performance	109	4.08	0.894
Better organisation and coordination of employees across departments in performing duties, tasks, and responsibilities have helped in improving my job performance	108	3.94	0.889
The involvement of employees in making decisions affecting my work has helped me in performing my work better	109	3.7	1.023
Training, recognition, and incentives play a significant role in my job performance	109	3.66	1.124

Table 4. 9: Employee Performance at AKUHNN

The responses regarding employee support for each other as a team and management support have helped improve work performance, conducive environment, regular communication, and feedback got mean scores of 4.29, 4.98, and 4.08. Respective standard deviations for the above were 0.853, 0.845, and 0.894.

In addition, better organisation, coordination of employees across all departments, employee involvement in decision-making that affects their work, training, recognition, and incentives for better work performance got mean scores of 3.94, 3.7, and 3.66. Respective standard deviations were 0.889, 1.023, and 1.124, respectively.

The above data confirm that the two total quality management principles of employee involvement and teamwork significantly improve employee job performance at AKUHN Nairobi.

4.10 Effects of Teamwork and Employee Involvement and Performance at AKUHN

4.10. Regression Analysis

Regression analysis is part of inferential statistics, which is essential because it allows a researcher to draw out a relationship found in a specific sample (a specific case) to a more massive, general population (called generalisation) (McGregor, 2017). Inferential statistics can also examine relationships or differences between groups within a sample that did not happen by chance (Wiersma & Jurs, 2009). Regression model analysis was summarized in three parts, including the model summary, ANOVA, and Regression coefficients, as shown in Table 4.11 below:

Model Summary

Model	R	R Square	Adjusted Square	R	Std. error of the Estimate
1	.783 ^a	.613	.605		.47793

a. Predictors: (Constant), Teamwork, Employee Involvement

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	38.282	2	19.141	83.799	.000 ^b
	Residual	24.212	106	.228		
	Total	62.494	108			

a. Dependent Variable: Employee Performance

b. Predictors: (Constant), Teamwork, Employee Involvement

Model Parameters

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.254	.214		5.863	.000
	Employee Involvement	.144	.085	.163	1.689	.094
	Teamwork	.583	.087	.649	6.739	.000

a. Dependent Variable: Employee Performance

Table 4. 10: Model Parameters

The study used a multiple linear regression model to determine the effects of total quality management principles of employee involvement and teamwork on employee performance. In addition, these examined the variability of employee involvement and teamwork on employee performance at Aga Khan University Hospital, Nairobi.

The performance was the dependent variable, and the two principles of employee involvement and teamwork were independent variables in the multiple regression.

From the results of the coefficient output in table 4.11, the Beta values of the unstandardized coefficients were used to come up with the following regression equation: $Y = b_0 + b_1 X_1 + b_2 X_2$

$Y = 1.254 + 0.144X_1 + 0.583X_2$; Where Y= Performance (Represented by employee involvement and teamwork) 1.254, performance value when TQM principles were non-existent all other factors held constant. $0.144X_1$, the coefficient for employee involvement, means that for every unit increase in employee involvement, employee performance is expected to increase by .144, all other factors held constant. $.583X_2$, the coefficient for teamwork, which means that, for every unit increase in teamwork, employee performance is expected to increase by .583 all other factors held constant.

Table 4.11 summarizes the results of analyzing the effects of total quality management principles of employee involvement and teamwork on employee performance. In the first part, labelled model summary, the R-value was 78.3%; hence, the model explained this data.

Furthermore, it implied that the model fits the data well; its predictive power was very high. Finally, the R-square of the model was .613, which is deduced as a 61.3% chance of dependent variable (Performance), explained by the TQM principles under study (employee involvement and teamwork).

On the other hand, the adjusted R-square was .605, which meant that 60.5% of the variation was explained by the independent variables that influenced the dependent variable. Thus, the adjusted R-square value showed that all the model's predictor variables explained the dependent variable's variability.

Also, in the model summary, the standard error of estimate posted a value of .47793, which was significantly small. It meant that the data did not fall very much from the regression line, depicting the model's best fit.

The second part of table 4.11: ANOVA describes how well the regression equation fits the data. It is how well the independent variables significantly predict the dependent variable. This result showed that the model was significant or insignificant if the F-value's significance was less than 0.05. In this case, the F-value's significance was .000, which was less than 0.05; hence, the model was significant.

Therefore, this showed that the model comprising the predictor variable of employee involvement and teamwork was statistically significant in explaining the dependent variable (employee performance).

The third section of table 4.11 represents the regression coefficients, significant levels, and intercept. Only the TQM principle of teamwork was substantial from this output because it was less than 0.05 at a 95% confidence level.

The findings from the multiple regression analysis, as indicated in Table 4.11, shows that as employee involvement rises by a unit, employee performance would increase by 14.4%. However, this influence on employee performance would be statistically insignificant at a 95% confidence level. It is because its P-value of .094 was more significant than the benchmark figure of 0.05. It meant that the effect of the TQM principle of employee involvement on the performance of Aga University Hospital, Nairobi, was not significantly explained by employee involvement. Thus, it was despite the descriptive statistics that showed that employee involvement substantially affected performance.

Regarding the effect of the TQM principle of teamwork on employee performance at AKUHNN, the findings from multiple linear regression analysis, as shown in figure 4.11, revealed that: when teamwork increases by a single unit, employee performance will rise 58.3%. Further still, its influence on employee performance would be statistically significant at a 95% confidence level. It is because its P-value of 0.00 was less than 0.05. Therefore, this meant that employee performance at Aga Khan University Hospital, Nairobi, was significantly explained by teamwork's TQM principle. Consequently, it can be deduced that the TQM principle of teamwork is depicted as significantly positively influencing employee performance at Aga Khan University Hospital, Nairobi, while employee involvement had an insignificant positive influence on the same.

4.13. Chapter Summary

The chapter described how data was analysed with the study objectives. Descriptive statistics comprising the mean and standard deviation were used to ascertain the effects of TQM principles of employee involvement and teamwork on employee performance at Aga Khan University Hospital, Nairobi. Moreover, the respondents agreed that the two total quality management principles of employee involvement and teamwork are implemented and adopted at AKUHN. Respondents also agreed that the two TQM principles had a positive effect on employee performance. Descriptive and inferential statistics were used to establish the impact of the two TQM principles on employee performance at AKUHN.

Descriptive statistics where the means and standard deviations were analyzed showed that both TQM principles of employee involvement and teamwork positively affected employee performance. On the other hand, the linear regression model in inferential statistics showed an insignificant positive effect of employee involvement on performance. The same regression model also showed that teamwork significantly affected employee performance at Aga Khan University Hospital, Nairobi.

CHAPTER FIVE: DISCUSSIONS, CONCLUSIONS, AND RECOMMENDATIONS

5.1. Introduction

This chapter presents a summary of the study findings, which formed the basis of the study. In addition, the discussions formed a foundation on which the conclusions and recommendations were based.

5.2. Discussions of the Findings

The study's main objective was to assess the effects of employee involvement and teamwork's total quality management principles on employee performance at Aga Khan University Hospital, Nairobi. The study determined how employee involvement and teamwork affect healthcare staff's performance at the university hospital. The target population was the hospital's management staff, including team leaders, supervisors, and managers drawn from nursing, faculty, clinicians, residents, and permanent doctors who had worked in the hospital for more than one year.

5.3 Response Rate

The response rate was 109 out of 132, 83%, and considered well above 70%, considered sufficient (Fincham, 2008). Regarding gender, 56% were female, while 44% were male. It shows a good representation of both genders. Most respondents indicated that they were between 21 and 30 years old at 53.2% regarding the age brackets. It showed that was a youthful workforce in the areas under study. Young employees could be technologically savvy hence more able to communicate regularly and link up with others. This could improve teamwork, involvement and thus performance.

The data collected showed that most respondents had an undergraduate degree, at 55%, followed by 26.60% who indicated a post-graduate degree. The majority of the respondents had a minimum of degree. 45% of the respondents had worked in the hospital for between 0 to 2 years. 38.5% of the respondents had worked at the institution for 3 and 4 years.

5.4 Existence of Quality Objectives

Regarding organizational quality objectives, 80.7% noted that quality objectives existed, while 57.8% of respondents stated a quality assurance program existed at AKUHN. In addition, 84.62% of respondents indicated that the total quality management program had an existence at AKUHN for over three years. Therefore, the responses imply that a total quality management program exists at the institution and has been for over three years.

5.5 Effect of Employee Involvement on Performance at AKUHNN

The first objective was to determine how the TQM principle of employee involvement affects employee performance. The study showed a positive effect of employee involvement on employee performance. However, a multiple linear regression model indicated a statistical p-value of >0.05 at .094. This implied that when employee involvement rises by one unit, performance will increase by 14.4 %, which is statistically insignificant.

There was no significant relationship between the TQM principle of employee involvement and performance at Aga Khan University Hospital Nairobi. Thus, this study outcome differs from previous similar empirical studies that showed that employee involvement was a critical TQM principle that helped improve staff and organizational performance.

This had been a consistent outcome despite other studies like Sadikoglu & Olcay (2014), who observed that most studies on the subject are somewhat mixed and ambiguous. Previous studies have cited lack of employee involvement, inappropriate firm structures, awareness, and commitment as obstacles to employee performance (Sadikoglu & Olcay, 2014). This can be witnessed in this study outcome, where the effects of employee involvement in implementation were less significant.

A lack of awareness could explain the insignificant relationship between employee involvement and employee performance in organizational decision making. Other factors that affect employee involvement in employee performance are a lack of adequate employee participation and delegation (Ambani, 2016; Gikonyo, 2018; Obiekwe et al., 2019).

Study outcomes from Ambani (2016) noted that employee participation led to an increase in job performance. In his study, the effects of employee involvement on job performance were examined. He explored the various aspects of employee involvement in job performance.

The study assessed employee involvement and job performance separately. The study explains why there was a significant relationship between employee involvement and job performance outcome. The provision of healthcare challenges is complex due to various specialities⁷ and cadres of staff involved. Therefore, the various healthcare service provision coupled with a complex healthcare system could explain the insignificant relationship between employee involvement and performance (Osborne & Hammoud, 2017).

Since the study population comprises only staff in the primary healthcare provision, the limited scope could be the main reason why the respondents did not give out higher responses. Therefore, there is a need for studies on the various models that measure employee involvement and participation. In addition, some of the models like the degree of involvement, scope level, and forms of participation should be studied in detail such that effective outcomes on performance should be assessed.

5.6 Effect of Teamwork on Employee Performance at AKUHNN

The study showed that with an increase of teamwork by a single unit, employee performance would rise by 58.3%. The P-Value notes the effect of teamwork on employee performance, 0.000 and less than 0.05 ($0.00 < 0.05$).

In studies on the effects of TQM principles on performance, teamwork has been noted as one that positively influenced employee performance. Unlike employee involvement, there was a positive relationship between teamwork and employee performance among the studied population at Aga Khan University Hospital, Nairobi. Healthcare personnel tend to work together as teams for effective outcomes (Manser, 2009; Rosen et al., 2018).

Doctors work together with nurses, clinicians, radiographers, pharmacists, and other relevant teams to improve hospital set-ups. There are various specialities among doctors and nurses: gynaecologists⁷, paediatricians, oncologists, surgeons, dentists, pathologists, and many others. All the given specialities must work together as a team for good outcomes.

Therefore, teamwork in a healthcare service provider is crucial if effective outcomes have to be realized (Babiker et al., 2014; Rosen et al., 2018). Teamwork on employee performance at AKUHN is essential, given that it is the main principle employed in healthcare service provision.

Coordination and delivery of safe, high-quality care demand reliable teamwork and collaboration within and across organizational, cultural, and technical spheres. Teamwork is imperative and is associated with the quality and safety of the care delivery system (Rosen et al., 2018). A study by Sanyal & Hisam (2018) confirmed a strong relationship between teamwork and performance by the faculty staff at Dhofar University.

Recent studies note a positive relationship between the practice of teamwork and employee performance not only in healthcare sectors but also in other sectors as well (Agarwal & Adjirackor, 2016; Agwu, 2015; Kelemba, Chepkilot, & Zakayo, 2017; Phina, Arinze, Chidi, & Chukwuma, 2018).

A relationship between employee involvement and teamwork must be clearly defined so as they are not treated as synonymous but rather complementary in an organization.

5.7. Conclusion

In conclusion, the study established a weak effect on employee involvement on performance at Aga Khan University Hospital, Nairobi. However, it is essential to note that employees are a vital asset of organizations, without whom no organization could survive and obtain its goals and objectives (Bakotić & Rogošić, 2017).

Therefore, low levels of employee involvement would be attributed to low motivation due to a lack of incentives. In addition, low levels of employee involvement in decisions that directly affect their work could also affect performance. On the other hand, the study revealed that the TQM principle of teamwork positively affected employee performance at AKUHN. Therefore, it implies teamwork plays a significant role in improving employee performance and delivering quality healthcare services to clients.

5.8. Recommendations

The research findings and conclusions from the previous sections form the basis for the recommendations below.

5.9 Management Recommendations

Since the TQM principles of employee involvement and teamwork positively affect employee performance, they must be fully adopted in healthcare-providing organizations. The management should also emphasize delegation, employee motivation, and incentives to boost morale and improve performance and output.

Managers should also increase employee involvement in decision-making, the autonomy of procedures, and incentives to improve performance and productivity.

Hospitals and healthcare management should be enlightened on the importance of total quality management principles on employee performance and enhancing quality healthcare service delivery.

5.9.1 Policy Recommendations

Policies that emphasize employee involvement, teamwork, incentives, and motivation should be put in place. It would enhance employee performance and subsequent high productivity.

5.9.2. Contribution to Knowledge

The research will contribute to existing studies by adding TQM principles to employee performance in tertiary health care providers. In addition, the body of knowledge's current contribution to the area under study should provide a basis for further research by other interested scholars.

5.10 Study Limitations and Suggestions for Further Research

The study was limited to only one institution and specific departments and sections. The study population were only those in direct healthcare provision within the hospital. It might not adequately represent the views of staff from other non-clinical areas of the hospital. For instance, the human resources department could respond better to some issues than the hospital's clinical sections. There were only two out of eight total quality management principles studied. It resulted in a narrow and limited scope of the study.

Future studies may consider incorporating all departments within the hospital to expand the study's scope. Future studies would also consider studying several tertiary hospitals to get a broader perspective and outcome of the study, which will be more broad-based with better results. Further research would also consider incorporating other TQM principles to ascertain their effect on employee performance based on productivity.

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APPENDIX I: LETTER OF TRANSMITTAL OF DATA COLLECTION
INSTRUMENTS

Nicholas Nyamai Kasyoki,

Tel, 0715479833,

Email: nicholasnyamai@hotmail.com.

Date: January 2, 2020.

Dear Respondent

RE: The Effects of Total Quality Management Principles on Employee Performance: A Case of Aga Khan University Hospital, Nairobi.

I am a master's student at Strathmore Business School, Strathmore University, currently researching entitled above. You have been selected as one of the respondents to provide the information and data necessary for this undertaking. I kindly request you to spare a little time and respond to the attached questionnaire. The information to be obtained will be strictly used for academic purposes only, treated with the utmost confidentiality, and will not be shared with anyone whatsoever. Please do not indicate your name anywhere in the questionnaire. Kindly respond to all questions in the most honest manner. I am thanking you most sincerely for your support.

Yours Sincerely

Nicholas N. Kasyoki

APPENDIX II: HOSPITAL CLINICAL STAFF AND MANAGEMENT QUESTIONNAIRE

Dear respondent,

Kindly note that this questionnaire is designed to gather research information regarding the effects of Total Quality Management Principles on Employee Performance: A Case of Aga Khan University Hospital, Nairobi. You are not required to indicate your name anywhere in the questionnaire. The questionnaire is divided into six parts, from A to F, and you are required to respond to each item as appropriate. A private room shall be provided to facilitate the process at your convince. All information provided herein will be treated with the utmost confidentiality.

APPENDIX III: INFORMED CONSENT FORM (part 1)

Study title: EFFECTS OF TOTAL QUALITY MANAGEMENT PRINCIPLES ON EMPLOYEE PERFORMANCE: A CASE OF AGA KHAN UNIVERSITY HOSPITAL, NAIROBI.

Purpose of the study

The respondent is invited to participate in a research thesis on the effects of total quality management principles on employee performance. This study aims to provide a broader understating of the principles of total quality management principles in a private institution, and the findings will help key stakeholders in healthcare in adopting the principles.

Potential risks, harms, and discomforts.

There are no known risks in participating in the research. Questions are focused on experiences working in a private institution. Participation in the study is voluntary. The respondent is free to choose questions they want to answer and those they wish not to answer. They may withdraw from the research at any point without any consequence or questioning.

Potential benefits

This study aims to gain knowledge of the effects of total quality management on employee performance, and thus the research will not have direct benefits. However, following participation in the research, a letter of appreciation will be sent to be included in a professional portfolio.

Additionally, the results will be the institution to provide information on total quality management principles to aid decision making. Finally, the results will also be shared in peer review journals.

Confidentiality

A private and quiet room shall be provided to fill in the questionnaire; all personal information shall be confidential. The respondents' names shall not appear in any reports or publications. Questionnaires shall be kept under locked files.

Participation and withdrawal

Participation in the study is voluntary. The respondent is free to withdraw at any particular point in the study or choose to have their data withdrawn, and there will be no consequences.

Data management

Obtained written documents shall be kept under a locked key in the principal investigator's premises and shall only be accessible to him. All paper records that have been collected shall be disposed of by way of burning, not to allow any reconstruction of the data. The burning of the records shall take place after the analysis of data is complete.

INFORMED CONSENT FORM (part 2)

EFFECTS OF QUALITY MANAGEMENT PRINCIPLES ON EMPLOYEE PERFORMANCE: A CASE OF AGA KHAN UNIVERSITY HOSPITAL, NAIROBI.

I understand the information described to me about this study. All my queries about this study have been addressed to my satisfaction, and I know whom to contact in case of additional questions and concerns. I understand that all information given is confidential and will remain so throughout. My identity and information given shall remain anonymous in reports and publications. I am willing to participate in the study on the impact of total quality management on patient outcomes. I understand that I can withdraw myself and the information given from this study at any time without any implications or consequences.

I agree to participate in this study

Name of participant
Date

Signature

Consent form administered and explained in person by

Name and title

Signature

_____ Date

SECTION A: DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS

1.1 Respondents' Particulars

- a. Gender Male Female
- b. Your age bracket
Below 20 21-30 31-40 41-50 Above 50
- c. Which Department/Section do you work in-----
- d. Title/Designation-----
- e. The number of years you have worked in the organization. 0-2 years 3-5 years 6-8 years 9-11 years 12-14 years Over 15 years
- f. What is your highest level of education?
 - i. Secondary Certificate
 - ii. College Diploma
 - iii. Undergraduate Degree
 - iv. Post Graduate Degree
 - v. Any Other (please specify)

1.2 Basic Information

- i. Does the hospital have a quality assurance department? Yes No
Do not know

ii. Do quality objectives for health services exist in your organization? Yes No
 Don't know

iii. If the answer is YES in ii above, briefly explain-----

iv. Is there any program for implementing Total Quality Management in your hospital? Yes No Do not Know

If the answer is YES in question iv, then answer the next question

v. How long ago have TQM been established in your hospital?

- a. 1 year ago
- b. 2 years ago
- c. Three years ago
- d. Over three years ago

SECTION B: EMPLOYEE INVOLVEMENT

Using a scale of 1-5, Where five is Strongly Agree, 4-Agree, 3-Neutral, 2-Disagree, and 1-Strongly Disagree, please indicate the extent to which you agree following statements about employee involvement and empowerment as TQM principle.

Employee Involvement and Empowerment	5	4	3	2	1
All employees are involved and encouraged to participate in making decisions related to quality					
Every employee is given incentives for improved performance					
All employees are trained in quality-related aspects of the hospital					
Employees are recognized with both monetary and non-monetary incentives for quality performance					
There is an organization-wide delegation of authority to all employees for quality output					
There is regular feedback regarding employees' performance					
There is provision for a safe working environment and regular efforts to improve working conditions					
There are regular incentives to motivate quality service provision					
Employees are made to feel like part of the organization and are loyal and committed to duty.					

SECTION C: TEAMWORK

Using a scale of 1-5, Where 5 is Strongly Agree, 4-Agree, 3-Neutral, 2-Disagree, and 1-Strongly Disagree, please indicate the extent to which you agree following statements about teamwork as a TQM principle.

Teamwork	5	4	3	2	1
All employees are encouraged to work as a team in achieving the laid-down goals and objectives					
All organizational duties, tasks, and processes are carried out by all employees as a team					
Employees are encouraged to support each other in executing various organizational functions					
The management encourages both individuals and departments to work together for the realization of organizational goals and objectives					
The various duties, tasks, and functions are performed jointly and interdependently for better outcomes					
The culture of employee support for each other for better service delivery is encouraged at the hospital.					
All the hospital departments are well-coordinated and organization in the provision of quality healthcare services.					
All employees of the hospital are always prompt, punctual, and timely in ensuring quality healthcare outcomes					
Employees have a culture of stepping in for and supporting each to ensure non-disruption and continuity of services in emergencies.					

**SECTION D: EFFECTS OF EMPLOYEE INVOLVEMENT AND
TEAMWORK ON EMPLOYEE PERFORMANCE**

Using a scale of 1-5, Where 5 is Strongly Agree, 4-Agree, 3-Neutral, 2-Disagree, and 1-Strongly Disagree, please indicate the extent to which you agree with the following statements about the effects of employee involvement and teamwork on performance

Effects of involvement and teamwork on employee performance	5	4	3	2	1
Involvement in making decisions affecting my work has helped me in performing my work better					
Training, recognition, and incentives I get play a significant role in my job performance					
A conducive work environment, regular feedback, and communication play a crucial role in my job performance.					
Being part of the team, support from colleagues and the management has helped me improve on my work performance whereby I do better					
Better organization and coordination of employees across departments in performing duties, tasks, and responsibilities have helped in improving my job performance.					
There is improved work performance when colleagues step out for each other and support each for business and work continuity and service delivery.					

APPENDIX IV: ETHICAL CLERANCE FROM SU-IERC



Strathmore
UNIVERSITY

30th April 2020

Dr Kasyoki, Nicholas
nicholas.kasyoki@strathmore.edu

Dear Dr Kasyoki.

RE: Effects of Total Quality Management Principles on Employee Performance: A Case of Aga Khan University Hospital, Nairobi.


This is to inform you that SU-IERC has reviewed and approved your above research proposal. Your application approval number is SU-IERC0780/20. The approval period is 30th April 2020 to 29th April 2021.

This approval is subject to compliance with the following requirements:

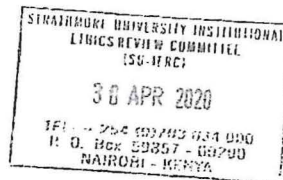
- i. Only approved documents including (informed consents, study instruments, MTA) will be used
- ii. All changes including (amendments, deviations, and violations) are submitted for review and approval by SU-IERC.
- iii. Death and life threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to SU-IERC within 72 hours of notification
- iv. Any changes, anticipated or otherwise that may increase the risks or affected safety or welfare of study participants and others or affect the integrity of the research must be reported to SU-IERC within 72 hours
- v. Clearance for export of biological specimens must be obtained from relevant institutions.
- vi. Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. Attach a comprehensive progress report to support the renewal.
- vii. Submission of an executive summary report within 90 days upon completion of the study to SU-IERC.

Prior to commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology and Innovation (NACOSTI) <https://oris.nacosti.go.ke> and also obtain other clearances needed.

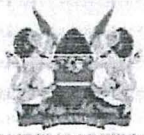




Yours sincerely,


Dr Virginia Gichuru,
Secretary; SU-IERC

Cc: Prof Fred Were,
Chairperson; SU-IERC



APPENDIX V: RESEARCH PERMIT FROM NACOSTI

 REPUBLIC OF KENYA	 NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION
RefNo: 120961	Date of Issue: 15/May/2020
RESEARCH LICENSE	
	
<p>This is to Certify that Dr. Nicholas Nyamai Kasyolzi of Strathmore University, has been licensed to conduct research in Nairobi on the topic: EFFECTS OF TOTAL QUALITY MANAGEMENT PRINCIPLES ON EMPLOYEE PERFORMANCE: A CASE OF AGA KHAN UNIVERSITY HOSPITAL, NAIROBI for the period ending : 15/May/2021.</p>	
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