STRATEGIES INFLUENCING PERFORMANCE OF HEALTH WORKERS IN PUBLIC HEALTH FACILITIES IN WAJIR COUNTY, KENYA

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DECLARATION

This thesis is my original work and has not been presented for a degree in any other university.

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DEDICATION

I dedicate this thesis to my loving wife Khadija Mohamed Ibrahim, our children Abubakar, Marzuq, Ubax and Umeyma and also my brother Khalif Abbey for their immense support throughout my study period.

ABSTRACT

The healthcare workforce is at the heart of all efforts to improve health systems. The provision of health initiatives necessitates the use of qualified and well-supported medical staff. There have been serious shortages of health care workers such as doctors, clinicians, nurses, medical lab officers, nutritionists, etc. in Wajir County, preventing the delivery of important health services. While these shortages have been present for some time, they have been exacerbated by unsatisfactory performance. As a result, long-term plans for increased health worker performance must be developed and maintained in order to boost the current workforce's engagement, productivity, and supports. The study's overall goal was to determine the strategies that influence performance of health workers in public health facilities in Wajir County. The study specifically aimed to establish the extent to which standard-based performance, quality improvement guidelines, professional regulations and recognition systems influences performance of the health workers in public health facilities, in Wajir County. The research focused on several human behavioral theories and used a cross-sectional descriptive research approach to collect data from 130 healthcare workers through a self-administered questionnaire. The six sub-Counties were sampled using stratified sampling and simple random sampling procedures. Correlation analysis results showed that quality improvement guidelines, standard-based performance, recognition systems and professional regulations were positively correlated to performance of the health workers. Logistic regression analysis results showed that standard-based performance, recognition systems and professional regulations affected performance while quality improvement guidelines negatively influenced the performance. The study came to the conclusion that while professional regulations, a recognition system, and performance measured against standards are all positively associated with performance at the bivariate level, quality improvement guidelines are not. Additionally, performance that was based on standards, industry rules, and recognition programs improved it when it was integrated with other setups that took into account all the factors. Performance, nevertheless, was unaffected by the quality improvement recommendations method. The identification system was also the most important strategy in a combined setup, preceded by performance based on standards. It was recommended that the management at public health facilities should ensure that performance based standards are regularly updated, and used for clinical decision-making, they should ensure that employees constantly adhere to the set performance-based standards, the management should ensure there are adequate health workers reward systems for recognizing high performance, ensure there are financial rewards for recognizing high performance, the management at the facility and ministry of health in Wajir county should ensure there are clear quality improvement guidelines, roles and expectations adequate health workers education on quality improvement guidelines, ensure there are mechanisms for ensuring continuing competence, and there are mechanisms for amending scopes of practice in Professional Regulation.

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ABBRIVIATIONS

ARC	African Health Professions Regulatory Collaborative for Nurses and Midwives
ASSIST	Applying Science to Strengthen and Improve Systems
CHIS	County Health Information System
CPAM	Council for Professions Allied to Medicine
GHWA	Global Health Workforce Alliance
HIV	Human Infectious Virus
HRH	Human Resource for Health
IoM	Institute of Medicine
IREC	International Ethical Research Committee
IST	In Service Training
KDHS	Kenya Demographic Health Survey
KIIs	Key Informant Interviews
KMIS	Kenya Medical Health Survey
KMU	Kenya Methodist University
KNBS	Kenya National Bureau of Statistics
MDG	Millennium Development Goals
MNCH	Maternal and Child Health
MOH	Ministry of Health
NACOSTI	National Commission for science and Technology and innovation
SPSS	Statistical Package for Social Sciences
UHC	Universal Health Coverage

USAID United States International Development Agency

WCREC Wajir County Ethical Research Committee

WCRH Wajir County Referral Hospital

WHO World Health Organization

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CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

A health organization's efficient performance is determined not only by its resources available, but also by quality and competency of its health personnel (Bronkhorst & Vermeeren, 2016). This indicates that the difference between these two healthcare organizations is mostly determined by the quality of their health workforce, and that employee competency thus serves as a distinguishing feature among different organizations. Likewise, the usage value of current health employees influences the performance level of health agencies. As a result, in a competitive and volatile health business climate, the effectiveness and effective utilization of health professionals on organizational activities are more heavily reliant on their worth (Onubi et al., 2020).

Only health professionals can run healthcare systems, so their access, acceptance, and quality are key factors in expanding access to healthcare services and ensuring that everyone has the right to the best attainable standard of health. The mere presence of health professionals is insufficient; only their equitable distribution and accessibility by the population, their competency, their motivation and empowerment to provide high-quality care that is appropriate and acceptable to the populace's sociocultural assumptions, and their support by the health system can make theoretical coverage into effective service coverage (World Health Organization [WHO], 2016).

However, challenges with workforce education, deployment, retention, and performance exist in all socioeconomically developed nations to variable degrees. The post-2015 agenda for sustainable development's health goals, such as eradicating AIDS, tuberculosis, and malaria; achieving drastic reductions in maternal mortality; increasing access to crucial surgical services; preventing preventable deaths of newborn babies and children under five; reducing infant death from non - communicable disease; promoting mental health; addressing chronic

diseases; and ensuring UHC, will remain ambitious unless they are preceded by techniques (WHO, 2016).

Globally, investment in the health workforce is lower than is often assumed, reducing the sustainability of the workforce and health systems. The chronic under-investment in education and training of health workers in some countries and the mismatch between education strategies in relation to health systems and population needs are resulting in continuous shortages. These are compounded by difficulties in deploying health workers to rural, remote and under-served areas. (WHO, 2016)

Persistent health workforce issues necessitate a paradigm shift in how the world community plans, educates, deploys, manages, and rewards health workers, according to the World Health Organization. By adopting inclusive models of care that include promotional, preventive, curative, rehabilitative, and palliative services, reorienting health systems toward a collaborative primary healthcare approach depends on team-based care, and fully realizing the potential of technological innovation, transformative advancements and a more efficient use of current health workers are both necessary and possible.

The management of medical systems revolves around people. The provision of health interventions necessitates the use of qualified and well-supported medical staff. All individuals involved in acts whose primary goal is to improve health are referred to as human resources for health (HRH). Doctors, Caregivers, nursing staff, pharmacists, clinical officers, laboratory technicians, management staff, and other personnel; cleaning staff, health record officers, and health analysts; and those who do not straightforwardly provide treatment to people but seem to be critical to the health system's structure and function and bolstering (WHO, 2016).

The Americas, are home to 14% of the worldwide people, bear just 10percent of the world's illness burden, but also have 37percent of the world health professionals and

spend almost half of the world's monetary backing on health (mostly the United States and Canada) (Setiawan, 2021).

As per a 2013 research by the World Health Organization (WHO), nations with less than 2.28 doctors, nurses, and midwives per 1000 people are unable to attain an 80 percent vaccination coverage for maternal and neonatal attendant births. WHO also discovered that 57 nations fall well short of that benchmark, actually results in a 4.3 million-strong shortage of staff, including 3 million physicians, nursing staff, and traditional birth attendants. The report also indicated three other challenges: skill mix disparities, urban-rural allocation disparities, and underperformance (Seitio-Kgokgwe et al. 2016).

Countries' capability to accomplish national and global health goals is significantly hampered by shortages. The shortage of essential skills, competencies, and education required for this workforce to provide acceptable care to the populations they support is compounded by the insufficient quantity of health workers (classified by the World Health Organization as less than 2.6 health care workers per 1000 people) (Bobek & Devitt, 2017).

The significance of HRH stems from the fact that health workers' primary job function is to provide health services, and also indication of the strength link between the concentration, well-being, and competence of HRH in a nation and public medical outcomes. Promotive, preventative, curable, rehabilitation, sustaining, and palliative health care services must be provided to individuals in need in a promptly and reliable manner. These intervention programs necessitate a well-trained, readily available, and well-supported healthcare workforce (Asiamah, 2017).

In Sub-Saharan African nations, there is indeed a pervasive lack of qualified health workers in accordance to the bulk of the community's health demands and disease burdens, which is less than the crucial criterion of 2.4 per 1,000 people. The region is home to around 11percent of the human race 's population, carries about 24percent of the global burden of disease, employs only 3percent of the world health profession, and invests just under 1% of worldwide financial expenditures on health. While the African Region's health worker shortage is truly staggering, the difficulty in Kenya has been attracting and retaining health professionals in rural and difficult-to-reach areas, as well as healthcare worker performance, mal-distribution, an insufficient skill levels, and lax regulation. Enhancing the efficiency of Kenya's health professionals is critical to enhancing service delivery and, as a result, to meeting the country's obligations to post-millennium plans, sustainable development goals, the global health agendas, and activities after 2015 (Bobek & Devitt, 2017).

Health worker efficiency is critical to the delivery of health services; nonetheless, the bulk of Kenya's counties continues to have poor health worker performance in public health facilities. This has resulted in lack of accessibility and ineffective care, resulting in poor healthcare outcomes when people opt out of services or are mistreated as a result of harmful behaviors. This indicates that the vast majority of countries are unable to offer primary health services to their citizens, which are defined as 80% vaccination coverage and 80percent skilled health professionals' attendants at deliveries (Bobe et al. 2017).

Even though there are no essential workforce scarcity, health care workers might very well fail to continue providing quality care due to performance obstacles such as uncertain norms and expectations, vague guidance, unsatisfactory working processes,

improper skill combination within the work context, skills gaps, absence of feedback, complicated workplace environment, and inappropriate incentives (Ishijima et al. 2020). Although there is restricted indication of the efficacy of various forms of interventions aimed at improving worker performance and efficiency, key characteristics are surfacing from published studies and nation observations that can notify a strategy for improving the achievement and efficiency of health professionals and health employee teams (Hoque & Shahinuzzaman, 2021).

Kenya seeks to raise the quality of the healthcare provision to the highest levels through qualified and sufficient health workers (Vision, 2030), but it continues to pose drastic cutbacks of health care workers, particularly in the rural and difficult areas. With an average of 18 physicians, 24 medical officers, 9 pharmacists, six pharmaceutical scientists and engineers, and 176 nurses for every 100,000 people, and a cumulative of 147 medical workers, Wajir county falls short of the Global Health Organization's minimum recommended staff numbers of 37 and 357 physicians and nurses for every 100,000 people, and a limit of 250 healthcare personnel for every 100,000 people (WHO, 2016).

Notwithstanding the fact that all public-funded institutions in the country provide free maternal health care coverage, mothers suffer and die. Despite the availability of extensive strategic HRH plans as treatments to promote maternal, neonatal, and child health, the county death rate climbed from 412 for every 100,000 live births in 2004 to 489 for every 100,000 in 2009 (Maternal and Child Health, [MNCH], 2014; Kenya Demographic Health Survey [KDHS], 2009). As prenatal, neonatal, and child health indices, SDGs three, which targets to ensure healthy lives and promote well-being for

all at all ages, has made the least development; these statistics remained alarmingly high, mismanaged, with little cooperation and non-commitment from health

Several international agreements and care workers and legislators (Kenya Medical Health Survey [KMHS], 2014). strategic plan has emphasized the relevance of HRH expenditures throughout the previous decade. Lawmakers and programme managers, on the other hand, continue to struggle to identify the best course of action for improving employee work performance. Due to important human resource labor shortage, especially in low contexts, Kenya should not only create lengthy strategies for increasing healthcare worker output and retention, but also enhance the effectiveness of its health care workforce in order to achieve the best possible outcomes and implications with limited resources.

The growing acceleration for accomplishing the post-millennium mental wellbeing development priorities provides an essential chance to assess public health workers' achievement in light of the sustainability, including Universal Coverage (UHC), and create suitable strategies to address challenges and capitalize on possibilities.

Studies that were conducted locally include the following: Were and Moturi, (2017). conducted research on the factors that influence health care professionals' performance at public health centers in the decentralized governmental system, with an emphasis on the Embakasi East Sub-County in Nairobi County. Training, employee appreciation, and staff involvement, according to the results, are crucial components for boosting the ability and desire of medical professionals. The report also recognized noteworthy efforts in healthcare worker retraining as a means of improving competence. Were and Moturi (2017) investigated the impact of the workplace environment on nursing performance in decentralized health care services in Baringo County, Kenya. The

findings revealed that career advancement, management techniques, and workloads all had a substantial impact on nurse effectiveness. The findings also reveal but under a decentralized health sector, nurses performed poorly due to a lack of acknowledgment. Were and Moturi (2017) used a cross-sectional research design, but this research would use a descriptive research methodology.

In comparison to other Kenyan counties, Wajir County ranks third in maternal deaths and infant death ratios, with 581 stillbirths and 1,685 mortality rates for every 1000 births. Mortality rates in general populace health centers in the County still are shockingly high due to pregnancy-related causes such as post-partum blood loss, infectious diseases, hypertension, and obstructed labor, as well as dengue, leukopenia, HIV, as well as pneumonia, which are totally avoidable with the obtainable, skilled, and able to respond health workforce.

1.2 Statement of the Problem

The Wajir County Investment Plan for the health sector (2014-2019) intends to retain, maintain, and strengthen the ability of health care workers in public health centers, resulting in improved productivity and clinical outcomes; increase capacity maternity, neonatal, and prenatal care. However, due to low functioning of service health professionals as a result of insufficient application of performance-based standards erformance improvement requirements, and inadequate professional oversight, problems exist in executing these human capital reforms (McCarthy et al, 2014).

Even in the absence of major manpower shortages, health care workers failed to offer high-quality care and hence fail to minimize mothers, baby's mortality and morbidity. In comparison to other Kenyan counties, the County ranks third in maternal deaths and infant death ratios, with 581 stillbirths and 1,685 mortality rates for every 1000 births.

Mortality rates in general populace health centers in the County still are shockingly high due to pregnancy-related causes such as post-partum blood loss, infectious diseases, hypertension, and obstructed labor, as well as dengue, leukopenia, HIV, as well as pneumonia, which are totally avoidable with the obtainable, skilled, and able to respond working population.

Much of the previous research discussed above had both contextual and methodological shortcomings, as seen by the following. None of them had looked at the impact of benchmark performance, quality improvement, professional regulation, and recognition systems on the performance of health professionals in health facilities on such a large scale as this research did. A descriptive research design was used in this study. As a result, the present study took a broader perspective to fill these theoretical, situational, and methodological gaps.

1.3 Purpose of the Study

The purpose of this study was to determine the strategies that influence performance of health workers in public health facilities in Wajir County.

1.4 Specific Objectives

The specific objectives of this study were;

i. To establish of the extent to which standard-based performance influence performance of the health workers in public health facilities, in Wajir County.
ii. To determine the extent to which quality improvement guidelines influence performance of the health workers in public health facilities, in Wajir County.
iii. To establish the extent to which professional regulations influence performance of the health workers in public health facilities, in Wajir County.

iv. To determine the extent to which recognition systems influence performance of the health workers in public health facilities, in Wajir County.

1.5 Research Questions

The study sought answers to the following questions:

i. To what extent does standard-based performance influence performance of the health workers in public health facilities, in Wajir County?
ii. To what extent do quality improvement guidelines influence performance of the health workers in public health facilities, in Wajir County?
iii. To what extent does professional regulations influence performance of the health workers in public health facilities, in Wajir County?
iv. To what extent do recognition systems influence performance of the health workers in public health facilities, in Wajir County?

1.6 Justification of the Study

Several international agreements and action plans throughout the last years have emphasized the relevance of HRH investments, especially those associated with the performance of public health employees. Legislators and program managers, on the other hand, continue to struggle to identify the best course of action for improving public health worker performance. Significant and critical shortages, particularly in low-income areas, require not only the creation of long-term plans for growing healthcare worker production and detainment, but also the need to improve the performance of the public health workforce; there is a need to attain the best outcomes and effect with available resources. The primary objective of this research is to advance recommendations for enhancing healthcare worker performance, which is critical for enhancing healthcare system and achieving wellness post-Millennium Development

Goals (MDGs), SDGs, and other country- and county-specific commitments, regulations, and activities beyond 2022.

1.7 Limitations of the Study

During the duration of this investigation, the research faced a number of obstacles. Because the participants had a demanding schedule, the research left the questionnaires with the respondents for them to complete at their convenience. Another issue was the daily schedule of certain nurses, particularly those on the evening shift; the researcher verified the timeline on the day they were to be accessible during the day; this sort of arrangement necessitated more time for data collection and multiple visits to the same institution to meet all of the selected respondents.

1.8 Delimitations of the Study

The research was limited to Wajir County and focused on standard-based performance, quality improvement guidelines, professional regulations and recognition systems influence on performance of health workers in Wajir County. The study was carried out in the following hospitals Habaswein District Hospital, Buna Sub-District Hospital, Arbajahan Sub-District Hospital, Wajir District Hospital and Leheley Sub-District Hospital. The respondents comprised 450 health care workers from the five public hospitals. From which a sample size of 130 respondents were selected.

1.9 Significance of the Study

This research will be valuable in providing quantitative information on ways for enhancing the performance of health care workers in order to build healthcare systems in Wajir County and Kenya overall. The research also attempts to contribute to the existing of expertise in management of human resources for care and wellbeing

information systems. The results and recommendations was help the community by allowing qualified hospital staff to provide better service.

The research is designed to help legislators, programme managers assess and formulate strategies for significance interventions, as well as make suitable recommendations to grow exponentially the performance of public health facilities for improved personnel management and improved health outcomes. The identification of additional research areas based on the results, conclusions, and recommendations would assist academics, learners, and scholars.

1.10 Assumptions of the Study

This study assumed that participants were to freely respond to questions and provide the data requested. It was also anticipated that the study would obtain the necessary data within the time frame.

1.11 Definition of Key Terms

Performance :	The accessibility, productivity, skills, and reactivity of health professionals are evaluated in calculating performance for health workers. Higher efficiency is shown by the development of these four factors.
Professional regulation	The establishment of professional training standards, the publishing of codes of professional behavior and values, the acceptance of certification mechanisms, and, eventually, the execution of disciplinary proceedings are all examples of professional regulating processes.

Quality improvement :	Is a method for analyzing practice results and making improvements that is methodical and formal.
Rewards and Recognition :	Is a method for analyzing practice results and making improvements that is methodical and formal.
Standard-based performance:	The degree of power or possibility given to an employee determines how responsible he or she is for work performance. The need of ensuring accountability for job performances is emphasized in benchmark efficiency.
Strategy:	
Influence	A course of action planned to accomplish a long-term or overarching aim or goal. to influence someone to alter their actions, beliefs, or opinions, or to influence change in general. It is the capacity, force, or ability to persuade or encourage someone to choose a certain course of action.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

The quantitative evidence from previous research on health worker performance, the underlying theories of performance management, the conceptual model used in the research, and the conceptual shortcomings that guide the investigation are all presented in this chapter.

2.1 Health Worker Performance

Any healthcare organization's purpose is to improve performance in order to not only survive but also to thrive. To keep up with the demands of today's increasingly competitive healthcare markets, a health institution must maintain a culture of lifelong improvement and development among its employees. Furthermore, the company must set goals, track progress toward those goals, and make adjustments as needed to meet the stated objectives (Atinga et al., 2020).

The actual output or outcomes comprise performance of the organization, which includes regular efforts to set organization objectives, regularly monitor towards certain goals, and make some adjustments to accomplish those goals and success (Bäckström, 2019). An institution's performance is determined by how successfully its human resources are managed. Organizational and human actions can both have an impact on performance. Managing the performance of public health professionals is one of the most important success elements in improving the performance of public health organizations. The availability of qualified persons and the manner in which they are managed are the foundations for generating high human resource productivity (Chan et al., 2017).

Results standards, quality assurance recommendations, and professional supervision and recognition systems are among the tactics used by public health institutions to get a better knowledge of health professionals' output and to turn to more inventive changing sources. Systems that recruit, develop, inspire, and retain staff to enable the smooth execution of major changes and the preservation of health centers and their membership have been identified as strategies for increasing health officials' productivity (Meegahapola & Prabodanie, 2018).

Improving health workers' performance can generate increased knowledge, motivation, thanks to motivation and dedication, health professionals' synergy and devotion result in a source of continuous exceptional results for the health agency (Teizer, 2016). Furthermore, these techniques are concerned with personal, relational, and team dynamics, implying an attempt to improve individual or group performance as well as people's teamwork in organizational contexts (Fiorillo, 2016). The goal of enhancing the health of an organization effectiveness is to improve the performance of its groups and individuals (Simpson & Sam, 2020).

Performance management, job design, incentive compensation, employee monitoring, and development of an organization and intervention strategies have all helped firms establish settings that cultivate, encourage, promote, and reaffirm employees' efficiency (Ingelsson & Bäckström, 2017). As a result, firms must implement performance management approaches that have proven to be not only productive but also a preferable alternative to wasting limited and valuable resources on futile endeavors. Incompetent management practices, administrative inefficiencies, and insufficient overall productivity are prevalent in many enterprises, necessitating the integration of HRH efficiency interventions to embrace quick, fully prepared techniques (Sarotar iek & Mulej, 2016).

In government hospitals, a health worker's performance is determined by the availability, competence, productivity, and responsiveness of the personnel. Poor service provider's performance results in lack of accessibility of service and incorrect care, both of which result to lower healthcare outcomes because people do not use services and are mistreated as a result of harmful behaviors. The number, quality, and kind of professionalism among health workers define output and productivity, and they have a significant impact on the progress of health service delivery (Azhar & Choudhry, 2016). Too little employees, staff who do not provide care according to standards, and staff who are not mindful of the needs of the society and patients all contribute to poor efficiency.

Agreement on the components and indications of staff performance is required for measuring and evaluating it. According to the WHO's analytical framework (WHO, 2016), the following levels can be defined, each of which is measured by a variety of criteria. Result efficiency is a mixture of the four impacts listed above. Waiting time, staff ratios, overtime, staff turnover, health adherence, productivity increases, occupancy rate, outpatient, and solutions delivered for every worker or facility are all indicators of increased performance. Patient contacts, competences, prescription procedures, protocol compliance during diagnostics and patient experience, response, and client happiness are all important factors to consider. Reimbursement rates and cross-infections, as well as case mortality rate and active excellent service, are all factors to consider (e.g. decubitus ulcers).

2.2 Standards-based Performance

A standard, according to Agnihothri and Agnihothri (2018), is a "...written value statement of rules, conditions, and activities in a patient, member of staff, or the system sanctioned by proper authorities." "...management expressions of performing

threshold(s), requirement(s), or associational) that workers must meet to be rated at various standards of achievement,"(p.248). Anthony and Stablein (2016) write. Standards, according to Atinga et al. (2020), should indeed be produced with participation from various key stakeholders, managerial cadres, and health practitioners' professionals, and therefore should be founded on a firm foundation of evidence. Nevertheless, emerging economies are hampered by a shortage of best practice or by obsolete principles and regulations; institutional ability to just provide evidence-based information to back up the establishment of quality standards is rare (Best et al., 2016). In this section, we'll go through a variety of performance-based standards.

2.2.1 Decision Support

The phrase "advanced analytics" is used in this section to represent brief patient- or quick meeting information designed to motivate a practitioner to take or avoid a certain therapeutic action, or even to make a ("right") decision (e.g. a diagnosis). In opposed to feedback, which gives a retrospective view of past performance, decision support frequently functions as a cue, typically supplied shortly before or during patients, and therefore may be considered a proactive or legitimate method (Bronkhorst & Vermeeren, 2016).

Other tactics, such as general boards in the consultation room, may strive to "reassure" providers regarding required duties, and yet here we concentrate on patient-specific decision making, that might do more than "alerting," providing new information to "endorse" scientific proof choices. Automated technologies are typically used to give this moment in time decision assistance (Atinga et al., 2020). As a result, we will keep

referring to the research for the effectiveness of computerized management information systems in this section (CDSS).

Management information systems, which may turn current clinical guidelines suggestions or predictions from technology and new systems into computerized reminders, are becoming more common in medical records. When a top - notch action is advised or contra-indicated, data from the patient history is examined using a series of procedures, which activate display prompts. These alerts but may not be set up so that the supplier must respond in order to overrule the recommendations (Chan et al., 2017).

2.2.2 Updating standards

Making sure that standards are regularly updated, tried to communicate to providers, and scientific proof is crucial to ensuring health care efficiency and results in fields like healthcare coverage, where technological advances, drugs, and processes are constantly being developed, where there is a vast body of scientific evidence to support medical decisions (Bharath, 2021). Better health outcomes are connected to adherence to scientific proof requirements, while patients suffer significantly when clinical care is not delivered in accordance with scientific proof standards (Bobe et al., 2017).

Numerous explanations why standards-based efficiency is typically hard to reach and maintain, according to a large body of studies on standards compliance. At the most fundamental level, health care workers could be unaware of standards because they have still not been conveyed or distributed nationwide to the national levels. In other circumstances, systemic problems such as a lack of the necessary materials or technology to execute as per rules, inadequate evaluation and monitoring of guidelines

application, and a shortage of human workforce can all have an impact on standard execution (Bobek & Devitt, 2017).

2.2.3 Adherence

Global or locally tailored standards are explicit declarations of expected excellence in the execution of a health-care activity (Santos et al., 2017). They can take the shape of protocols or clinical management guidelines that specify how a specific health-care activity should be carried out in order to obtain the desired outcomes. They specify what is required by both health workers and clients in order to provide high-quality services. Most improved health initiatives, such as certification of health-care facilities, independent evaluation, continual improvement standards, and quality enhancement, are built on standards (Best et al., 2016).

In order to encourage and maintain health workers' compliance to proof standards, research has demonstrated that combinations of interventions are now more efficient than individual interventions (for instance; graphic aids, clear and repeated messages, opportunities for discussion and experimentation, making desired behaviors compatible with current practices, and patient, peer, and administrator authorization and support) (Buttigieg et al., 2016).

2.2.4 Feedback

In this have a look at, remarks refer to as a shorthand for turning in statistics about scientific overall performance supplied to affected character populations over a positive time frame to professionals, practices, or establishments, for the reason of growing the group’s or clinician’s perception into the brilliant of care they offer, and enhancing it whilst feasible. This may arise inside the context of compulsory or voluntary projects

and can be prepared by using manner of external organizations (such as the healthcare gadget or an insurer) or inner/community organizations. The records provided is usually based totally on a systematic "audit." The literature separates such medical audits from remarks supplied as a part of continuing professional improvement, even though a number of the equal concepts observe, as learning from comments is an essential human mastering strategy (Buttigieg et al., 2016). Many clinical overall performance remarks projects avoid the term "audit" due to the perceived terrible or punitive connotations. Therefore, while the literature frequently makes use of the term "audit and feedback," in exercise the common terminology for those duties consists of universal overall performance comments, practice reviews, file playing cards, scorecards, high-quality dashboards, key overall performance symptoms, and benchmarking. Regardless of the terminology, the importance of the size trouble of the method can't be underestimated (Cahaya et al., 2017).

An audit entails measuring medical performance in opposition to specific requirements or standards, commonly knowledgeable by using proof-based totally clinical recommendations (e.g. Warding off beside the point or wasteful assessments) or affected person results (e.g. Health facility admission or loss of life). Audits may be primarily based on robotically available facts, collectively with administrative databases, digital patient information, or clinical registries, or they may be based totally on records accrued specially for this cause. Feedback may also be based on patient-recommended measures (based totally mostly on their experience of care or based on the completion of installed scales to assess scientific results). Sometimes, feedback consists of medical audit, affected person-cited measures, plus peer or personnel enter, a method known as 360 comments. Regardless of the statistics assets for the audit, it ought to be diagnosed that no longer all-important aspects of care are sincerely

measurable, and in deciding on some components of care to be measured there may be a hazard of unintended results, inclusive of tunnel imaginative and prescient (Candido et al. 2020) or gaming (Chan et al. 2017). Measurement is constantly to some extent wrong, however is often nevertheless useful for studying and enhancing basic performance.

The comments itself includes a number of key capabilities (Choi et al. 2018). Information approximately factors of clinician overall performance, approximately sufferers' reports, about the organization of care, its effects, and/or the prices of care can be summarized in written, graphical, and/or verbal layout. It may be brought to the recipient electronically, on paper, or in person. In phrases of content cloth, the recipient's own overall performance is summarized using aggregated populace-degree information, even though there may be affected individual-precise information as properly. The recipient's non-public standard performance over time can be as compared to a goal and/or to the general overall performance of peers, and there may or might not be and define or adjustment for case blend. In addition, tips or movement plans may be provided to help the recipient beautify their basic performance. Usually, feedback is provided outdoor the context of affected person interplay, and commonly brought outdoor of clinician–affected person consultations (Elsheikh et al., 2017).

2.3 Quality Improvement Guidelines

The advancement of technology aims to introduce systematic changes to the delivery of healthcare in order to increase the likelihood that these changes will lead to better care. Many basic, low-impact interventions that could save lives and ease suffering are not reaching the people who most need them, despite the wealth of evidence-based recommendations and consensus on what must be done (Elsheikh et al., 2017). The advancement of technology aims to introduce systematic changes to the delivery of

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Improving the performance of the health frame of employees at each level of the fitness system, including the county and sub-county, control degrees, nearby centers, and businesses, is necessary to achieve performance and ensure that all segments of the population have access to high-quality treatment. To do this, managers, front-line staff, network medical examiners, and volunteers must be given the tools they need to manage their general performance, learn how to improve care, and screen and test exceptional practices and fitness results so that data can be used to make decisions and create guidelines. This functionality, enhanced at all levels of care delivery, leads to strengthened structures and sustained excellence of care. A large portion of contemporary acknowledgement of top development has focused on changing care delivery models to enable providers to adhere to evidence-based recommendations (Ahmed et al., 2018).

These memories in modifying development approaches to function within organizational boundaries are displaying encouraging outcomes. Advanced care methods have been inspired by employee involvement in quality improvement

businesses, which has also had an impact on individual outcomes. The health system can tap into the experience of groups of health professionals operating at various levels of the system to collaborate in development services and produce solutions that have the potential to be innovative. Medical and non-medical medical examiners at all levels of the system can develop and test practical solutions that better utilize modern assets to improve health care by involving health workers in the design, testing, and implementation of changes (Sibthorpe et al., 2018).

Education of healthcare professionals may also only partially close the "recognize-do" gap if healthcare professionals do not regard themselves as agents of change and are not given the authority to implement change. For instance, more nurse engagement in high-income countries has been linked to improved patient satisfaction, nurse retention, and morale; fewer headaches; and advanced scientific measurements including fewer infections and medication errors (Choy et al., 2018). In a similar vein, a recent unpublished investigation from Tanzania discovered that the percentage of HIV patients who failed to follow up was three times higher in hospitals where the medical staff engagement levels were below average. Since the majority of groups that take part in improvement activities complete these tasks without remuneration, it is clear that non-fabric incentives are at work (Marmat & Jain, 2020).

There is a true need to better understand what drives firms to participate in improvement sports and incorporate those factors into their improvement, which is why research in this area is only getting started. improving the efficiency, efficacy, and sustainability of internal scientific expert education. A significant portion of the financing was used to build medical professionals' competency to provide excellent services through in-service training (IST). IST has become well-known as a way to scale up the unexpected development of health professional talents. However, challenging circumstances

including wasteful duplication in education and interruptions in top-tier providers have called into question the viability, efficiency, and sustainability of educational spending. The Global Health Worker In-Carrier Training Improvement Framework, which codifies training recommendations, was developed and launched by organizations that include the USAID's Applying Science to strengthen and Improve Systems (ASSIST) Project in response (Buttigieg et al., 2016).

incorporating developmental skills into pre- and on-the-job training. All healthcare systems have some level of disease, inefficiency, and ineffectiveness, and continuous improvement is a crucial component of every medical examiner's day-to-day work. Most health professionals' education and training structures aren't giving medical examiners the skills to brainstorm, examine, check, pinpoint into impact, and spread changes, even though they are getting better at helping them develop distinctive abilities to practice in their profession. Ad hoc in-house training is therefore required for development commitments, despite the fact that group worker turnover and rotations reduce the effectiveness of development teams (Green et al., 2016). The availability of a current and future body of fitness device personnel who are qualified to direct and participate in enhancing care is a crucial prerequisite to the sustainability of past and present investments in fitness care development (Ovretveit et al., 2016).

In addition to adding development skills into pre-carrier education, work is being done in the East Africa Region to establish the top middle development skills that may be taught in medical expert training and education. To integrate improvement skills into clinical expert education and training, there is currently a shortage of literature and possibilities for collaborative learning. Prior to that, a platform is required to bring together important players to discuss curricula, perspectives, and individual learning techniques (Short et al., 2019).

2.4 Professional Regulation

In order to ensure that fitness professionals are prepared to exercise in a way that is relevant to the general public who are recipients of such care, fitness professional law defines and establishes guidelines about standards for professional exercise and training. Regulators accomplish this by keeping protected registers of people who fulfill their standards for education, training, professional talents, conduct, and health. There are four diagnosed components: registration, popular culture, certification, and behavior control, average performance, and impairment topics (Were & Moturi, 2017).

The 2006 World Health Report highlighted three essential regulatory structure models—self-regulating expert institutes, the command and manipulate approach of institutional regulators, and civil society advocacy—while also identifying fundamental regulatory structure deficiencies. The report emphasizes that none of those, taken individually, are adequate to control the conduct of medical examiners and institutions and comes to the conclusion that regulations involving all three bodies, as well as healthcare organizations and the workforce, are much more likely to produce acceptance and cooperation (Adisa et al., 2020). The challenge of specific scopes of practice and overlapping responsibilities has presented task-sharing as a project in the direction of a way to better meet patient and population goals as the scope of practice of modern practitioners has accelerated and the number of medical examiners has increased (Lillis & Varetto, 2020).

Overall, the evidence base focused on unmarrried profession or legal experience. With few exceptions, studies have been descriptive and have infrequently tested components of the least well-established and efficient method of enforcing regulatory structures and strategies. But there are aspects that require attention from multiple USAs. Case studies are regular law that protects the public but allows for change; a listing of those who are

qualified and educated instead of those who have actually completed a program; oversight or accreditation of pre-carrier education programs; mechanisms to ensure ongoing competence; techniques that allow for changing exercise scopes to satisfy shifting fitness aspirations; open-and-shut policies that encourage practitioner mobility while simultaneously defending the public; A coherent criminal law framework enables authorities to uphold their obligation to protect the vast majority of people, but the divergence between the ministries of education, health, work, and other departments has led to fragmentation and inefficiencies in planning. It has been proposed that in order to address these and other common performance gaps, a structures-based approach is necessary (Pacey, et al. 2017).

The 17 U.S. initiative African Health Professions Regulatory Collaborative for Nurses and Midwives (ARC) recently unveiled a tool-based strategy for the United States of the United States evaluation about regulatory reform and a technique to play and determine alternative. Regulatory reforms cannot be implemented in a vacuum, without consideration for the legal and cultural heritage of the countries involved, or without excellent regulatory and excellent assurance systems that interact and contact with regulatory mandates (Sarabdeen & Moonesar, 2018).

Regulation is a critical issue of any method to beautify the overall performance of medical experts. Laws and suggestions, right away and not without delay, have an effect on who can do what to whom and wherein. Policy-makers view law as a tool in addressing staff imbalances and exceptional demanding conditions, and assembly the targets of improving health frame of workers' normal performance. Key problems within the law include, why alter, what to alter, the amount of regulation, who have to modify and how the consequences of regulation should be measured (Oppi & Vagnoni, 2020).

Market failures within the health employees are widely known and no longer correcting them may additionally bring about immoderate harm to populations: for instance, if there were no minimal qualification necessities to getting into the fitness tough paintings market, populations might be exposed to incompetent carriers and those misrepresenting themselves as licensed health-care corporations. Also, an unregulated market could not reply to the goals of the poorer sections of the population get right of entry to work out and the scope of responsibilities that can be finished; recognize of moral norms; regulatory mechanisms embody accreditation, licensure, and every so often periodical re-licensure, expert inspection and obligatory continuing education (Anthony & Stablein, 2016). In low-earnings worldwide places, the lifestyles of statutory authority for the law of the medical, dental, pharmaceutical, nursing, and midwifery professions is common, but unusual for mid-stage health workers, leaving them in a criminal limbo (Kjellström et al., 2017).

In a small extensive fashion of international locations, there exists a Council for Professions Allied to Medicine (CPAM), which, in pleasant instances, does cowl medical officials and scientific assistants. In terms of effectiveness, there are sometimes grave deficiencies within the strategies of identifying competence to exercise. Two deficiencies, specially, are highlighted: the evolving roles of health workers have not been as it must be identified an instance is the emergence of recent prescribers in response to the HIV epidemic; and lifelong registration implying that there can be a high risk of talents decay over the years. This is specifically in all likelihood to arise whilst the regulatory body is a branch of the equal entity answerable for training medical examiners for instance Ministry of Health (MOH) wherein graduates of the education applications are robotically licensed to exercise and now not the use of an impartial evaluation of competency (Cheloni & Tinker, 2019). However, pinnacle

exercise inside the shape of the shift from a single lifetime registration or licensure to a sample of periodic re-licensure trouble to evidence of non-prevent expert improvement and/or re-assessment of competence to exercising is increasingly encountered (Santana & Loureiro, 2019).

Regulation may be a barrier to innovation if it's far too inflexible, excessive, or now not conscious of evolving wishes. Rules and norms also may be too pricey to place into effect and therefore deprive institutions of belongings that might be devoted to improving their basic performance. A balance amongst flexibility and effectiveness wants to be discovered. States with a lifestyle of centralization will be inclined to anticipate this selection through their ministries of health or schooling, or groups created for that purpose. In others, the dominion has the closing obligation for protective most people hobby, but it delegates regulation rights and duties to professional councils. Regulation is finished through the use of buddies in preference to bureaucrats or the market (Shakibaei, 2019). However, more and more in those situations, there may be greater oversight and responsibility of the regulator and a bypass to greater public engagement in law. This is because of the fact it's far increasingly more recognized that the proper impetus to statutory recognition have emerge as to relaxed an expert monopoly, the continued protection of which isn't always within the public hobby (Bharath, 2021).

There also are unbiased organizations, alongside expert associations, which in some worldwide locations also can modify get entry to medical specialties, or accreditation corporations that adjust educational institutions and programs. In exquisite, nations use a combination of those mechanisms. The effectiveness of each modality relies upon on several elements and varies in step with the united states of a, period, or perhaps the professional group (Al Harbi et al., 2019).

The capacity of the professions to control themselves and to stability their self-hobby with most people interest is a trouble of persevering with debate. To decide who have to be the regulator and what should be its role, with what powers, and the manner and to whom it should be accountable is a matter of acceptability as an lousy lot as of effectiveness. For instance, in Australia and Canada, accreditation is a backside-up peer-managed way on the same time as in France, it's miles government-led. In a few times, educational establishments have a take a look at the requirements of worldwide accreditation our bodies, in addition to or in substitution of country wide mechanisms. This is the case for medical education in Canada, for public fitness in Europe7, and for health offerings control in Canada and the United States of America, and an increasing number of in Asia, Europe, and Latin America (Al Harbi et al., 2019).

In assessing whether or not health personnel fulfill its social duty mandate to the population it serves, the training law tool of health professionals should be assessed in phrases of its impact on quantity, first-rate, and relevance primarily based on suitable symptoms and symptoms. A robust, obvious machine of duty and public reporting mechanisms must be in vicinity to ensure that regulation produces the expected outcomes and that it isn't monopolized with the useful resource of interest corporations. Implementing the ones key regulatory interventions calls for collaboration among national stakeholders, collectively with the scientific expert regulatory our bodies and professional establishments (Rubel et al., 2021).

2.5 Recognition Systems

As per research, non-financial incentives related to medical based on the experts' career development and outdoor environment (such as individualized mentoring, basic performance reviews with feedback, continuing education, encouraging professional networks, and non-financial reputation of top performance) are just as significant as

financial incentives (Santana & Loureiro, 2019). There is growing evidence that publicly traded businesses that are intrinsically motivated want to pursue a passion for no apparent reward besides the passion itself, put forth more effort and need fewer extrinsic incentives than self-concerned carriers, and that the provision of financial bonuses can diminish motivation, dispute with or minimize intrinsic motivation, get worse public performance on difficult cognitive duties, and minimize the choice to people. (Shakibaei, 2019). Even when financial incentives have been successful, they have rarely been the only factor in motivating employees. Other factors, such as respect and esteem from peers, managers, and the society, recognition from management teams, friends, patients, and the society, a supportive work environment with supportive business norms, and opportunities for professional growth and improvement are also important (Rubel et al., 2021).

Many one of a kind factors have an effect on group of workers preferred performance. For instance, there can be a growing frame of research that suggests that technique pride, productiveness, and organizational willpower are all “influencers” of high-quality and overall performance which is probably impacted by management practices and control and governance structures. Recent analyses of human resources management, supervision, and mentoring interventions identified key success factors to include active team participation in problem-solving and stakeholder engagement in software development, implementation, and evaluation; organizational willpower and leadership; networking and supportive relationships; and organizational culture.

Other vital predictors of medical professional typical overall performance and productiveness consist of: The role of organizations is big for network medical experts, whose universal performance relies upon beneficial useful resource from each the

community and formal fitness tool. Supervision and control of organizations; medical examiners are traditionally supplied by means of the health system but regularly cautioned as prone and vain (Anthony & Stablein, 2016). To make sure that both the supervisor and the supervised know exactly what is expected of them in the given situation, the degree and scope of supervision must be clearly defined. 67 Public acknowledgements of overall performance and participation, as well as the submission of feedback and tracking through village health committees, are examples of community involvement in the supervision of network medical examiners (Oppi & Vagnoni, 2020). In order for the supervisor and the monitored to recognize what is expected of each in the specific setting, the degree and extent of supervision must be clearly defined. Experience with community engagement in networked medical examiner oversight includes offering feedback on evaluations, 67 public acknowledgments of general performance and contribution, and offering feedback and tracking through village health committees (Oppi & Vagnoni, 2020).

2.6 Theoretical Framework

Situation analysis, interventions (feedback), outcomes, consequences, conclusion, and effect were all incorporated into the framework used in this research. The framework demonstrates that factors related to the macroeconomic level, or the as a whole healthcare system, like allocation of resources, healthcare worker making plans and implementation, existing regulatory environment, information exchange and ruling processes, and accountability measures, are factors in influencing workforces' behavior and attitude (at work). Legislators and planners in the healthcare system, and other national players including the finance ministry, education ministry, medical organizations, civic groups, and financing agencies (healthcare system), can impact these (Al Harbi et al., 2019).

At the segments and sub, such as the purchase of materials, pharmaceuticals, and supplies, collaboration, and HRM operations at the work (district or facility, for example). Managers, coworkers, patients, and other local partners can, in theory, impact these (health facility level). Individual qualities and living situations, such as living in a combat zone, being a female, or being a newly minted professional, are all factors. These necessitate unique group strategies, which can be established nationally by managers or regionally by regulators and planners in collaboration with partners (Rubel et al., 2021).

Individual-level treatments are developed after a thorough examination of the factors that affect health care professionals' performance. The implementation of these initiatives (inputs and processes) results in outputs (anticipated outcomes) such as better pay and workplace conditions, increased motivation, and enhanced employee retention, among other things. These, in return, lead in quantifiable increases in the accessibility, creativity, competency, and/or reactivity of health employees as a result of the treatment (Shakibaei, 2019).

The research was influenced by a number of theoretical frameworks for human interactions or behavioral approaches, including Abraham Maslow's theory of the hierarchy of needs, the Douglas McGregor theory, the Vroom theory of expectation, and the systems theory of Fredrick Hersberg. The behavioral approach focuses on how managers relate to their subordinates. It is based on research into how human factors and productivity are related. In addition to achieving the financial objectives of the company, managers must seek to address the social and psychological requirements of employees, as this increases productivity.

2.6.1 Abraham Maslow’s Hierarchy of Needs Model

The Hierarchical of Theory of needs was created by Abraham Maslow in the 1940s and 1950s in the United States, and it is still important today for studying human motivations, training courses, and personal growth. Indeed, Maslow's concepts about the List of Priorities and employers' responsibilities to offer a workplace climate that supports and allowing users to reach their full potential (self-actualization) are more important today than ever before. The Maslow's Hierarchy was first proposed in Abraham Maslow's book Motivation theories, released in 1954 (Cheloni & Tinker, 2019).

A five-level hierarchy pyramid is a common representation of Maslow's Hierarchy. The first four levels of the pyramid (lower-order needs) correspond to biological requirements, whereas the highest level of the pyramid corresponds to growth requirements. Lower-order demands must be satisfied before higher-order wants can affect behavior. The levels are as follows: These include morals, creativity, empathy, and other self-actualization-related qualities. Self-esteem is exemplified by things like optimism, ego, accomplishment, and respect. Belonging can take many different forms, including love, friendship, intimacy, family, and other types of attachment. Protection of the environment, the workplace, resources, people's health, and property are a few instances of safety. Physiological factors include, among other things, air, food, water, closeness, sleep, and other elements that contribute to the maintenance of homeostasis (Pacey et al., 2017).

The first four factors are known as deficiency or deprivation needs (or "D-needs") because their unfulfilled needs lead to a deficit and force people to fill that deficit. Air, food, and water are examples of physiological items, which are listed last in the hierarchy. Most of the time, these are satisfied, but when they aren't, they start to

dominate. Safety considerations including health and security are prioritized in an emergency. Once these two stages are completed, the need for belonging needs like love and intimate friendships or connections becomes more important. The need for praise from others, trust, success, and ego are all components of the next stage, which is respect for people (Short et al., 2019).

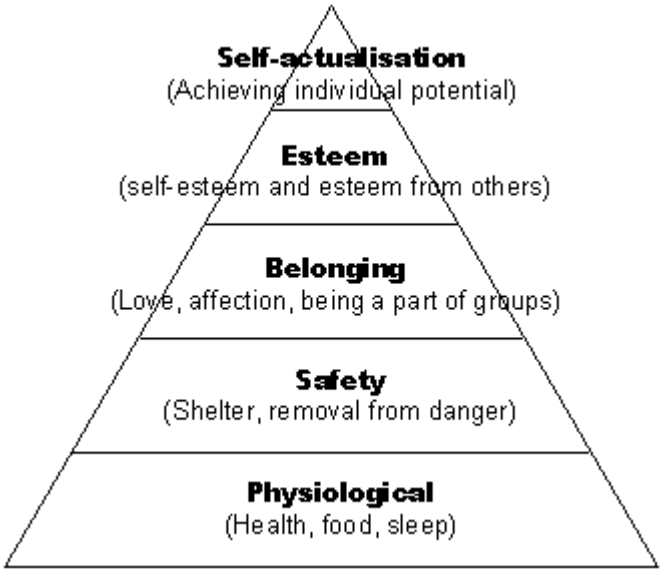
Self-actualization, is the greatest degree. In this instance, behaviour is driven by the desire for self-improvement and the drive to become everything that a person is able to become, or by flaws (Maslow, 1999).

In order to establish and keep superior efficiency, in both terms of individual employees' performance and organizational outcomes, human resources inspiration has become a prerequisite in all fields of endeavor, but is particularly important in the healthcare system where the demand for high-quality services is constantly growing. Motivational variables can be categorized into many subgroups within the healthcare system. For instance, in a study done in Pakistan, intrinsic motivational variables and social-cultural influences like serving others, esteem, and job advancement were also significant (Malik et al., 2010).

In a research by Catarina et al on Implications of Maslow's Hierarchy of Needs Theory on Healthcare Employees' Performance it concluded state that the Romanian health system employees are mostly motivated by meeting the needs of higher level, especially the need of self-actualization, and to a lesser extent by meeting the lower level ones.

Figure 2. 1

Abraham Maslow's Hierarchy of Needs Model.



Source: Arapgirlioğlu, et al, (2017)

2.6.2 Douglas McGregor: Theory X and Theory Y

The managerial presumptions of McGregor's theories "X" and "Y" concern the subordinate's behavior. He pointed out that these are the presumptions majority executives have about their workers.

2.6.2.1Theory 'X'

The average person dislikes work inherently and will try to avoid it at all costs. Because of the aforementioned premise, the majority of people require coercion, control, direction, and punishment threats in order to produce. The typical person needs to be strictly controlled, wants to avoid taking on responsibility, and merely wants security.

2.6.2.2 Theory 'X'

Have a more positive outlook on people. They claim that: Work is a natural human activity, just like rest or recreation. As long as there is dedication to the organization,

people can be managed without being compelled or controlled. If the circumstances are right, they will accept and even seek out responsibilities.

The impacts of the Douglas Mcgregor theory on the performance of healthcare workers were studied by Lawter et al. in 2015, and despite the study's weak statistical power, the results were statistically significant for both individual and group performance. As expected, managerial X/Y behaviors completely moderated the impact of X/Y attitudes on individual- and group-level performance. These findings support the notion that if managed properly, employees have limitless potential for high performance. The performance of individuals and groups is impacted by managerial behavior as well as attitudes toward personnel.

2.6.3 Vroom's Expectancy Theory

Victor Vroom proposed this motivational hypothesis. From the standpoint of why people decide to take a specific course of action, motivation is examined. Three variables are introduced by Vroom. These are valence, or the weight an individual attaches to what they believe will happen in a scenario; Expectancy, which is the idea that an individual's performance and the success of the situation are related, for instance, when I work even harder, the result will be better, and Instrumentality, which is the idea that the accomplishment of the circumstance is connected to the anticipated outcome of the situation, for instance, when I successfully complete well, I consider praise, are both forms of this idea..

Expectancy theory is applicable in healthcare work environments as well. Motivation is key to the performance of individuals, as well as a predictor of turnover in the workplace. It is well-known that the healthcare industry has high turnover rates, particularly among nurses, due to high-stress jobs. For managers in healthcare, the objective is to motivate people to

join and remain in the workforce while performing up to standard. Using the Expectancy theory, managers should identify outcomes which employees would value in being rewarded. There is an inherent connection between employee competence, behavior, the workplace environment, and success on the job. Motivations for healthcare workers range widely, including autonomy at work, workplace conditions and hours, salary, opportunities for professional development, and management practices/organizational policies. (Studycorgi, 2022)

2.6.4 Fredrick Herzberg's Two Factor Theory

Using the idea that certain variables inspire and some dishearten, Frederick Herzberg proposed a theory of motivation. He referred to it as the "Two Factor Theory." Frederick Herzberg divided these elements into two groups. Which are: To prevent a disgruntled employee, hygiene aspects are necessary. Without them, there is discontent even when they do not result in increased levels of drive. Interpersonal interactions, Work circumstances, Salary, Status, and Security are common hygiene variables. In order to inspire an employee to work at a better level, motivational factors are required. Accomplishment, development, task obligation, and job interest are a few of these.

2.6.5 Systems Theory

Organizations are emphasized as cooperative structures in this paradigm. "A series of arrangements of items so related or connected as to create a unit or biological whole" is the definition of a system. As a result, the description of the organization is "a framework of purposefully organized personal activities or forces." Based on the systems theory, groups of people who can communicate with one another and who would each commit an activity to the accomplishment of a goal form organizations.

It approaches problems by looking at input, transformation process, outputs and feedback. (input- physical, human, materials, financial, information resources that enter system and leave as outputs. Outputs are- form of goods and services- vital aspects are ongoing information on status and performance, interaction with the environment.

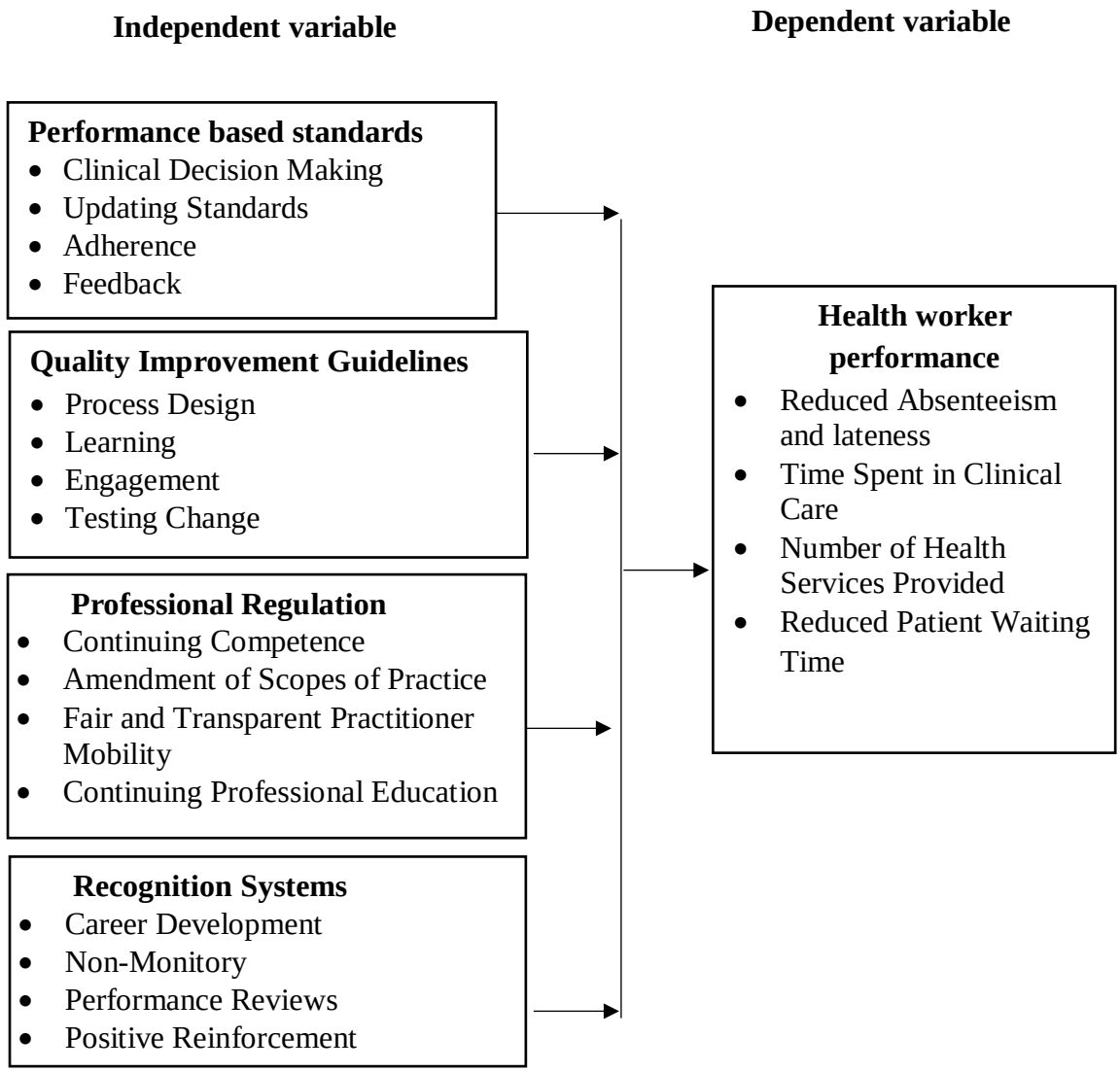
For cooperation to be effective the following must be present: place where work is done, time when work is done, person with whom work is done, things upon which work is done and method or process by which work is done.

2.7 Conceptual framework

Health worker performance has a great impact on the overall patient management outcome. The outcome of health worker performance is dependent on many other factors/variables as discussed in chapter two. These variables include: standard based performance, quality improvement guidelines, professional regulations and recognition systems. The variables were measured using Likert scales on a questionnaire as shown in the operationalization framework as shown in table 3.2.

Figure 2. 2

Conceptual Framework



Source: Author, 2022

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter covers the design of the research methodologies, as well as the study area, population sample, and its derivation, sampling procedure, procedure of data collection, validity and reliability, analysis techniques, and reporting that was used in this research.

3.2 Research Design

A cross-sectional descriptive study design was used, and quantitative methodologies were adopted. This design was chosen because of its capacity to provide a picture of occurrences at a certain point in time (Adisa et al., 2020). It is also preferable since it can meet the survey's descriptive and inferential needs. The study's objective and methodology necessitated a design that was more focused on the desired outcomes (Anthony & Stablein, 2016).

3.3 Study Location

This research was carried out in Wajir County's public health institutions. The research took place in Tarbaj, Wajir South, Wajir North, Wajir East, Wajir West, and Eldas at the Wajir County Referral Hospital and Sub-County Referral Hospitals.

3.3 Target Population

A population is the total number of people who match the research study's parameters (Asiamah et al., 2018). The public hospitals in Wajir County were the research unit of observation, whereas all County health personnel were the research unit of analysis/target population. The distribution of the target population is as shown in table 3.1. The area's public hospitals encompassed Habaswein District Hospital, which had 216 employees, Buna Sub-District Hospital, which had 84 employees, Arbajahan Sub-District Hospital, which had 69 employees, Wajir District Hospital, which had 55

employees, and Leheley Sub-District Hospital, which had 47 employees. As a result, the research focused on 450 health care workers from Wajir County's six public hospitals.

3.4 Sampling Techniques and Sample Size

3.4.1 Sampling Techniques

According to the County Ministry of Health, there are 792 workers in Wajir County. Nassiuma's formula was used to generate the needed sample group from these target demographics (2000).

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

Where n = sample size, N = population size, and e = error margin (= 4%), c = coefficient of variation (= 50%) by substituting the formulae, therefore, we obtain;

$$n = \frac{792 * 0.5^2}{0.5^2 + (792-1)0.04^2}$$

$$n = 130$$

3.4.2 Sample size

Because Wajir County is divided into six sub-counties, this research employed stratified sampling to choose health care workers from each. Facilities were divided into groups primarily on their location (Sub-County). The characteristics of stratified sampling ensured that each health facility had an equal opportunity of being included whilst maintaining the sample size reasonable (Azhar & Choudhry, 2016). Random sampling was used to select participants from the healthcare setting. To improve the generality of the survey's data, random sampling was performed. As stated in Table 3, the size of the sample was proportionately distributed per the target group in each Sub-county.

Table 3. 1

Allocation of sample size according to targeted population in respective sub-counties

Sub-Counties	Facilities (Both level 3 & 4)	Target population	Percentage (%)	Sample size
Wajir North	16	178	16.41	29
Wajir South	16	167	16.41	27
Wajir East	13	127	16.41	21
Wajir West	12	144	16.41	24
Eldas	5	55	16.41	9
Tarbaj	15	121	16.41	20
Total	**77**	**792**	16.41	**130**

3.4.3 Inclusion Criteria

During the period of **study,** all of the targeted respondents in public hospitals in Wajir County who were on duty were included

3.4.4 Exclusion Criteria

During the research period, all targeted participants who were be away or on leave were excluded.

3.5 Instrumentation

A questionnaire was developed and used in the collection of primary data. The questionnaire was divided into three sections, numbered A through F. Section A asked question about participants' demographic information, section B about standard-based performance, section C asked questions concerning improving quality, section D about regulatory guidelines, section E about recognition systems, and section F about healthcare worker performance.

For the closed-ended questions, responses to the questionnaires were assessed using a Likert Scale. The Likert scale ranged from 1 to 5, with 1 denoting strongly disagree, and 5 denoting strongly agree. A consent form was included with the questionnaires that also explained the research's objective.

3.5.1 Pretest Study

A pretest was done in Ali Maow health Centre to verify that the data collecting tools utilized obtain the necessary information, as well as to check for uniformity and phrasing of the questionnaires, and also the tools' viability and efficacy, and the time it takes respondents to answer to the questionnaire. According to Braithwaite et al. (2020), the sample size for the pre-test will be between 10% and 40percent of the total sample size (i.e., 13 – 52 respondents). As a result, a total of 52 people took part in the Pre-test. The completed questionnaires were reviewed to ensure that the language and sequencing of the questions are consistent and suitable. The responders' comments and ideas were taken into account, and the collecting data mechanisms was improved accordingly.

3.5.2 Validity of the Research instrument

The completed questionnaires were reviewed to ensure that the language and sequencing of the questions were consistent and suitable. The responders' comments and ideas were taken into account, and the collecting data mechanisms were improved accordingly.

3.5.3 Reliability of the Research Instrument

The constancy of a measurement is referred to as reliability. Additionally, dependability describes the range of constancy toward metrics in which the same or nearly identical results are consistently obtained in repeated testing (Bobek & Devitt, 2017). As a

consequence, an internal consistency test was performed to ensure that the results were reliable and consistent. The internal consistency reliability test employed Cronbach's Alpha to describe and evaluate the dependability among the items examined (Braithwaite et al., 2020). Furthermore, when there are several 5-point Likert scale questions in the research form, Cronbach's Alpha is preferred. Furthermore, Cronbach's alpha, which runs from 0.0 to 1.0, was utilized to determine whether or not the construct is credible. Many scholars believe that 0.70 is by far the most appropriate and appropriate Cronbach's Alpha cut-off point.

3.6 Methods of Data Collection

3.6.1 Semi-Structured Questionnaire

The use of a standardized questionnaire was used to collect the data from low cadre staff in government hospitals in Wajir County. Questionnaires are a useful as data collection tool, according to Buttigieg et al. (2016), when the professional experience exactly what it takes and how to quantify the variables of the study. The research created a questionnaire with largely survey questionnaires and a few open-ended questions (Appendix 5). The primary data was collected using a drop-and-pick method, in which the research scientist and a trained research fellow distributed questionnaire survey to the selected population and then collect the survey questions in person three days later after the respondents have finished filling them out.

3.7 Operational Definition of Variables

Table 3. 2

Study Variables

Independent Variables (cause)	Indicators	Scale of measurement
Performance-Based standards	• Clinical decision-making • Updating of standards • Adherence • Feedback	• Likert scale-structured questionnaire
Quality Improvement	• Process Design • Systemic Factors • Health Worker Education • Health Worker Engagement • Testing Change	• Health worker responsiveness • Public/client satisfaction
Professional regulation	• Continuing competence; • Amendment of scopes of practice; • Fair and transparent practitioner mobility • Protection of the public and patient interest • Continuing professional education and training	• Competent Health workers
Recognition Systems	• Career Development • Non-Monitory • Performance Reviews • Positive Reinforcement	• Health Workers Engagement &Satisfaction • Health Worker Retention
Health workers performance	• Reduced Absenteeism and lateness • Time Spent in Clinical Care • Number of Health Services Provided • Reduced Patient Waiting Time	

3.8 Methods of Data Analysis

The research's findings included both quantitative and qualitative information. Buttigieg et al. (2016) define qualitative information as data with non-numerical

properties including such people's views that are connected to qualities, values, or value assessment, whilst data were in quantitative nature with numeric value and is verifiable. A data collection was created by sorting, coding, and properly entering surveys into SPSS version 26. Inferential analysis in terms of correlations (to determine the direction and strength of the association) was, on either hand, be used in the main data assessment. The qualitative data from key interviews was arranged and evaluated utilizing content analysis in order to provide inferences based on the study goals or topics. Through a side-by-side contrast and debates, qualitative information was also used to support quantitative conclusions.

Statistical Measurement Models

The analysis of quantitative data was done using a logistic regression model. According to Schober and Vetter (2021), Binary Logistic Regression analysis was utilized to ascertain the linear quantitative association between the factors and predicated variable in this research because it evaluates the association between a categorical variable and a continuous predictor variable by transforming the criterion variable to possibility scores.

The Binary Logistic Regression model was of the form given below.

$$\text{Logit}(p) = \beta 0 + \beta 1 SBP + \beta 2 QIG + \beta 3 PR + \beta 4 RS + \varepsilon \ldots\ldots$$

Where:

p = the probability of performance.

β0, β1, β2, β3 and β4 = model parameters.

- SBP = Standard based performance
- QIG = Quality improvement guidelines
- PR = Professional Regulations

- RS = Recognition System

ε = is the error term.

Checking for Multicollinearity

This investigation included checks for numerical issues and multicollinearity. According to Hosmer and Lemeshow (2000), multicollinearity in a logistic regression solution may be found by looking at the standard errors for the B coefficients. A standard error greater than 2.0 suggests that there are numerical issues, like multicollinearity amongst predictor variables. They contend that analyses that reveal numerical issues should not be understood.

3.9 Ethical Considerations

Research ethics is a set of moral ideals that considers how closely study techniques correspond to ethical, regulatory, and societal commitments to study participants (Buttigieg et al., 2013). Kenya Methodist University SERC, the National Commission for Science and Technology and Innovation (NACOSTI), and the Hospital Managers at Wajir County public hospitals gave permission to conduct this study. Respondents were needed to express their consent before participating in the study, and all of their private details was be held private. The research was also conducted in complete confidentiality to guarantee that the participants' privacy rights is protected. If the participants asked for the research's results, the research made sure they got them.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.0 Introduction

This chapter presents the findings in relation to each research aim through statistical analysis, interpretation, and presentation. The study's goal was to determine how much standard-based performance impacts health professionals' performance at public health institutions in Wajir County, to ascertain how much quality improvement guidelines in Wajir County affect the performance of the health professionals in public health institutions, to determine how much professional regulation affects health professionals performance in public health institutions in Wajir County and finally, to ascertain how much recognition systems in Wajir County have an impact on how well health professionals perform at public health institutions. Sections of the data presentation correspond to the study topics. Inferential statistics are offered after the descriptive statistics of the research variables.

4.1 Instrument Return Rate

In order to gather data, the researcher visited 77 level 3 and level 4 sampling facilities in the county of Wajir. Level 3 and 4 facilities are within the subcounty of study all displaying high work load and relatively sufficient staffing. The medical staffs were reachable by the researcher. Table 4.1 displays the response rates.

Table 4. 1

Instruments Return Rate

Instrument type	Category	Sample size	Frequency	Percent
Questionnaire	Wajir North	29	25	86.2
Questionnaire	Wajir South	27	21	77.8
Questionnaire	Wajir East	21	18	85.7
Questionnaire	Wajir West	24	21	87.5
Questionnaire	Eldas	9	9	100.0
Questionnaire	Tarbaj	20	15	75.0
	Average response rate			**85.4**

Source: Author, 2022

130 individuals were expected to respond to the study, however the researcher was unable to reach a 100% response rate owing to unforeseen circumstances. The response rate from different participants across various sub-counties of Wajir County is shown in Table 4.1. Participants in Eldas sub-county had the highest response rate (100%) followed by Wajir West sub-county (87.5%), then Wajir North sub-county (86.2%), and finally Wajir South sub-county (77.8%). Overall, the research had a commendable response rate of 85.4%. Kothari (2019) recommended that research pertaining to studies associated with health should have a response rate of at least 70%.

4.2 Pretest Test Results

Prior to being used in the main survey, a pretest evaluated the individual questions, format, question order, and instructions. Prior to conducting the study, validity and reliability tests were conducted.

4.2.1 Test of Reliability

The statistical reliability for the various variables is shown in Table 4.2. With a Cronbach's alpha reliability value of above 0.7, all the variables were very reliable. The reliability of standard-based performance was (α=0.785), followed by quality improvement principles (α=0.763), professional regulations was (α=0.713), recognition systems was (α=0.766), and health worker performance was (α=0.761). As a result, the research concluded that the tool could be utilized for additional analysis and was reliable.

Table 4. 2

Reliability Results

Variable	Cronbach's Alpha	No. of items	Comments
Standard-based performance	0.785	7	Accepted
Quality improvement guidelines	0.763	9	Accepted
Professional regulations	0.713	4	Accepted
Recognition systems	0.766	4	Accepted
Health worker performance	0.761	6	Accepted

4.2.2 Test of Validity

A validity test is carried out to demonstrate how well a research instrument measures what it is intended to measure (Kothari, 2019). Validity is the precision and significance of conclusions drawn from study findings. If a questionnaire is measuring what it claims to be measuring, it is said to be valid (Bryman & Cramer, 1997).

It defines validity as the degree of agreement between the phenomena' explanations and the world's reality. While proving the validity of a new measure is crucial for research, absolute validity is challenging to prove (Bowling, 1997). According to Mugenda and Mugenda (2003), the correctness and significance of conclusions drawn from study findings constitute validity. Simply put, validity is the extent to which findings from data analysis accurately reflect the phenomena being studied. Construct validity and content validity were both employed in this study. The questionnaire's validity was originally verified by the primary supervisor. Additionally, the questionnaire was evaluated by two randomly chosen managers of the intended healthcare institutions. To improve the content validity of the questionnaire, their opinions were assessed and included by adding the missing pieces, eliminating vague and generic statements, or substituting words that were easily understood.

4.3 Demographic Characteristics of the Respondents

Gender, age, level of study, educational background, and employment experience were among the demographic and general data deemed relevant in this study. These factors were taken into account since they can have an impact on the type of replies provided by survey participants. Table 4.3 provides descriptive data of the respondents.

Table 4. 3

Demographic Characteristics

Demographic	**Classification**	**Frequency**	**Percent (%)**
Gender	Male	72	66
	Female	37	34
Age	20-30 years	26	24
	31-40 years	42	39
	41-50 years	31	29
	>51 years	9	8
Education level	Certificate Level	15	14
	Higher Diploma	34	31
	Postgraduate degree	15	14
	Bachelor's Degree	45	41
Working experience	Less than 1 year	16	15
	1-5 years	39	36
	6 – 10 years	10	9
	Over 10 years	44	40

The majority of respondents—72 (66%) were men, compared to 37 (34%) women—which indicates an unequal gender distribution and, consequently, gender bias in the data gathered. This result is consistent with the findings of a research by Mousavi et al. (2020) which discovered that in the northern regions of Kenya, including Wajir, there are more male health employees than female health professionals.

According to the study, the majority of respondents, 42 (or 39%), were between the ages of 31 and 40, while 31 (or 29%) were between the ages of 41 and 50. The age groups would help the study by providing data based on the tactics used and their performance since they are thought to have greater job experience.

The respondents were competent, and the answers they gave were based on both theoretical and practical knowledge, as was demonstrated by the fact that 45 (41%) of them had bachelor's degrees, followed by 34 (31%), by those with diploma education. High levels of education among the respondents also correlate with greater comprehension of the data collecting methods and the study's aims and goals, which enhances the relevancy of the replies.

According to the research, of the respondents, 44 (40%) had worked for more than ten years, followed by 39 (36%) who had worked for less than five years, and 16 (15%) who said they had worked for less than one year. Since so many employees have been with their company for more than five years, it is likely that replies were based more on respondents' experiences than on generic knowledge of the topic. The knowledgeable personnel were to offer pertinent information based on their personal experiences and what they have observed over time in the facilities.

4.4 Standard-Based Performance

This study´s first goal was to determine how much standard-based performance affects how well health professionals perform at public health institutions in Wajir County. With the aid of questionnaires, information was gathered from 109 respondents.

The respondents were asked to rate how much of the statements about performance standards they agreed with. They gave statements that described instructors' direct instructional tactics a score of 1 to 5, with Strongly Agree being equal to 5, Agree as being equal to 4, 3 as neutral, 2 as Disagree, or 1 as Strongly Disagree. The results were recoded into two, as agree and disagree. Specifically, the "agree" category was created by combining "agree" and "strongly agree," while the "disagree" category was created by combining "disagree," "strongly disagree," and "neutral." The results are shown in Table 4.4.

Table 4. 4

Standard-Based Performance

	Disagree n(%)	**Agree n(%)**
There is evidence of the existence of performance-based standards	38(34.8)	71(64.6)
Performance based standards are regularly updated	16(15.2)	93(84.9)
Performance-based standards are regularly used for clinical decision-making	41(37.6)	67(61.8)
Employees constantly adhere to these performance-based standards	38(34.8)	70(64.6)
Managers regularly communicate performance-based standards to employees	8(63.3)	91(83.7)
There are mechanisms for providing feedback on the available performance-based standards	12(11.8)	97(88.2)
Performance based standards are regularly updated	15(14.0)	94(85.9)

In light of Table 4.4, 93 (84.9%) agreed that performance-based standards are constantly updated while 16 (15.2%) disagreed, and 71 (64.6%) agreed that there is proof of the existence of performance-based standards while 38 (34.8%) disagreed. Additionally, 41 (37.6%) disagreed with the statement that performance-based standards are frequently utilized for clinical decision-making, while 67 (61.8%) agreed with it. In addition, whereas 38 (34.8%) disagreed, 70 (64.6%) agreed that staff consistently follow this performance-based criterion. Finally, 91 respondents (83.7%) agreed that managers should routinely let staff members know how they are doing. Only 8 respondents (63.3%) disagreed.

The results support the conclusion made by Braithwaite et al. (2020) that performance against standards contributes to better health professionals' performance. According to Silva and Fonseca (2017), performance standards-based clinical decision-making guarantee that standards are consistently updated and disseminated to providers to ensure quality and efficacy of treatment. The study comes to the conclusion that while failing to deliver clinical care in accordance with evidence-based standards has substantial adverse consequences on patient outcomes; doing so is also related with improved health outcomes. The majority of health care improvement strategies, such as certification of medical institutions, external quality assessment, continuous quality improvement guidelines, and performance improvement, are built on standards.

4.5 Quality Improvement Guidelines

The second goal of this study was to determine how much the performance of the healthcare professionals at public health institutions in Wajir County is influenced by quality improvement standards. With the aid of questionnaires, information was gathered from 109 respondents.

The respondents were asked to rate their agreement with several statements pertaining to best practices for quality improvement. They gave statements that described instructors' direct instructional tactics a score of 1 to 5, with Strongly Agree being equal to 5, Agree being equal to 4, neutral, 3, Disagree, 2, or 1, Strongly Disagree. The results were recoded as two, agree and disagree. Specifically, the "agree" category was created by combining "agree" and "strongly agree," While the "disagree" category was created by combining "disagree," "strongly disagree," and "neutral." The results are shown in Table 4.5:

Table 4. 5

Quality Improvement Guidelines

	Disagree n(%)	**Agree n(%)**
There are clear quality improvement guidelines	54(49.4)	55(50.5)
There are clear roles and expectations in the quality improvement guidelines	44(40.4)	64(58.9)
Quality improvement guidelines contribute to appropriate work processes and designs	22(20.2)	87(79.8)
There is adequate health workers education on quality improvement guidelines	18(16.9)	91(82.6)
There are mechanisms for testing change in the application of quality improvement guidelines	72(66.3)	37(33.7)
There are opportunities for employees to recognize individual achievements in implementing quality improvement guidelines	13(11.8)	96(88.2)
Employees believe that the organization embraces performance culture on quality improvements	15(14.0)	94(85.9)
The institution promotes activities that enhance the application of quality improvement guidelines	31(28.7)	78(71.3)
Average mean:75.3%		

In light of Table 4.5, 64 (58.9%) agreed that the responsibilities and expectations in the quality improvement guidelines at their facilities were clear, and 55 (50.5%) agreed that their facilities had clear quality improvement guidelines. Also, 87 people (79.8%) agreed that quality improvement standards help create designs, work procedures, and performance improvements. Additionally, 96 (88.2%) of the respondents believed that there were chances for staff to acknowledge individual accomplishments in putting quality improvement standards into practice. Finally, 78 respondents (71.3%)

concurred that their facilities supported initiatives that improved the use of quality improvement guidelines.

The findings are consistent with Brandrud et al. (2017), who conducted research in Norway on the following areas linked to effective quality improvement in healthcare: A case study conducted throughout the country found that quality improvement initiatives with strong leadership and a focus on measurement for improvement had a higher possibility of success. The study supported the value of the learning collaborative's approach to continuous development. In order to successfully implement patient-centered quality improvement, high performing professional environments needed to have access to the following: (a) *knowledge of best practice* provided by professional subject matter experts; (b) *knowledge of current practice* provided by straightforward measurement methods; and (c) assistance from *improvement knowledge experts* who provided helpful measurement guidance and enabled the team to organize the improvement efforts effectively despite the challenging resource situation (time and personnel).

According to the present report, there are significant unresolved healthcare issues that are endangering lives, driving up prices, and making patient treatment unpredictable. One of the biggest problems facing contemporary healthcare leadership is undoubtedly the improvement of healthcare quality. When it comes to clinical, patient-focused improvements and including frontline healthcare providers early in the change process, quality improvement initiatives can occasionally fall short. While many healthcare institutions in Wajir County have quality improvement teams or departments, it's crucial that all staff members take part in these initiatives.

4.6 Professional Regulation

The third goal of this study was to determine how much professional rules in Wajir County enhance the performance of health professionals in public health institutions. With the aid of questionnaires, information was gathered from 109 respondents.

The respondents were asked to rate how much of the statements about professional standards they agreed with. They assigned a score of Strongly Agree = 5, Agree = 4, Neutral = 3, Disagree = 2, or Strongly Disagree = 1 to statements that described instructors' direct instructional tactics. The results were recoded as two, agree and disagree. Specifically, the "agree" category was created by combining "agree" and "strongly agree," While the "disagree" category was created by combining "disagree," "strongly disagree," and "neutral." The results are shown in Table 4.6.

Table 4. 6

Professional Regulation

	Agree n(%)	**Disagree n(%)**
There are mechanisms for ensuring continuing competence	54(49.4)	55(50.5)
There are mechanisms for amending scopes of practice in Professional Regulation	44(40.4)	64(58.9)
Professional regulations in place to ensure fair and transparent practitioner mobility	22 (20.2)	87(79.8)
Professional regulations are in place to ensure simultaneous protection of the public and patient interest	17 (15.7)	92 (84.2)

According to the data in Table 4.6, 44 (40.4%) disagreed with the statement that there are mechanisms for changing the scopes of practice in professional regulation, while

64 (58.9%) disagreed that there are systems for assuring continued competence. Also, 92 (84.2%) disagreed that professional regulations are in place to ensure the simultaneous protection of the public and patient interest while a mere 17 (15.7%) agreed. In addition, 87 (79.8%) disagreed that professional regulations are in place to ensure fair and transparent practitioner mobility, while 22 (20.2%) agreed.

The results are consistent with Ortiz et al (2018).'s observation that the performance of healthcare professionals was influenced by rules in their study on the effect of nurse practitioner practice restrictions on rural population health outcomes. Regulations governing health manpower control where and how professionals may work as well as what they can do while doing their jobs. These restrictions are justified by the idea that the public interest will be best served if unethical, inept, and inadequately trained individuals are prevented from practicing. If these restrictions are successful, they will ensure that patients receive safe treatment by discouraging certain individuals from pursuing careers and by suitably altering the conduct of others who are currently engaged in professional practice.

According to the present study, effective regulations will prevent certain persons from pursuing jobs and will suitably alter the behavior of working professionals, ensuring that patients receive safe treatment. Regulating techniques and professions results in unpleasant side effects such as: restrictions on their numbers, mobility, and activities. Thus, by restricting access to services for particular clients and changing the pay scales, fees, and career mobility of working professionals, health delivery systems may become less cost-effective.

4.7 Recognition Systems

Establishing the degree to which recognition systems enhance the performance of health professionals in public health institutions in Wajir County was the fourth goal of this study. With the aid of questionnaires, information was gathered from 109 respondents.

The respondents were asked to rate how much of the claims on recognition systems they agreed with. They gave statements that described instructors' direct instructional tactics a score of 1 to 5, with Strongly Agree being equal to 5, Agree being equal to 4, neutral, 3, Disagree, 2, or 1, Strongly Disagree. The results were recoded as two, agree and disagree. Specifically, the "agree" category was created by combining "agree" and "strongly agree," While the "disagree" category was created by combining "disagree," "strongly disagree," and "neutral." The results are shown in Table 4.7.

Table 4. 7

Recognition Systems

	Agree n(%)	**Disagree n(%)**
There are adequate health workers recognition systems for recognizing high performance	26(24.3)	83(75.7)
There are financial rewards for recognizing high performance	39(36.1)	69(63.2)
There are opportunities for non-financial rewards for good performance	47(42.0)	62(57.3)
We are verbally praised for good performance	61(55.6)	48(43.8)

The results are shown in Table 4.7. The majority of respondents, 83 (75.7%), disagreed that there are sufficient health worker recognition systems for recognizing high

performance, while only a small number, 26 (24.3%), and the majority of respondents, 69 (63.2%), agreed that there are financial rewards for doing so. Additionally, 61(55.6) agreed that they receive verbal appreciation for outstanding performance while 48(43.8) disagreed, while 62(57.3) disputed that there are options for non-financial rewards for high performance and 47(42.0) agreed.

Every reward system is predicated on the idea that rewarding employees will draw in new employees and keep existing ones motivated. Any reward system that falls short of achieving them was viewed as unsuccessful. The present study found that several of the health facilities under investigation had sufficient health worker incentive systems, including both financial and non-financial rewards for recognizing outstanding performance. The results are consistent with James et al. (2015)'s research in Nigeria on the impact of the reward system on the productivity of healthcare workers: a case study of the university of Calabar teaching hospital in Calabar. They discovered that both monetary and non-monetary rewards improved employees' performance. In support of James et al. (2015), Momanyi et al. (2017) stated that any organization that does not care about the welfare of its employees would produce less and be more prone to failure. Apart from monetary pay, there are other ways to reward employees. Some of characteristics include the chance to take on significant initiatives or responsibilities, leadership focus, and the ability for employees to get appreciation from their bosses. If the monetary reward is combined with non-monetary benefits, this will work out. When reward systems are prioritized, these motivational aspects naturally appeal to employees the most, and are thus seen as effective ways to motivate them to work harder and provide high-quality outcomes for the company.

4.8 Health Worker Performance

The respondents were asked to rate how much of the assertions about their performance they agreed with. They gave statements that described instructors' direct instructional tactics a score of 1 to 5, with Strongly Agree being equal to 5, Agree being equal to 4, neutral, 3, Disagree, 2, or 1, Strongly Disagree. The results were recoded as two, agree and disagree. Specifically, the "agree" category was created by combining "agree" and "strongly agree," while the "disagree" category was created by combining "disagree," "strongly disagree," and "neutral." The results are shown in Table 4.8.

Table 4. 8

Health Worker Performance

	Disagree n(%)	**Agree n(%)**
Reduced absenteeism	61(56.1)	48(43.3)
Reduced lateness	61(55.7)	48(45.3)
Reduced time spent in clinical care	64(58.4)	45(41.6)
Increased the number of health services provided	61(55.6)	48(43.8)
Reduced patient waiting time	69(63.5)	40(36.5)

Table 4.8's findings show that 56.1% disagreed that absenteeism had decreased while 43.3% agreed, 55.7% disagreed that lateness had decreased while 45.3% agreed, 58.4% disagreed that time spent in clinical care had decreased while 41.6% agreed, and 55.6 disagreed that the number of health services offered had increased while 43.8% did. Finally, 36.5 percent agreed and 63.5% disagreed that patient wait times had decreased.

The investigation supported the findings of the respondents' disagreements that absenteeism, tardiness, and excessive waiting times are widespread in Wajir County. Health professional performance includes availability, clinical competency,

responsiveness (offering patient-centered care), and productivity, according to Rowe et al. (2018). (or efficiency). According to the current study, Kenya's health system analysis frequently overlooks health worker performance, which compromises the standard of healthcare provided. When the ratio of patients to healthcare providers reaches a certain level, there won't be enough time to properly diagnose and treat every patient.

4.9 Correlation Analysis

The coefficient of correlation may vary from -1 to +1, with -1 being perfect negative correlation, +1 representing perfect positive correlation, and 0 representing no association whatsoever.

Table 4. 9

Pearson Correlation Matrix for Independent and Dependent Variables

		QIG	SBP	PR	RS	PERF
QIG	R	1				
	P-value					
SBP	R	-.114	1			
	P-value	.129				
PR	R	-.093	.934**	1		
	P-value	.217	.000			
RS	R	-.043	.290**	.246**	1	
	P-value	.568	.000	.001		
PERF	R	-.188*	.506**	.435**	.751**	1
	P-value	.012	.000	.000	.000	

*. Correlation is significant at the 0.05 level (2-tailed).
**. Correlation is significant at the 0.01 level (2-tailed).

Keywords: QIG= Quality Improvement Guidelines; SBP = Standard-Based Performance; **RS** = Recognition systems; **PR** = Professional Regulations; and **PERF** = Performance of the health workers

Source: Research Findings 2022

The Pearson product-moment correlation coefficient, which is an indication of the strength of the linear relationship between given variables, is shown in Table 4.12. The findings show that the association between standard-based performance and health worker performance is substantial and related positively (r = 0.506, p=0.000). This suggests that any improvement in standard-based performance resulted in improved performance by health workers. The results agree with those of Mousavi, et al., (2020

The findings show that the association between quality improvement recommendations and health worker performance is substantial and positively connected (r = 0.751, p=0.000). This suggests that any good improvement in and performance of health personnel resulted in improved performance. The findings are consistent with those of Pferzinger et al. (2018), Roland et al. (2017), & Duff et al. (2017).

The findings show that the association between professional regulations and health worker performance is substantial and adversely connected (r = -0.188, p=0.000). This suggests that every good adjustment in professional regulations resulted in worse health worker performance. The findings are consistent with those of Spencer-Lane (2014), Were and Moturi (2017) and Short et al. (2019).

The findings show that the association between recognition systems and health worker performance is substantial and strongly connected (r = 0.435, p=0.000). This suggests that any beneficial improvement in recognition systems resulted in improved health worker performance.

4.10 Logistic Regression for Independent and Dependent Variables

According to Schober and Vetter (2021), Binary Logistic Regression analysis was utilised to ascertain the linear quantitative association between the factors and predicated variable in this research because it evaluates the association between a categorical variable and a continuous predictor variable by transforming the criterion variable to possibility scores.

4.10.1 Checking for Multicollinearity

This investigation included checks for numerical issues and multicollinearity. According to Hosmer and Lemeshow (2000), multicollinearity in a logistic regression solution may be found by looking at the standard errors for the B coefficients. A standard error greater than 2.0 suggests that there are numerical issues, like multicollinearity amongst predictor variables. They contend that analyses that reveal numerical issues should not be understood. Table 4.10 displays the results of this analysis.

Table 4. 10

Checking for Multicollinearity

	Parameters	**B**	**S.E.**	**Wald**	**df**	**Sig.**	**Exp(B)**
Step 1a	Standard-based performance	1.643	.850	3.734	1	.050	.193
	Quality improvement guidelines	-0.677	.226	9.009	1	.003	1.968
	Professional regulations	0.742	.363	4.173	1	.041	.476
	Recognition systems	2.362	.779	9.187	1	.002	10.616
	Constant	2.615	0.598	19.115	1	.000	.073

a. Variable(s) entered on step 1:

The standard errors for standard-based performance, quality improvement recommendations, professional regulations, and recognition systems are 0.850, 0.226, 0.363, and 0.779, respectfully. In this study, none of the independent variables had a

standard error greater than 2.0. As a result of the lack of multicollinearity amongst the predictors variables in this research, the data may be understood. This check excludes the standard error for the constant.

4.10.4 Relationship of Individual Independent Variable to Dependent Variable

In order to address the study question, the influence of individual independent variables on the predicated variable was examined. Because the dependent variable in this study is a Logit, the extent of each predictor's effect is represented by the odds ratio obtained from its Exp (B). The odds ratio is calculated by dividing the likelihood of success by the chance of failure.

Table 4. 11

Relationship of Individual Independent Variable to Dependent Variable

	Parameters	B	S.E.	Wald	df	Sig.	Exp(B)
Step 1a	Standard-based performance	1.643	.850	3.734	1	.050	.193
	Quality improvement guidelines	-.677	.226	9.009	1	.003	1.968
	Professional regulations	.742	.363	4.173	1	.041	.476
	Recognition systems	2.362	.779	9.187	1	.002	10.616
	Constant	1.057	1.067	.981	1	.322	.348

a. Variable(s) entered on step 1

Effect of standard-based performance on the performance of health workers

As stated in Table 4.15, the likelihood of the Wald statistic for the variable standard-based performance was 3.734, which was significant (p = 0.050) at = 0.05. The study indicated that standard-based performance increased the performance of public health professionals in Wajir County, Kenya.

The value of Exp (B) from the study was 0.1930, implying that a one-unit improvement in standard-based performance in public health facilities in Wajir County increased the likelihood that health workers' performance is favorably impacted by standard-based performance by 80.7%. This verifies the statement that a one unit change in standard-based performance is connected with a one unit change in the chance of belong to 1 (Yes) of health professionals' performance. The value of Exp (B) was 0.193, implying that a one-unit increase in standard-based performance increased the likelihood of health workers' performance being impacted by standard-based performance by 0.1930 times.

Effect of Quality improvement guidelines on the performance of health workers

Table 4.15 shows that the likelihood of the Wald statistic for the variable quality improvement recommendations was 9.009 and was significant (p = 0.0030) at alpha = 0.05 for the second variable. This demonstrated that quality improvement recommendations had a detrimental impact on the performance of health care personnel. The value of Exp (B) was 1.968, implying that a one-unit increase in quality improvement guidelines reduced the likelihood that quality improvement guidelines impact health professionals' performance by 96.8 percent.

Effect of Professional regulations on the performance of health workers

As indicated in Table 4.15, after assessing the third independent variable, the likelihood of the Wald statistic for professional regulations variable was 4.173, which was considerable (p = 0.041) at alpha = 0.05. This revealed that professional regulations affected the performance of health personnel. The score of Exp (B) was 0.4760, implying that a one-unit improvement in professional rules increased the probability of

health workers' performance being impacted by professional regulations by 0.4760 times.

Effect of Recognition Systems on the Performance of Health Workers

The fourth predictor variable found that the likelihood of the Wald statistic for variable recognition systems was 9.187 and considerable ($p = 0.002$) at alpha = 0.05, as seen in Table 4.15. This suggests that recognition systems affected the performance of health staff. The score of Exp (B) was 10.616, implying that a one-unit improvement in recognition systems increased the chance of health professionals' performance being impacted by recognition systems by 10.6160 times.

The reason for addressing the relationship of each predictor variables with the dependent variable was that the overall goal of this study was to develop methods for improving the performance of health professionals at public health facilities in Wajir County. According to the direction and size of the regression coefficients, the data described in Table 4.16 demonstrate that the techniques under research have a statistically significant impact on the performance of health professionals in public health facilities in Wajir County.

The direction of the regression coefficients

According to the data in Table 4.15, the B coefficients for standard-based performance, quality improvement recommendations, professional rules, and recognition systems were 1.6430, 0.6770, 0.7420, and 2.3620, respectfully. As per Menard (2002), a sign linked with the Beta coefficients of the predictor variables showed if the chance of success increased or decreased, with a positive development suggesting an improvement and a negative sign suggesting a reduction. As demonstrated in Table 4.15, in this research, standard-based performance, quality improvement guidelines,

professional regulations and recognition systems have positive B coefficients, suggesting that the chance of choosing a certain strategy improves with each unit increase.

The magnitude of the regression coefficients

The size of the beta value reflects the possibility that a specific strategy was be implemented as a result of the effect of standard-based performance, quality improvement guidelines, professional laws, and recognition systems. It aids in identifying the best predictors in the conceptual framework, which are identified by the size of Beta coefficients indicated by the probability value for every variable. The top predictor in this research is recognition systems, which had a Beta coefficient of 2.3620 and a probability value of 10.6160. This means that with each increment in recognition systems, the likelihood of selecting a recognition system improved more than tenfold. Quality improvement guidelines were the second strongest predictor, with a Beta coefficient of 0.6770 and a probability value of 1.968, implying that for each unit improvement in quality improvement guidelines, the chance of adopting another method reduced by 96.8%.

Fitting the Logistic Regression Function

The results for the coefficients of the four independent variables forming the strategies were developed and provided in Table 4.15 to fit the logistic regression function.

The Regression Function

In this study, the logistic regression model for this study was developed as;

$\text{logit}(p) = \beta 0 + \beta 1SBP + \beta 2QIG + \beta 3PR + \beta 4RS + \varepsilon.$

Where: p is the probability of selecting a given strategy.

$\beta 0 = 1.057$ = the coefficient of constant

$\beta 1 = 1.643$ = the coefficient of standard-based performance

$\beta 2 = 0.677$ = the coefficient of quality improvement guidelines

$\beta 3 = 0.742$ = the coefficient of professional regulations and

$\beta 4 = 2.362$ = the coefficient of recognition systems

and, ε = is the error term.

For this investigation, the logistic regression model was analyzed, and the Beta coefficients for four variables were made to fit and presented in terms of the variables utilized. The logistic regression function was determined to be;

Health workers' performance = 1.057 + 1.643*SBP + 0.677*QIG + 0.742*PR + 2.362*RS

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION ANDRECOMMENDATIONS

5.1 Introduction

The purpose of this study was to identify the performance-influencing tactics used by healthcare professionals in public health institutions at Wajir County. This chapter gives the study's conclusions and suggestions along with a summary of its findings. Additionally, it offers ideas for additional research.

5.2 Summary of the Study

The goal of the study was to identify the performance-influencing tactics used by healthcare professionals in Wajir County's public health institutions. In particular, the purpose of the study was to determine how much standard-based performance impacts the performance of health professionals at public health institutions in Wajir County, to determine the effectiveness of quality improvement guidelines in Wajir County in enhancing the performance of health professionals working in public health institutions, to determine how much professional regulations in Wajir County increase the performance of the health professionals in public health institutions and finally, to ascertain how much recognition systems in Wajir County enhance the performance of health professionals in public health institutions.

In Chapter Two of the research, literature pertinent to the study variables is presented topically. The conclusions drawn from the studied literature provide conceptual and theoretical frameworks as well as guidelines for the study's investigation. To perform the study, quantitative research paradigms were used. The respondents' free assent to engage in the study was taken to imply ethical standards for their utilization.

216 hospital employees from Habaswein District Hospital, 84 from Buna Sub-District Hospital, 69 from Arbajahan Sub-District Hospital, 55 from Wajir District Hospital, and 47 from Leheley Sub-District Hospital made up the target population. The study thus concentrated on 450 healthcare professionals from the five public hospitals in Wajir County. The research participants were chosen using stratified sampling approaches. An interview guide and anonymous self-administered semi-structured questionnaires were used to gather the data. Descriptive statistics like percentages and frequencies as well as inferential statistics like correlation and regression analysis were used to evaluate the data acquired. At alpha 0.05, the statistical significance was evaluated. Chapter Four presents a thorough discussion and explanation of the research findings, and this part summarizes the key findings.

5.2.1 Standard-based performance and performance of the health workers in public health facilities, in Wajir County

The findings of the correlation analysis showed a positive association between the performance of the health professionals in public health facilities in Wajir County and standard-based performance ($r = 0.506$; P-value < 0.05). According to the findings of a logistic regression research, health professionals in public health institutions in Kenya's Wajir County performed better when held to standards. According to the analysis, the value of Exp (B) was 0.193, meaning that the likelihood that standard-based performance was have a positive impact on the performance of health workers in Wajir County increased by 80.7% for every unit increase in standard-based performance in public health facilities.

5.2.2 Quality Improvement Guidelines and the Performance of the Health Workers

The findings of the correlation analysis showed a favorable link between quality improvement recommendations and the performance of the medical staff in public health institutions in Wajir County ($r = -0.188$; P-value < 0.05). Results of a logistic regression study showed that quality improvement guidelines enhanced the performance of healthcare professionals in public health institutions in Kenya's Wajir County. The value of Exp (B) was 1.968, which suggests that a one-unit increase in quality improvement guidelines lowered the likelihood that quality improvement guidelines had an impact on the performance of health professionals by 96.8%.

5.2.3 Professional Regulations and the Performance of the Health Workers

The findings of the correlation analysis showed a favorable link between professional requirements and health professionals' performance in public health facilities in Wajir County ($r = 0.435$; P-value < 0.05). The probability that professional regulations will have an impact on the performance of health professionals increased by 0.476 times, or one unit, according to the value of Exp (B), which was 0.476.

5.2.4 Recognition system and the Performance of the Health Workers

The findings of the correlation analysis showed a favorable association between the health professionals' performance in public health facilities in Wajir County and their recognition system ($r = 0.751$; P-value < 0.05). The value of Exp (B) was 10.616; hence, a one-unit increase in recognition systems increased the likelihood that recognition systems have an impact on health professionals' performance by 10.616 times.

5.3 Conclusion

In conclusion, by examining the elements of standard-based performance, quality improvement standards, professional rules, and recognition systems, this study offered a distinctive viewpoint on tactics that impact the performance of health professionals. The investigation filled the conceptual and contextual holes mentioned in section 1.3 of chapter one. A conceptual model to describe how and why the methods enhanced the performance of the health workers at public health facilities in Wajir County was developed using the study, which was based on the hierarchy of needs theory.

The research concludes that, whereas professional rules, recognition programs, and standard-based performance all have a positive association with the performance of health professionals in public health facilities at the bivariate level, quality improvement guidelines do not in Wajir County.

It was determined that standard-based performance, professional regulations, and recognition systems enhanced the performance of health professionals at a combined setup taking into account all the aspects. However, it was discovered that the quality improvement guidelines method had no effect on the performance of the medical staff in Wajir County's public health institutions. Additionally, in a combined setup, it was discovered that the identification system, followed by standard-based performance, was the most crucial tactic.

5.4 Recommendations

The study indicated that, in a mixed setup, performance-based strategy was followed by recognition systems as the most crucial approach. The management at public health facilities is advised to make sure that performance-based standards are regularly updated and used for clinical decision-making, that employees always abide by the

established performance-based standards, that managers regularly communicate performance-based standards to employees, and that there are mechanisms in place for collecting feedback on the performance-based standards that are available.

In regards to the parameter (recognition system), this study recommends that management make sure there are adequate systems in place for rewarding high performance among health workers, that there are opportunities for non-financial rewards for good performance, that the health workers receive verbal praise for their efforts, and that management should support initiatives that improve performance.

It was determined that quality improvement guidelines had a negative impact on employees' performance at the bivariate level and when combined with the other three study variables, this study recommends the management of the institution and the ministry of health in Wajir County should make sure that there are clear quality improvement guidelines, defined responsibilities and expectations in the quality improvement guidelines, that there is sufficient education of health professionals on these guidelines, there are procedures for evaluating changes in the application of quality improvement guidelines, there are chances for employees to recognize their own efforts in putting quality improvement guidelines into practice, and finally the management has to develop initiatives that improve how the guidelines for quality improvement are applied.

At the bivariate level, the study found a positive correlation between professional regulations and the performance of health workers; however, when other study variables were taken into account, it was found that professional regulations had a negative impact on health workers' performance in Wajir county, this research recommends that the management at public health facilities and the ministry of health

in Wajir county should ensure that there are mechanisms for ensuring continuing competence, amending scopes of practice in professional regulations, putting professional regulations in place to ensure fair and transparent practitioner mobility, and simultaneously protecting the interest of the public and patients.

5.5 Areas for Further Research

Although the techniques that affect the performance of healthcare professionals in public health facilities in Wajir County were effectively established by this study, there are still some gaps that need to be filled in future research. Further research may be done to see whether the findings can be repeated on the techniques that affect health professionals' performance in public and private health facilities in Wajir County, other counties, in East Africa, and beyond. Another investigation is required to ascertain the reasons why the performance of the health professionals in Wajir County was negatively impacted by quality improvement recommendations.

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APPENDICES

Appendix 1: Informed Consent Form

Informed Consent Form

Kenya Methodist University

P. 0 Box 267-00200,

Meru, Kenya

Subject: Informed Consent

Dear Respondent,

My names are Abdikadir Abbey Hussein. I am a Masters's student from Kenya Methodist University. I am conducting a study titled "Strategies for Improving the Performance of Health Workers in Public Health Facilities in Kenya: A Case of Wajir County". The information obtained will be used to review current policies for improving health worker performance in public health facilities and contribute towards strengthening health service delivery to those who need it and when they need them.

Procedure to be followed

Participation in this study will require that I ask you some questions and also access the hospital and the staff. I will present to you the attached self-administered questionnaire for your honest action and response and record information on your responses to the Key Informant Interview Guide.

You have the right to refuse participation in this study. You will not be penalized nor victimized for not joining the study and your decision will not be used against you nor affect you at your place of work.

Please remember that participation in the study is voluntary. You may ask questions related to the study at any time. You may refuse to respond to any questions and you may stop an interview at any time. You may also stop being in the study at any time without any consequences to the services you are rendering.

Discomforts and risks

Some of the questions you will be asked are on the intimate subject and maybe embarrassing or make you uncomfortable. If this happens; you may refuse to answer if you choose. You may also stop the interview at any time. The interview may take about 40 minutes to complete.

Benefits

If you participate in this study you will help me to formulate strategies for improving health workers' performance in public health facilities in Kenya which is important for better health service provided by competent health providers. You will benefit from this assessment because it will help us strengthen the health systems in our county.

Rewards

If you agree to participate in this study it will be voluntary and that no monetary rewards will be provided but will thank you for your participation.

Confidentiality

The interviews will be conducted in a private setting within the hospital. Your name will not be recorded on the questionnaire and the questionnaires will be kept in a safe place at the University.

Contact Information

If you have any questions you may contact the following supervisors: 1. Mr. Musa Oluoch and 2. Dr. Muthoni Mwangi of the Department of Health Systems Management of Kenya Methodist University or Kenya Methodist University research review committee of Box 267-00200, Meru, Kenya.

Participant's Statement

The above statement regarding my participation in the study is clear to me. I have been given a chance to ask questions and my questions have been answered to my satisfaction. My participation in this study is entirely voluntary. I understand that my records will be kept private and that I can leave the study at any time. I understand that I will not be victimized at my place of work whether I decide to leave the study or not and my decision will not affect the way I am treated at my workplace.

Name of Participant…… Date……..

Signature…….

Investigator's Statement

I, the undersigned, have explained to the volunteer in a language she/he understands, the procedures to be followed in the study and the risks and the benefits involved.

Name of Interviewer…… Date…….

Interviewer Signature……

Appendix 2: Questionnaire

This questionnaire seeks to elicit responses from study participants on strategies for improving health worker performance in Kenya. You are kindly requested to provide answers to these questions as honestly and precisely as possible. Responses to these questions will be treated as confidential. Please (tick) where appropriate or fill in the required information on the spaces provided. The questionnaire is divided into the following segments:

Section A: General Information

1. **Which is your gender?**

Male	[ ]	Female	[ ]

2. **What is your age bracket? (Tick as appropriate)**

18 – 24 years	[ ]	25 - 30 years	[ ]
31 - 34 years	[ ]	35 – 40 years	[ ]
41 – 44 years	[ ]	45 – 50 years	[ ]
Over 51 years	[ ]		

3. **What is your highest level of education?**

Certificate Level	[ ]	College Diploma	[ ]
Higher Diploma	[ ]	University Degree	[ ]
Postgraduate Degree	[ ]	Doctoral Degree	[ ]

4. **How many years have you worked in the current position? (Tick as applicable)**

Less than 1 year	[ ]	Between 1-5 years	[ ]
Between 6-10 years	[ ]	Over 10 years	[ ]

		1	2	3	4	5
PBS1	There is evidence of the existence of performance based standards	[1]	[2]	[3]	[4]	[5]
PBS2	Performance based standards are regularly updated	[1]	[2]	[3]	[4]	[5]

PBS3	Performance-based standards are regularly used for clinical decision-making	[1]	[2]	[3]	[4]	[5]
PBS4	Employees constantly adhere to this performance-based standards	[1]	[2]	[3]	[4]	[5]
PBS5	Managers regularly communicate performance based standards to employees	[1]	[2]	[3]	[4]	[5]
PBS6	There are mechanisms for providing feedback on the available performance-based standards	[1]	[2]	[3]	[4]	[5]

Section B: Performance Based Standards (PBS)

Section C: Quality Improvement Guidelines (QIG)

5. To what extent do you agree with the following statements on quality improvement guidelines? Key: 1 strongly disagree, 2 Disagree, 3 Undecided, 4 Agree and 5 strongly agree (please put a tick as appropriate).

	Statements	**1**	**2**	**3**	**4**	**5**
QIG1	There are clear quality improvement guidelines	[1]	[2]	[3]	[4]	[5]
QIG2	There are clear roles and expectations in the quality improvement guidelines	[1]	[2]	[3]	[4]	[5]
QIG3	Quality improvement guidelines contribute to appropriate work processes	[1]	[2]	[3]	[4]	[5]
QIG4	Quality improvement guidelines contribute to appropriate work designs	[1]	[2]	[3]	[4]	[5]
QIG5	There is adequate health workers education on quality improvement guidelines	[1]	[2]	[3]	[4]	[5]
QIG6	There are mechanisms for testing change in the application of quality improvement guidelines	[1]	[2]	[3]	[4]	[5]
QIG7	There are opportunities for employees to recognize individual achievements in implementing quality improvement guidelines	[1]	[2]	[3]	[4]	[5]
QIG8	Employees believe that the organization embraces performance culture on quality improvements	[1]	[2]	[3]	[4]	[5]

QIG9	The institution promotes activities that enhance the application of quality improvement guidelines	[1]	[2]	[3]	[4]	[5]

Section D: Professional Regulation (PR)

6. To what extent do you agree with the following statements on how Professional Regulation influences employee performance at the hospital?

Key: 1 To No Extent, 2 To Less Extent, 3 To Moderate Extent, 4 To Great Extent, 5 To Very Great Extent (please put a tick as appropriate).

	Statements	1	2	3	4	5
PR1	There are mechanisms for ensuring continuing competence	[1]	[2]	[3]	[4]	[5]
PR2	There are mechanisms for amending scopes of practice in Professional Regulation	[1]	[2]	[3]	[4]	[5]
PR3	Professional regulations in place to ensure fair and transparent practitioner mobility	[1]	[2]	[3]	[4]	[5]
PR4	Professional regulations are in place to ensure simultaneous protection of the public and patient interest	[1]	[2]	[3]	[4]	[5]

Section E: Recognition Systems (RS)

7. To what extent do you agree with the following statements on how recognition Systems influence employee performance at the hospital? Key: 1 To No Extent, 2 To Less Extent, 3 To Moderate Extent, 4 To Great Extent, 5 To Very Great Extent (please put a tick as appropriate).

	Statements	**1**	**2**	**3**	**4**	**5**
RS1	There are adequate health workers recognitionsystems for recognizing high performance	[1]	[2]	[3]	[4]	[5]
RS2	There are financial recognition for recognizing high performance	[1]	[2]	[3]	[4]	[5]
RS3	There are opportunities for non-financial rewards for good performance	[1]	[2]	[3]	[4]	[5]

RS4	We are verbally praised for good performance	[1]	[2]	[3]	[4]	[5]
RS5	The institution promotes activities that enhance better performance	[1]	[2]	[3]	[4]	[5]

Section F: Health Worker Performance (PERF)

8. To what extent have you achieved the following? Please use a scale of 1-5 where 1 denotes "To No Extent", 2 denotes "To Less Extent", 3 denotes "To Moderate Extent", 4 denotes "To Great Extent", 5 denotes "To Very Great Extent" (please put a tick as appropriate).

	Statements	**1**	**2**	**3**	**4**	**5**
PERF1	Reduced absenteeism	[1]	[2]	[3]	[4]	[5]
PERF2	Reduced lateness	[1]	[2]	[3]	[4]	[5]
PERF3	Reduced time spent in clinical care	[1]	[2]	[3]	[4]	[5]
PERF4	Increased the number of health services provided	[1]	[2]	[3]	[4]	[5]
PERF5	Reduced patient waiting time	[1]	[2]	[3]	[4]	[5]

Appendix 3: Research Permit

COUNTY GOVERNMENT OF WAJIR
DEPARTMENT OF MEDICAL SERVICES, PUBLIC HEALTH AND SANITATION

When replying, please
QUOTE
Mohamedhassan.mhmi@gmail.com
0702114396

OFFICE OF THE DIRECTOR
PLANNING AND
ADMINISTRATION

14th APRIL, 2022

TO WHOM IT MAY CONCERN

RE: APPROVAL TO CONDUCT RESEARCH BY ABDIKADIR ABBEY STUDENT NO. HSM-3-2575-2/2015

The above-named person is our staff and is hereby authorized to conduct research on strategies influencing performance of health workers in public health facilities in Wajir County, Kenya

I therefore request you to accord him all the necessary support.

Yours Faithfully

MOHAMED HASSAN
DEPUTY DIRECTOR
PLANNING AND ADMINISTRATION
DEPARTMENT OF HEALTH
COUNTY GOVERNMENT OF WAJIR

MOHAMED HASSAN MAALIM
DEPUTY DIRECTOR PLANNING AND ADMINISTRATION
DEPARTMENT OF HEALTH – WAJIR COUNTY

Appendix 4: Research Permit

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Ref No: **370882**

Date of Issue: **04/April/2022**

RESEARCH LICENSE

This is to Certify that Mr.. Abdikadir Abbey Hussein of Kenya Methodist University, has been licensed to conduct research in Wajir on the topic: STRATEGIES FOR IMPROVING THE PERFORMANCE OF HEALTH WORKERS IN PUBLIC HEALTH FACILITIES IN WAJIR COUNTY, KENYA for the period ending : 04/April/2023.

License No: **NACOSTI/P/22/16763**

370882

Applicant Identification Number

Director General
NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Appendix 5: Kemu Authorization Letter

KENYA METHODIST UNIVERSITY
P. O. Box 267 Meru - 60200, Kenya
Tel: 254-064-30301/31229/30367/31171
Fax: 254-64-30162
Email: deanrd@kemu.ac.ke

DIRECTORATE OF POSTGRADUATE STUDIES

March 30, 2022

Commission Secretary,
National Commission for Science, Technology and Innovations,
P.O. Box 30623-00100,
NAIROBI.

Dear sir/ Madam,

ABDIKADIR ABBEY HUSSEIN (HSM-3-2575-2/2015)

This is to confirm that the above named is a bona fide student of Kenya Methodist University, Department of Health Systems Management, undertaking a Degree of Master of Health Systems Management. He is conducting research on, **'Strategies for improving the performance of health workers in public health facilities in Wajir County, Kenya'.**

We confirm that his research proposal has been defended and approved by the University.

In this regard, we are requesting your office to issue a permit to enable him collect data for his research.

Any assistance accorded to him will be appreciated.

Thank you.

30 MAR 2022

Dr. John Muchiri, PHD.
Director Postgraduate Studies
Cc: Dean SMHS
COD, HSM

KENYA METHODIST UNIVERSITY
P. O. BOX 267 MERU - 60200, KENYA FAX: 254-64-30162
TEL: 254-064-30301/31229/30367/31171 EMAIL: serc@kemu.ac.ke

March 22, 2022 KeMU/SERC/HSM/6/2022

Abdikadir Abbey Hussein
Kenya Methodist University

Dear Abdikadir,

SUBJECT: STRATEGIES FOR IMPROVING THE PERFORMANCE OF HEALTH WORKERS IN PUBLIC HEALTH FACILITIES IN WAJIR COUNTY, KENYA

This is to inform you that Kenya Methodist University Scientific Ethics and Review Committee has reviewed and approved your above research proposal. Your application approval number is KeMU/SERC/HSM/6/2022. The approval period is 22nd March 2022 – 22nd March 2023.

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 Kenya Methodist University Scientific Ethics and Review committee.

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 KeMU SERC within 72 hours of notification.