FACTORS INFLUENCING THE PROVISION OF SERVICE QUALITY IN THE PUBLIC HEALTH SECTOR:

THE CASE OF MOROGORO REGIONAL HOSPITAL

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By

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MBA-CM

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CERTIFICATION

We, the undersigned, certify that we have read and hereby recommend for acceptance by the Mzumbe University, a dissertation entitled **Factors Influencing the Provision of Service Quality in the Public Health Sector: the Case of Morogoro Regional Hospital**, in partial fulfilment of the requirements for award of the degree of Master of Business Administration of Mzumbe University.

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I, Shalin Parvez Thaver, declare that the thesis is my own original work and that it has not been presented and will not be presented to any other university for a similar or any other degree award.

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Date……..

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DEDICATION

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LIST OF ABBREVIATION AND ACRONYMS

ACT	Artemisinin Combination Therapy
CBOs	Community Based Organizations
EmOC	Emergency Obstetric Care
GOK	Government of Kenya
MDGs	Millennium Development Goals
MOH	Ministry of Health
MOHSW	Ministry of Health and Social Welfare
MSD	Medical Store Department
NGO	Non- Governmental Organization
NMCP	National Malaria Control Programme
OPD	Out Patient Department
RBV	Resource Based View
RDTs	Rapid Diagnostic Tests
SPSS	Statistical Packages for Social Science
VRIO	V value, R rare, I inimitable and O organization
WHO	World Health Organization

ABSTRACT

This study was carried out at the Morogoro Referral Hospital, which is located in Morogoro municipal along old Dar es Salaam road in Morogoro Region. The intention of the study was to assess the factors influencing provision of service quality in the public health sectors in order to come up with remedial measures that will lead to better health care that meet customer's expectations and satisfaction. The specific objectives include; assessing the influence of employee knowledge on health service delivery, evaluating the use of modern technologies on health service delivery and to assess the availability of medical supplies. The target population of this study comprised of 186 employees in Morogoro Referral Hospital. A sample of 127 respondents was taken from a population as 68% of the total population. One hundred and twenty-seven (127) questionnaires were prepared and distributed to the respondent, however, only 93 questionnaires were dully filled and handed over to the researcher. Data from the questionnaire were recorded and entered into the computer using Statistical packages for social science (SPSS) version 20 for analysis. The findings reveal that the level of professional staffs in the organization is low and there is no good ratio between the modern equipment to patients in the organization. The organization experiences frequent shortages of drugs and medical supplies. The findings pointed out the main setbacks that face supply management in the organization such as; delay for Medical Store Department, communication problems between the staffs, delay time from order replacement, expired medicine in the shelves, lack of the required drugs, stock out, shortage of workers, lack of resources and supplies stock out from MSD respectively.

There is a negative relationship between factors affecting service quality in hospital and the provision of service quality in Morogoro Hospital clearly indicating that low staff's knowledge, poor staff empowerment, ineffective quick services to customers and insufficient communication channels affect delivery of service quality in the hospital as they were statistically significant with a P-Value of 0.012, 0.035, 0.0421 and 0.044 at 95% confidence level.

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CHAPTER ONE

1.1 Introduction

This chapter presents an introduction of the study on the factors influencing provision of service quality in the public health sector in Tanzania. The need for carrying out this research is to assess factors influencing provision of quality health services in the Morogoro Regional Hospital and to come up with concrete solution and strategies to improve health service provision. Therefore, this study covers background of the study, statement of the research problem, research objectives, research questions and significance of the research undertaken.

1.2 Background of the Study

Health care quality can be referred to as a level of performance in connection to characterized norms of mediation that are perceived to be innocuous with the limit of improving wellbeing by utilizing the accessible resources (Murray & Frenk, 2000)

An important component for national advancement, poverty alleviation and other health development improvements required by all Tanzanians is good health. In this way, the Government has since freedom worried on giving fair and quality preventive, curative, remedial and rehabilitative health services at all dimensions so as to attain good health (Abdallah, 2003).

Health system in Tanzania is surrounded by its National health policy and is also decentralized. One of its primary objectives is to provide Primary health care to all citizens and this objective is clearly linked to the health related- millennium development goals (MDGs). Two key components in MDG are Community health promotion and disease prevention and this is achieved through environmental hygiene and management of occupational health services (MOH, 1990).

The Tanzanian government through the Ministry of Health (MOH) and Social Welfare has emphasized the importance of improving the nature of quality care through nu-

merous methodologies, such as; Health Quality Improvement Framework, having the general objective of improving the quality of health services and the well-being of all Tanzanians (MOH, 2003; MoHSW, 2011). Regardless of the hard work carried out by the government of Tanzania to enhance the quality of healthcare facilities, there are a number of limiting factors, including: bad facilities, inaccessibility of drugs and/or medical facilities and a limited amount of human resources for healthcare have limited healthcare provision (MOH, 2003; Kruk & Freedman, 2008; Juma & Manongi, 2009; Munga & Mwangu, 2013).

Because of these limitations, Tanzania has embarked on a practice of implementing policy modifications within the framework of a health sector reform strategy (MOH, 2003, MoHSW 2008a, b) central to the reforms is the country's decentralization of health services. Decentralization is well documented as a main approach enabling the local health officials to be more engaged, independent and responsive in matters that are related to health care services (WHO, 2006; MoHSW, 2007, 2008; Munga et al., 2013).

Regardless of these changes, it has been observed that patients attending the public health sectors are still facing the problem of poor/low service quality being provided to them (Khamis & Njau 2014). Scarce human resources for health care sector is one of the key encounters in Tanzania, especially in rural settings (Songstad et al., 2011).In 2012/2013 for instance, the national average professional proportion per 10,000 population was 0.9 while the national average medical attendants/midwives per 10,000 masses was 4.9 (Mboera et al., 2015).

Indeed, Quality of care is an unpredictable issue which is impacted by numerous components. Fewer components in the quality of care are easy to define and measure, while others are difficult to characterize and gauge (Donabedian, 1980). Surely, the multifaceted nature of these components and their measurements ought to be considered at whatever point the quality of care is being considered, either in general terms or in a specific level of health delivery (Cole, Shimkhada, Fielding, Kominski & Morgenstern 2005).

In a service industry, like healthcare, the quality of services provided is rated and assessed based on the patient's experience. Components such as new technology, high staff to patient ratio, and provision of newer and effective medication, affordability, effectiveness and efficiency in service delivery lead to provision of quality health care (Terrein, 2012). The health industry comprises of a government scheme that involves major players such as the Ministry of Health and parastatal agencies, and the private sector that involves private for-profit, non-governmental organizations (NGOs) and faith-based organizations (WHO, 2010).

Public hospitals are facing a problem of poor management and this has remained the same as it was in the old dispensation. Medical workforce who are at lower management levels are not empowered to set their work goals, make decisions and solve problems regarding work processes. The wards appear small, lack of basic equipment in service provision to patients, like computers and microscopes. Also, are in short of medical supplies which are essential for service delivery to patients, the staff work for long hours, which is an indication that the medical staff is understaffed All of these variables influence the quality of services in government hospitals, as service quality delivery has an important connection with customer satisfaction. (Swanson & Davis, 2003).

Health services provided by the government are improved through hospitals that are possessed and functioned by private people, all of these when brought together provide between 30% and 40% of the beds in Tanzanian hospitals (GOK 2010). Specific health services are provided by Non- Governmental Organizations, Faith Based Organizations and Community Based Organization due to their comparative advantages (Argote 2010).

Generally speaking, the health framework of Tanzania is as yet being confronted with some difficulties pertaining to the health care services, the reason behind such difficulty is that there is a shortage of staffs who are well trained in their medical field, hospitals constantly run out of drugs and supplies in the primary health sectors (Tibandebage, Mackintosh & Kida 2013). Moreover, the accessible human resource in health segment are underutilized in this way subsequently upsetting the nature of health services con-

veyed to patients. This additionally prompts the disappointment of successfully executing the waiver framework which along these lines' bars/excludes the extremely poor and defenseless gatherings from having an entrance to human services benefits as announced by the Ministry of Health (MOH, 2005).

1.3 Statement of the Problem.

Health sectors need to benefit from staff commitment, conveyance of required materials and equipment's, innovations and communication channels while providing public health services in hospitals. Currently, long lines of patients awaiting services and overcrowding are a common occurrence in public hospitals. Medical workforce is not empowered to make decisions and solve problems arising from their work processes. All these tasks are a preserve of the higher administration board.

Quality in healthcare may include components such as high workforce to patient ratio, newer technology, affordability, newer and effective medication, efficiency and effectiveness in the provision of service delivery (Tam, 2005).These components should be realized through quick services to patients in terms of availability of prescribed drugs, providing specialized services in a wards; empowerment of a medical team to set work goal, make choices and resolve problems. Job satisfaction should be derived by the medical team in their work. There should exist effective client- staff communication as it influences patient satisfaction levels significantly (Broderick, 2001). Providing service quality to public health sectors still remains a challenge in Tanzania despite of the initiatives made by Non- Government Organization (NGO), Faith Based Organizations and the government through the Ministry of Health (MOH) and Sanitation.

Previous studies by Mutui (2006), Mayoli (2008) & Mwenda (2012) have explored the impact of government initiatives to provision of health services, community participation and provision of public health services and the future forecasts on the sustainability of the community health strategy respectively. Based on this knowledge, it is an appro-

priate time to shed light on the connection between public health and provision of quality health services.

1.4 Research Objectives

1.4.1 General Objective

The general objective of this study is to assess the factors influencing the provision of service quality in the public health sector.

1.4.2 Specific Objectives

i. To assess the influence of employee knowledge on health service delivery in Morogoro Regional Hospital.

ii. To evaluate the use of modern technologies on health service delivery in Morogoro Regional Hospital.

iii. To assess the availability of medical supplies in Morogoro Regional Hospital

1.5 Research Questions

1) Which knowledge do employees possess on Health service delivery in public Health?
2) Which are the modern technologies used in Health public sector service delivery?
3) Do the medical supplies meet the patient's requirement in Morogoro regional hospital?

1.6 Significance of the Study.

This study's results will allow health care organizations to provide quality health care that meets the expectations and satisfaction of clients, they can do so by improving their management and other variables such as; human resource, drug availability, Information

Technology (E- System), recruitment and motivation process that cause hindrance in provision of quality health care.

This research will also assist in increasing the knowledge of the organization regarding the importance of providing quality health care and maintain the quality health care facilities so as to enhance the achievement of health industry growth.

The research results may also be helpful to government health authorities and civil society by equipping them with the necessary facts and expertise, certifying efficient partnerships, and collaborating with other stakeholders so to enable health service providers to operate more effectively.

1.7 Scope of Research

This study was carried out so as to examine the factors influencing provision of service quality in the public health sector so as to come up with remedial measures that lead to provision of better health care services.

The study also involved a sample of 127 respondents whereby the sample was divided into subgroups called strata using stratified sampling technique. A total of 127 questionnaires were distributed to respondents in different departments of the health sector. A total of 100 questionnaires were obtained from the respondents. However, out of 100 only 93 questionnaires were complete and accurately responded, resulting into a response rate of 73% which was deemed as acceptable level for this study.

1.8 Limitation of the Study

While carrying out the study, the researcher faced certain limitations such as inadequate support by the respondents during the process of collecting data, some of the respondents were not ready to spare their time filling in the questionnaires provided to them and returning them on time hence the researcher had a great task of convincing them and carrying out a regular follow up so as to get the questionnaires answered, other respondents such as medical doctors, surgeons were reluctant in providing any information or filling

the questionnaire due to their busy schedules hence the researcher might have missed out some important information/ facts that the doctors were aware of.

1.9 Organization of the Study

The study encompasses six chapters whereby chapter one consists the following; introduction, background of the study, problem statement, research objectives (general and specific objectives), research questions, significance of the research, limitation of the research, and lastly organization of the study. Chapter two consisted of the following sections; introduction, definition of health service quality, factors affecting the provision of service quality in the public health sector, theoretical literature review, empirical literature review, gap model in service quality and the conceptual framework. Chapter three contains the research methodologies; introduction, study area, research design, target population and sample size, sampling frame, sampling technique, sample size, data collection methods, data analysis and presentation, the unit of analysis, reliability and validity of the study and ethical consideration. Chapter four consists the presentation of finding. Chapter five focuses on discussing the findings and lastly chapter six looks at the summary of finding, conclusion and recommendations.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The section provides the introduction of literature reviews of the study. It consists of the following sections: Theoretical Literature Review, Empirical Literature Review is based on the various theories, Conceptual Framework and concluding remarks. The literature review will assist the researcher to conceptualize the framework of the study.

2.2. Definition of Health Services Quality

Medical service quality is referred to, as the presentation of technology and medical discipline in a way which enables to maximize the health benefits without simultaneously increasing the risk. Quality health services tend to be personal, compound and multi-dimensional (Donabedian 1980).

Quality health services can also be defined as the process of regularly providing effective and efficient health services to the patients by taking into consideration the current clinical standards and guidelines that meet the needs of patients and also pleases the providers (Mosadeghrad 2013). Providing quality health service means providing the right healthcare services in a right manner to the right patient in the right place at the right time by the right provider for the right price so as to get the right results (Mosadeghrad 2013).

2.3 Factors Affecting Provision of Service Quality in the Public Health Sector

- **Employees Management Knowledge**

According to a study conducted by Wanjau, Muiruri & Ayodo in 2012 on the factors which affect provision of service quality in the public health sector Kenyatta National Hospital, they identified general low employee's capacity, low adoption of technology, poor communication channels and inadequate fund as the main factors that affect deliv-

ery of quality health services to patients attending public health facilities and thus having an impact on perception of health service quality, satisfaction and loyalty of patients.

Like in most developed countries, managing public health in the USA is characterized by emphasis on performance and improving the quality of healthcare. In order to attain these critical indicators, public health management is fully equipped with the necessary resources and management skills (Nembhard, Alexander, Hoff & Ramanujam 2009). The hospital personnel are more equipped with the management skills that enable them to efficiently manage resources and provide an evidentiary basis for determining patient, clinician, and organizational outcomes (Nembhard et al., 2009). In other words, the health professionals are well educated and trained so as to be able to improve the patient services health outcomes.

- **Management Style on Service Delivery**

In the past, the management of the health care system was to some extent inefficient, incoherent and largely driven by health care providers (supply forces), thus keeping patients (demand side) out of the design, development and delivery process (Berenson & Cassel, 2009. Currently, however, there has been a change to an organizational structure in which patients affect every client service role (Glickman, Baggett, Krubert, Peterson & Schulman 2007). Organizations which are operating in the public health sector, that always takes up the challenge of huge restructuring, have encountered in the past and are still experiencing difficulties in fully and properly implementing their services (Glickman et al., 2007).

Effective management is cited as a vital element of quality from the provider's viewpoint, managers, policy-makers and equally the spenders. Management has an influence and affects every component within the hospital setting (Mosadeghrad, 2014). Good ideas for quality improvement will always remain useless if the management is not good and competent enough to make use of the ideas available. Most studies have cited lack of qualified managers in public healthcare organizations. Most managers are not quali-

fied professional managers, rather are just hospital physicians, nurses, doctors or are healthcare professionals who are given the task of managing the hospital due to the limited number of workforces in the public hospitals (Mosadeghrad, 2014).

In fact, in most Public Hospitals, the managers have no experience and knowledge in managing the overall activities of the hospital. According to Buong', Adhiambo, Kaseje, Mumbo, Odera & Ayugi, in their study done in 2013 the authors concluded that the majority of public health managers were trying to resolve problems as short term measures and not taking into consideration the long-term effects. Besides, there were no criteria and objectives, which were kept in place to appoint and select managers in healthcare facilities. National policies were considered to be strict and did not allow adequate flexibility that was needed to adjust to the native conditions. Mostly, managers in the public health sector wanted to have more power so as to be able to identify and recruit the most suitable and deserving personnel that were needed to provide quality health facilities to the patients (Buong' et al., 2014).

- **Patient Cooperation**

Patient participation and support are a vital element and it also affects the quality of medical services provided. If doctors do their job well, but the patients do not follow medical orders given by their doctors then the objective would not be achieved. Also, Clinical outcomes depend on the ability of patients to provide the right information and to cooperate and follow all the instruction given by the clinicians.

- **Collaboration and Partnership Development**

It is important for practitioners to have good support services. A nurse should administer medicines on time and should not administer wrong medicines to patients; nurses should be more responsible.

Practitioners should show their willingness and ability to effectively interconnect with different health specialists or organizations so as to ensure provision or delivery of high

quality medical services for example, if the hospital does not have a certain equipment or machine such as the CT- Scan machine, in this case the patient's relatives need to find another hospital which has such machine so as to take the patient there and get all the tests done. Therefore, such complications and inconvenience suffered by the patient's family can be sorted out easily through collaboration between two hospitals.

- **Financial Resources**

Fixed budgets are widely used by most of the hospitals that are often based on the previous historical spending levels, with no focus on the price change over a certain period of time (Peters, Elmendorf, Kandolaand, Chellaraj, 2000). Such system clearly secures a good spending control and is managerially unchallenging (Smee, 2002). However, it can often bring about historical imbalances and inequity and therefore fail to respond to new demands and priorities (Peters et al., 2000).

Furthermore, the fixed budgets provide minimal incentives in exploiting the effectiveness, quality or quantity of care, which is offered by hospitals using such budget systems (Smee 2002). However, hospitals that are financed using the line item budgets that are directly attained from the health ministry lead to central bureaucracies thereby exercising maximum control levels over peripheral spending whereby the peripheral levels have less or no capacity to use the funds in a flexible manner that corresponds to their local needs (Arhin-Tenkorang, 2000). Therefore, such centralized budget systems lead to technical inefficiency whereby it keeps preventing the local managers from improving the distribution of inputs and hence lead to spreading/ providing poor quality of service (Peters et al., 2000).

In service organizations, financial management has mainly been perceived as a constraint and hurdle to other functions within the organization (Adams & Colebourne, 1989). Therefore, an 'enlightened' approach has been suggested to finance in service organizations. This approach is more participative and positive rather than being a hurdle or a constraint, it adds to strategic planning, costing systems, staff motivation, quali-

ty control, ongoing solvency and to defending the trust of outsiders in the management of organizations (Arhin-Tenkorang 2000).

In specific, it is necessary to distinguish' good costs' that enhances organizational capacity and service quality delivery from' bad costs' that intensifies bureaucracy and thus become an obstacle in the delivery of service quality (Sun & Shibo, 2005). Health resource allocation should be carried out using different layers of the structures of domestic and local government on their manner to the health facilities (Blas & Limbambala, 2001).

It is a prerequisite to make sure that the funds which are allocated in different departments of the organization are used for the intended purposes and this can be done through financial accountability by using monitoring, auditing and accounting mechanisms which are well-defined country's legal and institutional framework (Oliveira-Cruz, Hanson & Mills. 2001). Governments lack the financial and technical capacity in many developing countries to effectively exercise such oversight and control functions, track and report on allocation, disbursement and use of financial resources (Smee, 2002).

2.4 Theoretical Literature Review

This section covers diverse concepts and objective of topic done by different researchers. It additionally covers theories in connection to the study being contemplated as a method for contextualizing research thought.

2.4.1 Adoption Theory

The theory of adoption was advanced by Rogers Everett in 1962 that focused on adopting new products and also diffusing the new product into the market as well as to recognize how, why and to what extent a new product can be accepted by individuals or organizations in the market. This theory can also be called as the theory of product adoption.

The new product introduced in the market can be focused towards specific people or organizations in the market. In any organization, there exists a long product line and prod-

uct depth this is due to the fact that each of these product lines and depth in the organization exists because some dealer at some place thought that the item is required.

Once the product has been propelled into the market, the adoption theory plays a serious role in making sure that the product is received/acknowledged by the individuals in the market. As per the adoption theory, a new product, which is being propelled into the market, is ought to have some previous empirical information pointing towards the possible achievement of a product. A marketer does not directly launch the product in the market and then wait to watch it fail. Firstly, the product is to be tested and then it is launched.

In marketing the possible tool for the success of Adoption theory is to carry out the market test. This theory assumes that there are different variables, which are in charge of affecting the decision of the client in adopting the product. These variables might incorporate the consumer's knowledge and awareness in regard to the product, the level of innovation acceptance and experience in the purchase of such products. Therefore, the marketer collects more information so that he can influence buyers to purchase the product, resulting into faster market penetration of the product. Overall, the diffusion of innovation is a part of the adoption theory whereby the diffusion of a new and innovative product or even normal product is studied. It is noted that there are five categories of buyers such as; Innovators (always pick up products first), then early adopters, early majority, late majority and ultimately laggards (Rogers, 1962).

2.4.2 Agency Theory

Agency theory centers on the association between one person who is the principal and the other one who is the agent to carry out some work on their behalf (Jensen & Meckling, 1976).

The contract between the principal and the agent in the agency theory becomes the unit of investigation, such contracts can be written or unwritten and specify what rights do

the agent have, the criteria of performance, which is used to evaluate the agents and the payoff functions that they face (Fama & Jensen, 1983).

Similarly, in the health care sector there exists a connection between the supplier and the patient and such relationship is described as a principal-agent relationship (agency theory). The principal is the patient who selects a specialist that is the health care provider to guide him in making decisions about his/her treatment or to make decisions on behalf of the principle. Thus, the health provider is expected to be a perfect agent who will combine his/her professional knowledge alongside with the patient's preferences that would help the patient to make a choice/ decision based on the information provided to him. However, the principal-agent problem arises when the provider chooses instead to maximize his or her own interests rather than of the patients, which in many cases do not align/ match with the patient's interests.

The issue of information relating to the principal-agent relationship as Arrow (1963) has pointed out that there is a high degree of uncertainty in the healthcare market. Maybe neither the health care provider, nor the patient is sure about the illness and the ideal treatment or, more likely, the health care provider has a greater knowledge of the patient's condition than the patient him/herself has. As the patient turns out to be increasingly engaged and educated about his or her wellbeing conditions and possible treatment choices, the provider is less able to deviate from the role of a perfect agent.

2.4.3 Resources Based View Theory

Resource based theory has its central focus on the resources and competences which are controlled by a firm that generate persistent performance difference among firms (Peteraf & Barney, 2003).

Resource Based View (RBV) focuses on the link between organizational strategy and firms' resources through the VRIO framework: V (value), R (rare), I (inimitable) and O (organization) (Barney, 1995). Resources can either be tangible or intangible and are gathered as a result of 'in-firm decision making and external strategic factors. Resources

are the basic physical, human and organizational assets (Wheelen & Hunger, 2008) within an organization and form the basis of RBV (Bell & Dyke, 2012). They are the building blocks whereby an organization can develop its strategy and in turn achieve organizational success (Wernerfelt, 1984; Priem & Butler, 2001; Barney, 2001).

Capabilities refer to the capacity an organization has to exploit its resources in a way that is organized (Wheelen et al., 2008) hence, taking advantage of their attributes, by using organizational processes to achieve a desired result.

Therefore, it is likely that the supreme collection of resource capabilities which is necessary for health care organizations to achieve successful innovation and implementation is going to rely on their ability to identify, organize and subsequently take advantage of their own valuable, rare and inimitable resource capabilities (Peteraf, 1993).

Application of resource-based view perception for healthcare providers, can enable the organization to focus on unique and strategic capabilities that will enable an examination of how these capabilities can be identified and developed, including a valuation of their value, rarity and inimitability relationship to institutional advantage (Coates & McDermott, 2002).

2.4.4 Service Quality Theory

It is recognized that service quality is a key to realizing the highest possible medical outcomes within available resources (Øvretveit 1992, 2009). Variety of ways can be used to define quality, but it is commonly viewed as the provision of healthcare, which is safe, effective, patient-centered, timely, efficient and equitable (Boaden, Harvey, Moxham & Proudlove2008).

Zeithaml (1981) has identified that patients who visit hospitals for treatment usually blame themselves when they are not happy with the services provided to them by the health care provider and hence dissatisfied for the bad choice they made. Therefore, health care employees must be very cautious and attentive in providing service quality to

their patients since some patients who are dissatisfied with the services received may not complain, but also may not return to the same hospital again and therefore the health care providers should make sure to provide service quality to their patients and seek out sources of dissatisfaction in case of any and resolve them timely so as to avoid losing the patients.

Perceived service quality components such as assurance, reliability, tangibles, empathy and responsiveness are the five dimensions which were used to study the service quality in service industries such banking, tourism, and transport as well as healthcare industry.

2.4.5 Abraham Maslow Theory

The Theory of Hierarchy of Human Needs was created by Abraham Maslow (1971), this theory characterizes needs from the fundamental ones (lower) to higher ones. The primary need is physiological need this need incorporates of food, attire, safe house and water. The second-dimension need is wellbeing needs whereby people need to feel safe, protected, secured, educated and having investment. Level three involves the need to be loved and feel belonged to certain society. Individuals wish to have a family or an institution. The fourth-dimension need is about esteem needs, after individuals have been acknowledged and have a place within a specific gathering of society, they can build up a feeling of self-esteem. The fifth dimension is self-realization, which is a definitive objective or motivation behind human conduct. In this dimension, individuals need to understand their maximum capacity and continuously create themselves in order to accomplish something throughout everyday life.

In relation to this study, taking into consideration the health care sector, in the event that the public does not receive quality health services, then they will lack the precautionary and remedial measures that are important for their health. Hence, they get stressed because their basic needs are not well met due to that they cannot progress to the other levels/needs. As a result, their health condition deteriorates making them weak and ineffective.

They, therefore, need to be adequately provided with quality health service so as to be able to value themselves and take care of their healthy needs and of their fellow people consequently ensuring their health growth and development.

2.5 Empirical Literature Review

Various academics in the past two decades or so have been attracted by the emergence and assessment of service quality. In this sense, service quality can be measured by using two main lines of thoughts (Kang & James, 2004). This line of thoughts or perspectives are American perspective and European perspective.

It is suggested that the researchers generally adopt only one of the two perspectives in their work. The American perspective of service quality focuses on functional quality attributes such as reliability, maintainability, usability, portability, correctness, efficiency, integrity and flexibility (Brady & Cronin 2001).

The European perspective of service quality perceived by customers consists of three dimensions such as: functional dimension- looks at the process of delivering services to the customers, technical dimension- focuses on the outcomes generated by providing the service to the customers and image dimension- focuses on how the customers view the company, what are their thoughts regarding a certain company.

2.5.1 Influence of Training on Service Delivery

Training and development have become a continuous process for improving the caliber and competence of employees so as to meet the current and future performances. In addition, while providing training, it has been very important to impart the required skills to all levels of employees. Management focuses on altering their employees ' behavioral patterns in a manner that is concentrated directly on achieving organizational efficiency, sustainability and development (Argote & Ingram, 2010).

As a service sector, health care remains an important sub-set whose growth in the country's changing economic scenario is forecast to be the fastest.

Several problems have been witnessed in the past years emerging in the area of training. Thus, the focus has been on urban curative care in tertiary care settings, which concerns provision basic medical education, hence less education, training is given to doctors in rural primary health systems also, when medical officers join the government system in primary health services are barely given any induction training.

Various measures such as customers' attitudes which are taken into consideration by using customer satisfaction questionnaires are used to assess the functional quality of a service. As described by Hayes (1997), the process of identifying customers' attitudes can be identified by determining what the customers' requirements are and how these requirements can be met so as to satisfy their needs/requirements.

2.5.2. Influence on Frequency of Drug Supply on Service Delivery

Drugs, medical supplies and equipment's play an important impact on the quality of patient care which further accounts for a considerable high proportion of health care costs. In order to avoid the wastage of available limited resources, health services are supposed to make informed choices/ decisions on what to buy so that they can meet priority health care needs (Granehein & Lundman, 2004). There exists less information about essential medical supplies and equipment, though most public health organizations have useful information about essential drugs.

Despite, having useful information in the public health sector selection of supplies and equipment has been given very little attention with the availability of a range of brands and items to choose from leading brands to acquisition of inappropriate and technically unsuitable items, which are incompatible with existing equipment, unavailable spare parts and consumables or unskilled staff on their use all together (Dogba & Fournier, 2009).

The only part that deals with managing medical supplies and equipment, effective storage, stock control, care and maintenance is the Procurement department and are also critical if health services are to get the most out of what they buy (Dogba et al., 2009).

The Government of Kenya in collaboration with other health players has produced medical supplies and equipment manual that remains very important in addressing some of the challenges. The manual applies to all healthcare levels as a reference for carrying out responsible procurement and management of medical supplies and equipment (Granehein et al., 2004).

Middle income countries usually face real shortages of drugs and medical supplies in healthcare services which poses a major challenge in the provision of health care to patients, thereby contributing to poor quality health services and a further leading to increased mortalities (Tumwine, Kutyabami, Odor & Kalyango 2010).

It is estimated that almost 99% of deaths occur in developing countries, especially in rural areas are due to inappropriate equipment and drugs prescription. Adequate health services involving emergency care to the public could lead to drastic reduction in such deaths. Most countries in sub-Saharan Africa still find it complicated to access essential medical items, thereby compromising the provision of timely care to the patients (Tumwine et al., 2010).

2.5.3 Determinants of Patients' Satisfaction

There has been no proof/concession to whether financial attributes and experience of patients on health services have an impact on their satisfaction as it was referenced by Al-Abri and Al-Balushi (2014). Discoveries from accessible readings are contradictory, for example Bleich, Ozaltin, & Murray, (2009) acknowledged that there is a positive relationship between satisfaction and level of education and income, while in the study of Ham, Peck, Moon, & Yeom (2015) it was inferred that there were no relationship between general qualities of patients and patient fulfillment.

2.5.4 Comparison on Quality of Health Services in Private and Public Facility

The nature of health services that is given by private medical offices are considered by numerous individuals as being better than those of public hospitals (Karen Spens, 2011)

Although, an ongoing report conducted in Ethiopia (Ambelie, Demssie, and Gebregziabher, 2014) showed that general fulfillment/satisfaction of outpatients in private clinic was 57%, that was lower when contrasted with that of public hospitals. Be that as it may, an examination directed to in-patients in a private clinic in Pakistan in 2014 shows a generally higher fulfillment on all measurements (Raheem, Nawaz, Fouzia, and Imamuddin, 2014).

A relative study that was carried out in both private and public hospitals in Nigeria (Karen Spens, 2011), discovered that the view of patients who are in private emergency clinics and those in public medical clinic is nearly the equivalent however, variances occur only when tertiary level hospitals are excluded, as private hospitals tend to score higher being compared to their counterparts.

In Tanzania, the nature of health services given by health care clinics is very much recorded and will in general be of low quality by large. An investigation by Khamis and Njau, (2014) at a Mwananyamala medical clinic Out Patient Department (OPD) discovered that patients were disappointed with every one of the five measurements used to evaluate patient's dimension of fulfillment, such measurements are: confirmation, reliability, physical assets, compassion, and responsiveness. A study conducted by Uwazi (2012) in Dar es Salaam suggested that private and public health sectors experienced a slight variance in relation to the available health quality components. It also indicated that the satisfaction level of patients attending the private and public health facilities resulted into 80% and 60% respectively.

2.6 Gap Model in Service Quality

Health care services are directly linked to service quality and therefore it is relevant for this research study because there is a high requirement of customer/consumer involvement in the process of delivering service quality. Therefore, the health care service quality relies to a greater extent on the co-contribution of the patient in the process of delivering services. There has been evidence from various studies that if patients comply

with the medical advice and treatment provided by the professional medical staff than the patients will perceive to have received a health service that is of a good quality and hence resulting in a healthy outcome (Irving & Dickson, 2004; Sandoval, Brown, Sullivan & Green, 2006).

In line with Edvardsson (2005) he suggests that, there is a sturdy influence on the way customers perceive quality, they do so by taking into consideration their experience, the experiences of patients begin from the moment they meet the medical experts and other support employees and proceed the therapy process. The experience sought by the client generates the cognitive, emotional and behavioral reactions of either satisfied or unhappy with the quality of service supplied by the client.

As in this study, this encounter is influenced by many other factors such as communication, availability of skilled medical staff, the technology used in providing treatment, the availability of the required facilities and equipment as proposed in the conceptual framework which shape this experience of the customer and determine their outcome.

2.7 Conceptual framework

The conceptual framework can be described as a collection of wide concepts and principles derived from appropriate research areas and used to structure a subsequent presentation (Kombo & Tromp, 2006).

It portrays key information in providing quality health services in public government hospitals. It is contended in a few extant literatures that at the same time as health used to be a staff function, current studies have shown that it is leading function and when service delivery is wrong it affects other health service delivery.

The independent factors affect the delivery of quality health services to patients. For example, when medical staff does not possess the required skills and training for delivering health services it will affect the provision of quality health care in government hospitals,

also the trend of medical supplies is not constant in public hospitals and this affects the service quality delivery.

It was further observed that in order to ensure provision of good quality health service in public health organizations the following interventions are to be considered;

Employee's motivations and incentives- Provision of motivation to medical staffs is very important in quality health service delivery. The researcher believes that if medical staffs are demoralized due to low pays and marginalized fringe benefits, they can seldom be effective in the provision of good services to patients.

Take an example of a medical staff who works with the Government hospital earns an average of Tshs 960,000/= per month while those who work with private hospitals earns more than 1.5milion, at the same time he attends 25-30 patients as compared with his counterpart in a private hospital attends 10-15 patients per day. Too much work with low wage. So, the researcher believes this is one of the factors that contribute to the scarcity of medical staffs in some government hospitals. It is also very important for the employers to know that the contribution of the staffs should be recognized and valued by the management in order to stimulate their performance.

Shared decision making and ongoing education – For Medical practitioners having good support services is very important. A medical practitioner's need to be assured of good clinical laboratory works (the test results are reliable) and that the nurses administers the right medicines. The cooperation and team work among the medical staffs is a very important component in providing high quality health services.

Good ratio of staffs to patients- It is documented that one medical staffs from the organization attends more than 20-30 patients per day. This is due to the fact that the number of medical staffs is not proportional to the number of patients who seek medical service. This is very common in most of the government hospitals. In order to ensure good and effective medical services there should be a good proportional of medical staffs and the number of patients.

The use of sophisticated medical equipment's - A researcher believes that, high quality medical services require high quality inputs. Working with low quality materials (equipment's) decreases employee's productivity, on the other hand working with old and outdated equipment's prolong the works at the same time the results may be inaccurate or unreliable. For example, it takes about 50 minutes to get an electrocardiograph instead of 10 to 15mimutes by using sophisticated machines.

An adequate number of sophisticated equipment- it is very difficult to serve a huge number of patients at once if there is a limited number of equipment's. One of the factors that measure the quality of health in medical organization is the speed of patients to access the health services. The lesser the number of medical equipment used the lesser the patients served that led to poor health services.

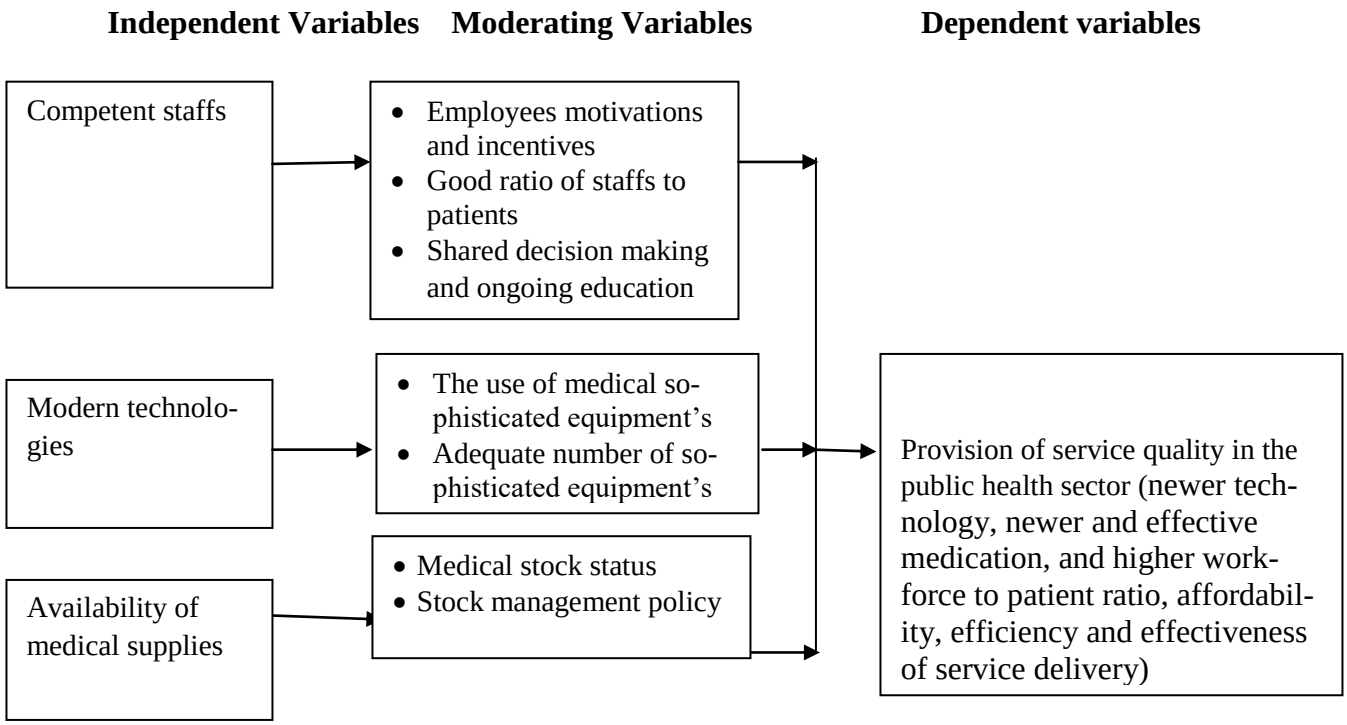

Figure 2.1 Conceptual framework of factors influencing the provision of service quality in the public health sector

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This chapter describes the procedures that were used in carrying out this research. This chapter consists of the study area, research design, target population, sample size, sampling frame and technique, data collection methods, pre-testing of the questionnaire and data processing and analysis

3.1 The Study Area

This research was held at the Morogoro Referral Hospital, which is situated in Morogoro municipal along old Dar es Salaam road in Morogoro Region. The study investigated the factors influencing the provision of quality health care in public sector in Tanzania; a case study of the Morogoro Regional Hospital.

The research was carried out at Morogoro Regional Hospital because it is a Referral Hospital and the biggest public hospital in Morogoro whereby most of the citizens residing in Morogoro prefer getting treated there since it's cheaper compared to a private hospital and also being a referral hospital all emergency casualties like accidents are referred to the above mentioned hospital Therefore, the researcher found it very important to carry out the research so as to find out what factors are limiting provision of service quality and to come up with remedial measures so as to enable the hospital improve their services and provide better health services.

3.2 Research Design

A research design can be defined as a plan of study, which provides the overall framework for data collection. On the other hand, research design is the conceptual structure within which research is conducted; it constitutes the blue print for the collection, measurements and analysis of data (Kothari, 2004).

The study was conducted using survey design in which data were collected by providing questionnaires to the hospital employees or workers of an identified population. Data were collected at one point in time thereby being a cross- sectional survey design.

3.3 Target Population

The target population of this study is comprised of 186 employees in the public sector in a Regional Hospital in Morogoro. A sample of 127 respondents was taken from a population (representing 68% of the total population).

3.4 Sampling frame

The sampling frame for this study was a list of all the employees working in the public sector in eight departments namely; Laboratory, pharmacy, medical doctors, supplies, management, nurse, health and others. The list contained the names of the employees formed the basis of the sampling frame and was obtained from public sector human resource department.

3.5 Sampling Technique

In order to select the appropriate sample size, the study employed probability sampling technique in particular stratified sampling.

Probability sampling in particular stratified sampling was used in the selection of the sample, which included; Lab Technician (25), pharmacists (15), Medical Doctors (20), Supplies Officer (10), Management Officers (15), Nurses (26), Health Officers (2) and others (14)

Stratified sampling technique was chosen because the researcher wanted to get information from all departments of the hospital. Thereby, dividing the sample into subgroups called Strata so as to include units from all departments in the research study and hence enabling the researcher to get all the required information.

3.6 Sample size

According to Cohen, Manion &Morrison (2007), researchers can collect data from a smaller number of participants who are part of the larger population or group and that smaller number is what is referred to as a sample.

According to Kothari (2004) a sample size refers to the number of items that are to be selected from the universe to constitute a sample.

Table 3.1 Sample distribution of the total population using stratified sampling technique

Sample Category (Strata)	**Number of Respondents**
Lab Technicians	25
Pharmacists	15
Medical Doctors	20
Supplies Officers	10
Management Officers	15
Nurses	26
Health Officers	2
Others	14
Total	**127**

Source: (Field data, 2018)

The sample size for this study was, drawn from total population of 186 workers. This sample size was obtained by using Yamane formula of 1967 which is represented as follows;

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

Where by:

n=Sample size

N=Total number of employees/workers = 186

e=Error (level of significance) = 5%

$$n = \frac{186}{1 + 186(0.05)^{\wedge}2}$$

$$n = \frac{186}{1 + 186(0.0025)}$$

$$n = \frac{186}{1 + 0.465}$$

$$n = \frac{186}{1.465}$$

$$n = 126.9 \sim 127$$

n= 127 sample size

3.7 Data Collection Methods

This section describes methods used to collect data. The study employed multiple sources of data collection. These are described below;

3.7.1 Primary Sources

The source of primary data for this study included, a questionnaire. This method is explained below:

3.7.1.1 Questionnaire

A questionnaire is a set of prepared questions to obtain responses from respondents. A Questionnaire was used to collect perceptions of the target population on the factors influencing provision of service quality in the public health sector in Morogoro regional hospital. Data were collected using structured questionnaires.

Questionnaire enables the investigator to gather the factors influencing the provision of service quality in the public health sector in Morogoro regional hospital from a large number of respondents in a short period of time.

The questionnaire is not perfect as there is a risk of obtaining less response rate from the respondents when they find it too long to fill and if it is poorly designed, to overcome such a limitation the questionnaire was sufficiently edited and simplified to make it reader friendly.

3.7.1.2 Interview

According to Seidman (1998) an interview *"*is a conversation between two or more people where questions are asked by the interviewer to elicit facts or statements from the interviewee*".* There are three types of interview such as structured (closed-fixed response), semi-structured (to allow a degree of freedom and adaptability) and unstructured (standardized-open ended response). The researcher used an interview method because it's viewed as a relevant method in the study since the researcher has an opportunity to make direct personal investigations to respondents. So far, through application of interview the researcher has a possibility of knowing views and ideas of other people, and study abstract factors, for instance, attitudes, feelings, emotions, and one is able to understand to the given study.

In additional, the interviews were used in areas where questionnaire did not meet the positive response from respondents therefore, individuals such informants, office attendants, security guards, human resources, other department heads and chairman of recruitment board and his members were interviewed. The unstructured interview as a type of interview format was used. The researcher preferred this type of interview because it gives more freedom to ask supplementary questions or omit some questions that could discourage the freedom of the interviewee or cause to collect inappropriate answers. Therefore, the unstructured interview reduces the tension of the respondents and makes them comfortable to provide the required appropriate answers

3.7.2 Secondary Sources

The secondary sources are the preexisting data that have been collected and recorded by someone other than the researcher. The study reviewed different documents such as Morogoro regional hospital reports, books, journals and the internet.

Secondary sources of data enable the researcher to collect additional information on the factors influencing provision of service quality in the public health sector in Morogoro regional hospital. Secondary sources of data may be inaccurate, outdated, false and mis-

leading (Porter, 1999) In order to avoid these limitations, documentary review will be carried out selectively and critically in the sense that data obtained must be checked against data from other sources such as the questionnaire.

3.8 Data Analysis and Presentation

The data gathered was investigated by utilizing a quantitative strategy.

The questionnaires were checked for culmination and consistency of data toward the end of each field information gathering. Information was captured utilizing the SPSS computer supported program. Information from the questionnaires were recorded and entered into the computer by utilizing the Statistical package for social science (SPSS) version 20 for investigation. Information was introduced in the form of recurrence distribution tables that encourage in the portrayal and clarification of the discoveries. At last, inferential measurements using regression analysis were done to build up the connection between the re-search factors.

The goal of carrying out data analysis was to extract data from raw information to the accurate estimation. One of the most important and common questions concerning data analysis was to see if there was any statistical relationship between a response variable\ independent variable (Y) and explanatory\ dependent variables (Xi). In order to answer this question, the researcher was required to carry out regression analysis.

A regression model was used to regulate the factors affecting the provision of service quality in the public health sector in Morogoro Referral Hospital. Regression analysis investigates the relationship between a **dependent variable** (target) and **independent variable (s)** (predictor).

Y (quality medical services) = $\beta 1x1 + \beta 2x2 + \beta 3x3 + \ldots\ldots\ldots + \alpha$ (Constant)

Where;

Y= Dependent variable, Provision of Service quality

β= Coefficient of the factors

X= Independent variables such as;

X1- Age of the respondents

X2- Marital status,

X3- Respondents' education level

X4- Respondents occupation

X5- Staff's knowledge

X6- Quick services to patients

X7- Empowerment of medical staffs

X8- Communications between medical staffs

X9- Application of modern technology

X10- Adequate number of equipment

X11- Adequate technologies

X12- Good average medical staff to patient ratio

3.9 Units of Analysis

The unit of analysis is the main object that is being analyzed in a study; it's the 'what' or 'who' that is being studied (Msabila and Nalaila, 2013). For instance, one of the following could be a unit of analysis in a study:

- Individuals (for instance; Prime venders, supply officers, pharmacist)
- Groups (For instance; Departments, Pharmacy, Clinic, procurement unit)
- Geographical units (census, state)

Therefore, for the purpose of achieving the general objective of the study; Prime venders, supply officers, pharmacist and Laboratory scientists were the unit of analysis from which the sample of respondents selected and provide reliable data about the problem.

3.10 Reliability and validity of the study

Two research instruments that are of great benefit in any research study are; reliability and validity. Therefore, the researcher is expected to keenly consider them when he/she is designing and judging the quality of his/her study

3.10.1 Reliability

When events produce consistent results, which are free from any accidental mistakes/errors are said to be reliable. According to (Sekaran, 2003), a measure's reliability is an indication of the stability and consistency with which the tool measures the idea and assists in evaluating the measure's goodness. Thus, the extent to which any measurement method yields coherent outcomes over time and a precise representation of the complete population under research is called reliability.

The researcher used a nominal scale, whereas nominal scale is for the purpose of name, it has no numerical value, example of variable uses nominal scale is classification variables i.e. gender, race, and occupation.

3.10.2 Validity

Validity can be described as the degree to which the device estimates what it intends to measure. As stated by Healy and Perry (2000), "validity chooses whether the investigator actually measures what it was suggested to quantify" Thus the validity seeks to assess how frank the study findings are or to what extent the scores actually reflect the underlying interest variable.

Further asserts that the questionnaire must be effective in order for it to be understood by all participants and a practical approach to pre-testing the questionnaires should be carried out. After the questionnaires have been intended, testing the validity was provided to some of the participants. This was performed to guarantee refining and validity of content.

While testing validity with skilled investigator was essential, pre-testing tools on prospective participants was also be essential. Therefore, a pre-test was performed before the research is conducted. The pre-test was used so as to allow the investigator to verify the validity of the data collection tool. The bottom line is that it allows the scientist to assess the questionnaire's clarity in order to modify items that would be found to be unnecessary and misunderstood in order to improve the research instrument's quality, thereby increasing its strength and validity.

3.11 Ethical Consideration

The researcher provided the introduction letter obtained from the university and also asked permission from the hospital management to be allowed to collect necessary data relevant to the research.

The researcher was granted permission to distribute the questionnaires to employees (the respondents) in various different departments in order to collect data.

Some respondents were hesitant to provide their names and this was respected by the researcher, also the data collected were kept confidential and were used only for the purpose of carrying out the research. Not only that, but also the researcher never solicited the respondents to fill the questionnaires instead the task was fair and objective. In additional to that, the researcher collected accurate data and analyzed them according to the facts.

CHAPTER FOUR

PRESENTATION OF FINDINGS

4.0 Introduction

The findings are presented in accordance with the characteristics of respondents and specific objectives which include; assessing the influence of employee knowledge on health service delivery, evaluating the use of modern technologies on health service delivery and to assess the availability of medical supplies in Morogoro Regional Hospital.

The research questions were; which knowledge do employees possess on Health service delivery in public health? Which are the modern technologies used in Health public sector service delivery? And do the medical supplies meet the patient's requirement in Morogoro regional hospital?

The sample size for this study was 127 respondents who were drawn from a total population of 186 workers using (Yamane formula, 1967).

To determine the questionnaire, return rate, there were 127 questionnaires distributed to 127 staffs within different departments of the Morogoro Regional Hospital. However, only 93 questionnaires were dully filled and handed over to the researcher. Therefore, the questionnaire return rate accounted for 73%.

4.1 Respondents' Characteristics

Characteristics of respondents were assessed based on a number of ages, gender, and position in the organization. The collected information was analyzed and the results are as shown below.

4.1.1 Respondents' age

The finding indicates that 3 (3.2%) of the respondents had the age between 18-20 years, 33 (35.5%) of the respondents had the age between 21-30 years, 36 (38.7%) of the re-

spondents had age between 31-40 years and 21 (22.6%) of the respondents had age between 41and above.

Therefore, the collected information shows that majority 36 (38.7%) respondents in the Morogoro Regional Hospital are at the age of 31-40 years (Table 4.1), probably people of this age are more active and aggressive in delivering of information and well informed with the organization's operations due to their long working experiences.

Table 4.1 Respondents' Age

Response	Frequency	Percent
18-20	3	3.2
21-30	33	35.5
31-40	36	38.7
40 and above	21	22.6
Total	93	100.0

Source; Research Findings 2019

4.1.2 Respondents' gender

The findings indicate that the ratio of males was greater than that of females. The male accounted to 51 (54.8%) while 42 (45.2%) were female (Table 4.2)

The purpose of taking into consideration gender distribution is based on roles and relationships that are to be undertaken between men and women in specific societies and cultures. Gender perspective created unique social roles and relations between women and men (URT, 2003). The role of male and female differs from one society to another society, however, they should have equal status in the recruitment process. Findings from this study show that, men have participated in high level compared to women and this also indicates that men have dominated the recruitment process in the organization.

Table 4.2 Respondents' Gender

Response	Frequency	Percentage
Male	51	54.8
Female	42	45.2
Total	93	100.0

Source: Research Findings, 2019

4.1.3 Respondents' positions

The findings indicate that 24 (26%) of the respondents were Lab Scientists, 12 (13%) of the respondents were Medical Doctors, 15 (16%) of the respondents were Management Officers, 12 (13%) of the respondents were Pharmacists, 9 (10%) of the respondents were Supply Officers, 9 (10%) of the respondents were Nurses, 3 (3%) of the respondents were Health Officers and 9 (9%) of the respondents were in other positions (Table 4.3).

The finding implies that laboratory scientists are a majority of the respondents, while the medical doctors are few as compared with their counterpart. The number of medical doctors in health organization is one of the indications of the quality health services, on the other hand medical doctors to patient ratio determine the status of health services.

Table 2.3 Respondents' Position

Response	Frequency	Percent
Lab scientist	24	26
Medical doctor	12	13
Management officer	15	16
Pharmacist	12	13
Supply officer	9	10
Nurse	9	9
Health officer	3	3
Others	9	10
Total	93	100

Source; Research Findings 2019

In this study position of respondents was inquired in order to see which group of workers in terms of their position has a good response on the study and in turn their interest on the factors related with the service quality in health sectors.

4.2 To assess the influence of employee knowledge on health service delivery in Morogoro Regional Hospital

4.2.1 Professional qualification

The finding indicates that 18 (19.4%) of the respondents interviewed were from other professions, 3 (3.2%) of the respondents had a Certificate in Medicine, 12 (12.9%) of the respondents had a Diploma in Medicine, 24 (25.8%) of the respondents had a Bachelor in Medicine and 3 (3.2%) of the respondents had a Masters in Medicine (Table 4.4). The findings indicate that most of the departments are dominated with staffs having bachelor's level.

Based on the development of science and technology, especially in health sector, it is apparent that level of professional staffs in the organization is low. According to a study conducted by Wanjau, Muiruri & Ayodo in 2012 on the factors which affect provision of service quality in the public health sector Kenyatta National Hospital, they identified general low employee's capacitating, as the main factor that affect delivery of quality health services to patients attending public health facilities and thus having an impact on perception of health service quality, satisfaction and loyalty of patients.

Table 4.4 Professional Qualifications

Response	Frequency	Percent
None	18	19.4
Certificate in Medicine	3	3.2
Diploma in Medicine	12	12.9
Bachelor in Medicine	24	25.8
Masters in Medicine	3	3.2
Other Professionals	33	35.5
Total	93	100.0

Source: Research Findings, 2019

4.2.2 Staff's knowledge and patient's services delivery

The finding indicates that 84 (90.3%) of the respondents believe that they are competent and their knowledge enhances provision of service quality to patients, however, 9 (9.7%)

of the respondents said that they are not knowledgeable enough to provide the required services to patients in the organization.

The findings also indicate that 45 (48.4%) of the respondents said that patients receive health services easily while 48 (51.6%) of the respondents said that patients do not have an easy access to health services.

The finding further noted that 39 (41.9%) of the respondents said that patients receive quick services while, 54 (58.1%) of the respondents claim that there is no quick service delivery to patients in the Morogoro Regional Hospital (Table 4.5)

Table 4.5 Staffs knowledge and patient service delivery

Response	Does your knowledge enhance service quality	Does patients access health service easily	Quick service to patients
Yes	90.3	48.4	41.9
No	9.7	51.6	58.1
Total	100.0	100.0	100.0

Source: Research Findings, 2019

4.2.3 Empowerment of Medical Staffs

The collected data show that, the majority respondents 81 (87.1%) agreed that the organization is empowering its medical staff while 12 (12.9%) of the respondents said that no empowerment was given to the staffs in the organization (Table 4.6).

Table 4.6 Empowerment of Medical Staff

Response	Frequency	Percent
Yes	81	87.1
No	12	12.9
Total	93	100

Source; Research Findings, 2019

The research finding implies that the medical staffs in the organization are empowered. The quality of the medical services mainly depends on the medical staff's knowledge and technical skills, commitment, honesty and good care of the patients. Health medical staffs should improve their competencies (i.e. the attitudes, knowledge, and skills) to

deliver high-service quality. According to the latest evidence, resources like Internet, journals, and books should be available for the medical practitioners in order to perform their duties well.

4.2.4 Poor Communications Channels

The finding shows that the majority of the respondents 51 (54.8%) said that there is poor communication between the medical staffs while 42 (45.2%) of the respondents claimed that the communication channel between the staffs is not common in the organization (Table 4.7)

Table 4.7 Poor Communication Channels

Response	Frequency	Percent
Yes	51	54.8
No	42	45.2
Total	93	100

Source; Research Findings, 2019

The finding results imply that there is a problem of communication between the staffs in the organization. It is documented that the performance of any organization depends on good communication between the staffs and management as well as staffs themselves. It is very important to have good cooperation between staffs and management in order to achieve the intended development goals.

4.3 Evaluation of the use of modern technologies on health service delivery in Morogoro Regional Hospital

4.3.1 The use of equipment and new technologies

The findings indicate 6 (6.5%) of the respondents strongly disagree the use of Modern technology in Morogoro Regional Hospital, 27 (19.4%) of the respondents disagree with using modern technology in the hospital, 33 (45.2%) of the respondents are neutral (neither disagree nor agree) on the use of modern technology in the hospital and 27 (29%) of the respondents agree to be using modern technology in the hospital (Table 4.8).

The finding implies that the use of modern equipment's and technologies is common in the Morogoro Regional Hospital.

Table 4.8 the use of Modern Technology

Response	Frequency	Percent
Strongly Disagree	6	6.5
Disagree	27	19.4
Neutral	33	45.2
Agree	27	29.0
Total	93	100.0

Source: Research Findings, 2019

4.3.2 Adequate number of medical equipment's in Morogoro Regional Hospital

The finding indicate that 15 (16.1%) of the respondents strongly disagree having adequate number of medical equipment's in Morogoro Regional Hospital, 21 (22.6%) of the respondents disagree having adequate number of medical equipment's in the hospital, 42 (45.2%) of the respondents are neutral (neither disagree nor agree) on having adequate number of medical equipment's in the hospital and 15 (16.1%) of the respondents agree having adequate number of medical equipment's in the hospital. (Table 4.9).

Table 4.9 Medical Equipment's

Response	Frequency	Percent
Strongly Disagree	15	16.1
Disagree	21	22.6
Neutral	42	45.2
Agree	15	16.1
Total	93	100.0

Source: Research Findings, 2019

4.3.3 A good average medical equipment to patient ratio

The finding indicates that 24 (25.8%) of the respondents strongly disagree having average medical equipment's to patient ratio, 12 (12.9%) of the respondents disagree having average medical equipment's to patient ratio, 30 (32.3%) of the respondents are neutral (neither disagree nor agree) having average medical equipment's to patient ratio and 27

(29%) of the respondents agree having average medical equipment's to patient ratio in Morogoro Regional Hospital (Table 4.10).

The finding implies that there is no good ratio between the modern equipment and patients in the Morogoro Regional Hospital probably due to the economic point of view that the equipment's are expensive, therefore it is not possible to have adequate number of equipment's to meet the patient's requirements.

Table 4.10 Average medical equipment's to patient ratio

Response	Frequency	Percent
Strongly Disagree	24	25.8
Disagree	12	12.9
Neutral	30	32.3
Agree	27	29.0
Total	93	100.0

Source: Research Findings, 2019

4.3.4 Modern technology techniques used in Morogoro Regional Hospital

The finding indicates that 72 (77.4%) of the respondents use E- Systems like computers and internet in the hospital, 9 (9.7%) of the respondents use Bar Coded Medication in the hospital, 9 (9.7%) of the respondents use Automatic Dispensing and 3 (3.25%) of the respondents do not use any technology in the hospital (Table 4.11).

The finding reveals that E-System is a common technology used in most of the departments of the Morogoro Regional Hospital, while, other technologies like Bar-coded and automatic dispensing are uncommon in the organization.

Table 4.11 Modern technology used in Morogoro Regional Hospital

Response	Frequency	Percent
E-Systems (computer, internet)	72	77.4
Bar coded medication	9	9.7
Automatic dispensing	9	9.7
None	3	3.2
Total	93	100.0

Source: Research Findings, 2019

4.4 Evaluation on the Availability of Medical Supplies in Health service Delivery in Morogoro Regional Hospital

4.4.1 Availability of medical supplies in Morogoro Regional Hospital

The findings indicate that 12 (12.9%) of the respondents said that there is an adequate number of medical supplies in the hospital, 66 (71%) of the respondents said that there are average medical supplies in the hospital, 12 (12.9%) of the respondents said there are inadequate numbers of medical supplies in the hospital and 3 (3.2%) of the respondents said that there are no medical supplies available in the hospital (Table 4.12).

The research finding implies that the availability of medical supplies in the organization is average. Sometime there exists less information about essential medical supplies and equipment, though most Public Health organizations have useful information about essential drugs.

Table 4.12 Availability of medical supplies in the Morogoro Regional Hospital

Response	Frequency	Percent
Adequate	12	12.9
Average	66	71
Inadequate	12	12.9
None	3	3.2
Total	93	100.0

Source: Research Findings, 2019

4.4.2 Availability of essential drugs

The finding indicates 15 (16.1%) of the respondents said that essential drugs are available at Morogoro Regional Hospital while and 78 (83.9%) of the respondents claim that essential drugs are not available in the hospital (Table 4.13). The finding implies that essential drugs are not available at the Morogoro Regional Hospital so as to meet the needs of the patients.

The health system in Tanzania is still constrained; most of the primary health care facilities are still characterized by experiencing frequent shortages of drugs and supplies and being poorly equipped.

Table 4.13 Availability of essential drugs

Response	Frequency	Percent
Yes	15	16.1
No	78	83.9
Total	93	100

Source: Research Findings, 2019

4.4.3 How to meet the patients drugs requirement

The findings indicate that 42 (45.2%) of the respondents use prescription forms to prescribe drugs to their patients, 12 (12.9%) of the respondents use specific identified pharmacy while prescribing drugs to their patients, 18 (19.4%) of the respondents directed patients to buy drugs from outside if drugs were not available at Morogoro Regional Hospital, 9 (9.7%) of the respondents said that they monitor minimum stock levels and 12 (9.7%) of the respondents did not comment regarding drug requirements in Morogoro Regional Hospital (Table 4.14)

Table 4.14 Drugs Requirement

Response	Frequency	Percent
By using prescription forms	42	45.2
Specific identified pharmacy	12	12.9
Patients are directed to buy outside	18	19.4
Monitor minimum stock level	9	9.7
None	12	9.7
Total	93	100

Source: Research Findings, 2019

4.4.4 Where drugs are obtained when there is a stock out from MSD

The findings indicate that 63 (67.7%) of the respondents said that they obtain drugs from prime vendors when there is stock out from MSD, 18 (19.4%) respondents said they get

drugs from nearby pharmacy in case of stock out from MSD, 6 (6.5%) respondents said they get drugs from local pharmacy when there is stock out at MSD, 3 (3.2%) respondents said in case of stock out from MSD they get drugs from authorized vendors and 3 (3.2%) respondents said that there are other alternative sources of drug supply (Table 4.15).

Therefore, the findings indicate that when there is a stock out from MSD drugs are mostly obtained from the primary vendors and a nearby local pharmacy.

Table 4.15 Alternative source of drug supply

Response	Frequency	Percent
Prime Vendor	63	67.7
Nearby Pharmacy	18	19.4
Local Pharmacy	6	6.5
Authorized Vendors	3	3.2
Others	3	3.2
Total	93	100.0

Source: Research Findings, 2019

4.4.5 Challenges facing medical supplies management in the organization

The findings indicate that 6 (6.5%) of the respondents said that there were no challenges facing the medical supplies management, 15 (16.1%) respondents said that delay from MSD was the challenge that medical supplies management were facing, 15 (16.1%) respondents said that communication problem was the challenge to medical supplies management, 6 (6.5%) respondents said that supplies stock out from MSD was the challenge facing the medical supplies management, 12 (12.9%) respondents said the challenge facing medical supplies management was delay time from order replacement, 6 (6.5%) respondents said stock out was the challenge facing the medical supplies management, 6 (6.5%) respondents said lack of resources was the challenge facing medical supplies management, 6 (6.5%) of the respondents said there was shortage of workers/staff , 3 (3.2%) respondents said the challenge was irrelevant medical supplies, 9 (9.7%) respondents said that there were expired medicines in the shelves and 9 (9.7%) of the re-

spondents said not all drugs required were available which poses a challenge to the medical supplies management (Table 4.16).

Table 4.16 Challenges facing medical supplies management in the organization

Response	Frequency	Percent
None	6	6.5
Delay from MSD	15	16.1
Communication problems	15	16.1
Supplies stock out from MSD	6	6.5
Delay time from order replacement	12	12.9
Stock out	6	6.5
Lack of resources	6	6.5
Shortage of workers/ staff	6	6.5
Irrelevant medical supplies	3	3.2
Expired medicine in the shelves	9	9.7
Not all required drugs are available	9	9.7
Total	93	100.0

Source: Research Findings, 2019

CHAPTER FIVE

DISCUSSION OF THE FINDINGS

This chapter presents the discussion of the findings originated from the previous chapter. It gives the analysis in relation to the factors influencing the provision of service quality in the public health sectors with reference to Morogoro Regional hospital. The aim of selecting this topic is not only for Government interest, but also to establish whether health institutions in Tanzania deliver the required health services to patients so that we can come up with remedial measures.

The information collected from the findings are summarized under five themes which are respondents' characteristics, the influence of employee knowledge on health service delivery, the use of modern technology on health service delivery and availability of medical supplies in health service delivery in Morogoro Regional Hospital.

5.1 Respondents Characteristics

The findings indicate that most of the respondents at the Morogoro Regional Hospital were in the age group of 31-40 years. This implies that the majority of employees were matured enough and had long exposure and experience on issues of quality public health services. Staffs of this age are more active and aggressive in delivering of information and well informed with the organization's operations due to their long working experiences.

It has further been noted from the study that, the majority of the respondents at the Morogoro Regional Hospital are male. The goal of looking at the gender distribution in particular societies and cultures is based on roles and interactions between males and females.

The share of men and women vary from one culture to the other, but they should have equal status in the recruitment process. However, findings from the study indicate that, men have participated in high level compared to women and this also indicates that men

have dominated the recruitment process in the Morogoro Regional Hospital, probably due to the fact that most women prefer studying art rather than science subject therefore fail to take up employment opportunities offered by the organization. It has also been realized that, most women are job selective as compared to men, therefore most of the job positions are taken by men.

The data were collected from respondents who were working in different departments in the Morogoro Regional Hospital so as to obtain information from all departments within the hospital in order to get more relevant data. The findings indicated that the majority of the respondents were Lab Scientists since they were easily available, while Medical Doctors and Nurses were few since they were very busy and not all of them were available during data collection.

5.2 The influence of employee knowledge on health service delivery in Morogoro Regional Hospital

The findings indicate that the organization has professional staffs who can enhance the provision of service quality whereby 90.3% respondents believe that their knowledge enhances the provision of service quality. This implies that the hospital recruits their employees basing on the level of education they have and the contribution they can make towards the hospital.

However, respondents said that the patients do not receive quick health services in the Morogoro Regional Hospital. This can be due to the fact that there are professional staffs, but are few in number as compared to the number of patients in the hospital.

In 2006, the Ministry assessed that a full amount of 82,300 skilled medical staff was needed, but only 29,100 specialists were really available, leading in a 65% setback. Medical physicians, radiographers, clinical officers, nurses and pharmacists are among the fields mentioned to have serious shortages.

The Total variance was the difference in the variance which can be explained by the independent variables (Model) and the variance which was not explained by the independent variables (Error).

The strength of variation of the predicted values influence the provision of service quality dependent variable at 0.05 significant levels.

Y = 0.316, X1 – 1.823, X2 – 1.799, X3- 1.826X4 – 6.735 Where X1= Staff's knowledge X2=Staffs empowerment, X3=Quick services to patients, X4=Communication.

From the regression model, the finding showed that provision of service quality in the public health sector was at the constant of 6.735 holding staff's knowledge, staff's empowerment, quick services to customers and communication channels. Low staff's knowledge lead to a reduction in the provision of service quality public health sector by 2.419 having a P value of 0.012 while the lack of staff's empowerment, would lead to a reduction in the provision of service quality by a 1.823 having a P value of 0.035.

The research also discovered that inadequate rapid customer service affects the performance of service delivery in the public health sector by 1.799 having a P value of 0.0421, while inadequate channels of communication would result in a factor of 1.826 having a P value of 0.044 reduction in the quality of health service provision.

This obviously shows that there existed an adverse (negative) relationship between factors affecting the service quality provision in Morogoro Hospital. It was obviously indicating that low staff's knowledge, poor staff's empowerment, ineffective quick services to customers and insufficient communication channels affect delivery of service quality in the hospital as they were statistically significant with a P-Value of 0.012, 0.035, 0.0421 and 0.044 at 95% confidence level. This implied that low staff's knowledge, low medical staff's empowerment, ineffective quick services to customers and channels of communication, influence the delivery of quality of service to clients in the public health sector, influencing perceptions of quality of health service, patient satisfaction and trustworthiness.

REGRESSION ANALYSIS RESULTS

Unweighted Cases[a]		**N**	**Percent**
Selected Cases	Included in Analysis	93	100.0
	Missing Cases	0	.0
	Total	93	100.0
Unselected Cases		0	.0
Total		93	100.0

a. If weight is in effect, see classification table for the total number of cases.

Classification Table[a,b]

	Observed		Predicted		
			(Y)Quality Health Services		Percentage Correct
Step 0			.00	1.00	
	Quality Health Services	.00	16	0	100.0
		1.00	15	0	.0
	Overall Percentage				51.6

a. Constant is included in the model.

b. The cut value is .500

Variables in the Equation

			Score	df	Sig.
Step 0	Variables	Age	.002	1	.966
		Sex	.313	1	.576
		Marriage	.562	1	.454
		Occupation	.603	1	.437
		Professional	.010	1	.920
		Knowledge	.675	1	.041
		Does knowledge	.444	1	.505
		Do patients access	31.000	1	.000
		Quick services	5.743	1	.017
		Empowerment	.005	1	.945
		Communication	5.427	1	.020
		Knowledgeable	.014	1	.907
		Adequate number	.209	1	.648
		Adequate technology	.484	1	.487
		Good average	.170	1	.680
	Overall Statistics		93.000	15	.009

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1a	Occupation	-0.033	0.316	0.011	1	0.918	0.968
	Staffs knowledge	-4.448	2.419	3.382	1	0.066	0.012**
	Quick services	3.92	1.799	4.751	1	0.029	0.042**
	Empowerment	-3.361	1.823	3.4	1	0.065	0.035**
	Communication	-3.114	1.826	2.908	1	0.088	0.044**
	Knowledgeable	-0.192	0.959	0.04	1	0.842	0.826
	Modern technology	-1.11	1.218	0.831	1	0.362	0.329
	Adequate number of equipment	0.798	0.952	0.703	1	0.402	2.221
	Adequate technology	0.509	1.085	0.22	1	0.639	1.663
	Good average med staff to patient	-0.934	0.984	0.902	1	0.342	0.393
	Constant	10.654	6.735	2.503	1	0.114	42357.294

*** Significant at 1%, ** Significant at 5% and * Significant at 1%

Payne (2006) found that effective internal communication channels were the requisite for integration and harmony in delivering service quality in hospitals. This implies that there is a need for the management to improve its communication channels to ensure the patients receive the correct medical prescriptions advices and instructions enhancing patient satisfaction to the services they receive.

According to a study conducted by Wanjau, Muiruri & Ayodo in 2012 on the factors which affect service quality provision in the public health sector Kenyatta National Hospital, they identified general low employee's capacitating, as the main factor that affect delivery of quality health services to patients attending public health facilities and thus having an impact on perception of health service quality, satisfaction and faithfulness of patients.

Like in most developed countries, managing public health in the USA is characterized by emphasis on performance and improving the quality of healthcare. In order to attain these critical indicators, public health management is fully equipped with the necessary resources and management skills (Nembhard et al., 2009). The hospital personnel are more equipped with the management skills that enable them to efficiently manage resources and provide an evidentiary basis for determining patient, clinician, and organizational outcomes (Nembhard et al., 2009). In other words, the health professionals are well capacitated to enable them improve the patient services health outcomes.

As per World Health Report (WHO, 2006), the proportion of medical staff having progressed in clinical abilities (therapeutic specialists and authorities) is 0.02 per 1000 populace. There is a rising collection of proof indicating the direct relationship between the accessibility and equitable distribution of the medical work force with some significant health status markers. Furthermore, accessibility of qualified medical specialists who are successfully pushed and equitably appropriated has as of late been ended up to be one of the key contributions towards achieving the Millennium Development Goals (Anand and Barnighausen 2004). In a multi-nation econometric examination, Anand and Barnighausen (2007) have discovered that territories with lower medical specialist are related to

lesser immunization inclusion and higher under-five mortality. In Tanzania, an investigation has demonstrated that local areas which had higher quantities of under-five mortality were likewise portrayed by an even fewer medical specialists per capita (Munga and Mæstad, 2009).

It is in this way sensible to reason that accessibility and equitable circulation of medical laborers is an important health system element for guaranteeing a wide inclusion of quality health administrators in particular, and health status improvement all in all.

5.3 Communication channel between the staffs themselves and management in the organization

The finding indicates that there is no good communication between the staffs themselves as well as between staffs and management. It is documented that it is important for practitioners to have good support services/facilities, a practitioner can perform his duty when is supported with clinical laboratory works well [the test results are reliable], and that the nurse administers medicines on time or does not administer a wrong medicine.

Colleagues or co-workers of the Medical doctors are expected to be pro-active, responsible and empowered enough to perform the job well, they should be equipped with all the necessary information that is required by the doctor and also carry out all the necessary procedures before handling the case to the medical doctor. A nurse, for example, spends more time with patients rather than the doctor therefore she/he should carry out all the tests required and provide the doctor with all relevant information and results so as to enable him/her to carry out the treatment and to make informed decisions.

In an interview with health care professionals, they highlighted the importance of cooperation and teamwork among healthcare providers as an important component of high-quality healthcare services. A laboratory supervisor said, “Sometimes, doctors do not give the necessary information to patients, therefore it affects the quality of the results. Another interviewee said: “Some doctors do not provide the patient with his/her medical records, hence if she/he has to see another physician/ doctor in an emergency situation, it

becomes hard for that doctor to know anything regarding the patient's medical history and cannot continue to give treatment. Therefore, the doctor will have to carry out all the basic tests first so as to give the patient right treatment."

The capacity of practitioners to interact and cooperate efficiently with other health experts or organizations was also regarded as crucial for delivering high-quality healthcare services. "There is no CT-Scan at the hospital. The relative of a patient must get an appointment from another hospital and then bring the patient for the CT-Scan there. She / he must go to get the outcome again. All of these can be readily sorted out by working together between the two clinics. A nurse may call the other hospital for a patient's appointment, then send the patient for a CT-Scan and then obtain the outcomes later.

Successful application of quality management needs a major shift in people's mindsets, attitudes, and views about quality. It is necessary to foster teamwork and cooperation. Good communication, cooperation and collaboration between healthcare supplier's support offering efficient and effective healthcare services and promoting shared accountability for patient care.

5.4 Evaluation on the use of modern technology on health service delivery in Morogoro Regional Hospital

The findings indicate that the use of modern technology in the hospital is neutral, meaning that there are few modern equipment's and technologies being used in the hospital. Also, the availability of medical supplies in the organization is low to average. The finding result is corresponding to a study conducted by (MoHSW/WHO 2007). The examination demonstrated that, regardless of the initiatives completed by the administration to present different techniques, for example, Indent System and Integrated Logistic System instead of the push system of predefined Essential Drug Program unit to improve the circumstance in the public sector, still the accessibility of medications, equipment's and therapeutic supplies at a lower dimension of health administrations conveyance isn't palatable. Also, frequent stock out is experienced by the public health offices.

The finding also revealed that E-System is a common technology used in different departments of the hospital, other technologies like Bar-coded and automatic dispensing is uncommon in the hospital.

It is documented that the technology used for harnessing information and data plays a critical role in the service quality delivery in hospitals, this is because all information relating to patients can be saved in a specific programmer and thus being able to access patient information anytime as required (Allen, 2011).

5.5 Evaluation on the Availability of Medical Supplies in Health service Delivery in Morogoro Regional Hospital

Findings indicate that the availability of medical supplies in the hospital is average as well as 83.9% of the respondents said that drugs are not available at the Morogoro Regional Hospital. Provision of quality health care services in health facilities heavily depend on the availability of medicines, medical supplies and equipment's hence this contributes to be one of the major reasons that gains a positive image on the patient's perspective, hence creates an urge on the patients to visit the same hospital/clinic later on in the future. This is essentially significant, especially at the lower dimension of public administration where most of Tanzanian populace lives and get health care services (MoHSW/WHO 2007).

At present, in rural areas there has been a serious shortage of workers where most of the health sectors are concentrated, the workers instead are more concentrated/focused on providing their services in the urban areas. Tanzania has an average of 1:5 health centers per 10000 individuals be it private or public health sector. Such figure is comparable to Sub- Saharan African regions such as Namibia and Zambia, having said that it is believed that regions such as Kagera, Shinyanga and Mwanza are characterized to have the lowest number health facilities per capita (MoHSW/ WHO 2007).

Various health care sectors faces the issue of shortages of medical equipment's, this can be seen in one of the studies which dealt with Emergency Obstetric Care (EmOC) which

ensures that women have a safe motherhood, whereby it had been reported that public health facilities in Tanzania suffer from acute shortages of such essential EmOC equipment's (Malecela et al 2006). A similar research was carried out in Tanga which found out that there were a limited number of equipment's in the laboratories and a shortage of microscopes at the dispensary level (Ishengoma, Rwegoshora & Mdira 2009). With a view to address the problem of shortages various programs were developed, one of it being the National Malaria Control programme (NMCP). This programme aimed at introducing rapid diagnostic tests (RDTs) in all public health facilities, so as to minimize the use of high-cost Artemisinin combination therapy (ACT) (MOHSW 2009, Malaria Medium Term Strategic Plan 2008-2013).

Findings also indicate that when there is a stock out from MSD, the alternative source of supply of drugs is from Prime Vendors, when the hospital runs out of stock and the stock is not readily available at MSD the hospital manages to get the stock from their prime vendors.

Further, the findings pointed out that the main setbacks/challenges facing supplies management in the organization are; delays from Medical Store Department, communication problems between the staff and patients, delay time from order replacement meaning that once the order is placed the drugs arrive late, medicine gets expired on the shelves as they are stored for a long period of time hence needs to be replaced with new stock, there are other drugs required by the hospital but are not readily available at MSD and other prime vendors hence the hospital lacks the required drugs, the hospital has a shortage of workers/ staffs and hence are not able to instantly provide health services to the patients.

CHAPTER SIX

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

6.1 Introduction

This chapter briefly presents the summary of findings obtained from the study, conclusion and recommendations necessary for improving the health services in the Morogoro Referral Hospital. The chapter also presents the areas for further studies and provides rooms for further researches in connection with the improvement health services to patients.

6.2 Summary

The aim of this study was to assess the factors influencing provision of quality health services in the Morogoro Regional Hospital. Specifically, the study was guided by the following objectives;

To assess the influence of employee knowledge on health service delivery, to evaluate the use of modern technologies on health service delivery and to assess the availability of medical supplies in Morogoro Regional Hospital.

Stratified random sampling was adopted to select a sample size of one hundred and eighty-six (186) workers for the study, whereby the sample obtained was 127 workers. The investigator used the primary and secondary method of data collection to gather information for the study. Data were collected using questionnaires, one hundred and twenty-seven (127) questionnaires were administered to the respondents and out of this figure only hundred (100) questionnaires were dully filled and returned. However, from hundred (100) questionnaires returned, seven (7) questionnaires were incomplete, which were then discarded by the researcher. Therefore, the study was carried out using ninety-three (93) questionnaires; the collected data were coded and analyzed using statistical package for social sciences (version 20).

The key findings in the research indicated several factors influencing quality health services in the organization such as delay for Medical Store Department, communication problems between the staffs, delay time from order replacement, expired medicine in the shelves, lack of the required drugs, stock out, shortage of workers, lack of resources and supplies stock out from MSD respectively, irrelevant medical supplies.

The finding also revealed that the organization has professional staffs that enhance the provision of service quality. This implies that the organization recruit based on the profession and level of education. However, it has been noted that the patients do not receive quick health services in the organization; probably this can be contributed by the fact that there are a good number of professionals but are few.

6.3 Conclusion

After a systematic research to examine the research objective and questions on Assessment of the factors influencing the quality of health services in the organization the finding pointed out that the quality of medical services in the organization is average and this has been contributed by frequency shortage of drugs and medical supplies, delay for Medical Store Department, communication problems between the staffs, delay time from order replacement, expired medicine in the shelves, lack of the required drugs, stock out, shortage of skilled workers, lack of resources and supplies stock out from MSD respectively.

It has been also noted that, there was an adverse (negative) relationship that existed between factors affecting service quality in Morogoro Regional Hospital, clearly indicating that low staff's knowledge, poor staff's empowerment, ineffective quick services to customers and insufficient communication channels affect delivery of service quality in the hospital however they were statistically significant with a P-Value of 0.012, 0.035, 0.0421 and 0.044 at 95% confidence level.

This meant that low knowledge of staff, little empowerment given medical staff, inadequate rapid customer service and communication channels also influence the delivery of

quality of service to clients in the public health sector, influencing patients' perceptions on quality of health service provided, patient satisfaction and trustworthiness.

6.4. Recommendations

1. The Hospital management should focus on empowering of medical staffs, continue recruiting and deploying qualified medical staffs and other health personnel in order to enhance patient's services delivery. The delay in patient's access to medical services is sometime caused by un-proportional medical staffs to patient ratio. Health personnel are a critical input in the health system, therefore, the management should improve its human resources team, so that they can assess how many staffs are required in the long term and hire the same so as to have a balance between medical staffs and patient's in the health sector. In short to medium term, the management should improve the working conditions, pays and incentives of their staff, this may serve a number of purposes; Firstly, professional people are attracted to work in such organizations which value their staffs, as well as good management helps to retain health workers in remote and underserved areas where it is difficult to recruit people due to shortages/ unwillingness of human resources to work in remote areas. Secondly, it acts as a trigger to increase/maintain the productivity (performance) of the workers and hence not been affected by the shortage of workers. Lastly, having a good management strategy in place attracts many students to pursue medical training since they have a good image regarding hospitals and medical sectors.

2. In order, to achieve the effective supply chain management the government through the ministry of health needs to lay more emphasis on enforcing the laid-out supply chain management in the government hospitals by conducting regular checking. Also, the procurement department should ensure that the hospital is well equipped with procurement plan and forecast of the quantity of medical supplies required for the specific number of patients in the particular period of time. This will help to reduce the problem of stock out at government hospitals.

3. The study also recommends that management in the organization should improve employee's capacity/knowledge so as to enhance provision of health service quality, various measures such as provision of appropriate equipment, instruments and supplies, adequate number of high skilled and experienced employees, effective recruitment should be adopted by the management so as to improve monitoring of doctors and staff, meeting performance and practice standards which will enhance service quality provision.

4. The finding insists that, Modern technology should be adopted by the public health sectors in order to assess the way services are provided to patients, improve the process of delivering services and communication between the providers as well as with the patients, provide high-quality medicine to patients, reduce time lags in accessing medical services.

5. There is also a need to improve IT equipment's, invest more on modern technology so that everything becomes computerized, example; doctor's prescribes medicine to the patient and it gets recorded in the system which straight away goes to the pharmacy department hence making it easy and fast in providing services to the patients and hence help to reduce time lags, also all lists of drugs/medicine should be entered into the system with their expiry dates so that it becomes easy for the management to have a record on which medicine is available, which needs to be ordered as well as keeping a track on expiry dates.

6. The hospital needs to have functional, reliable and secure water, power, sanitation, hand hygiene and waste disposal equipment. To enable privacy and promote the provision of service qualitys, the room requires to be designed, structured and preserved.

7. The patients should receive all information about their care and should feel involved in all decisions made regarding their treatment so as to reduce the com-

munication barrier between staff and patients, thereby being able to overcome one of the challenges found in the study which was communication barrier.

6.5 Recommendations for further research

Having seen the factors influencing quality health services in Morogoro referral hospital, there is a need to carry out the same study in other government hospitals in order to compare the results.

Leadership is one of the crucial parts as far as quality health services in government hospitals is concerned, therefore this area requires an immediate research in order to diagnose the level of its contribution and finally come up with remedial actions.

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APPEDNDICES

APPENDIX 1: QUESTIONNAIRE

Dear respondents, I am a postgraduate student at the University of Mzumbe carrying out a research project on the factors influencing the provision of quality health services in the public health sector a case of the Morogoro Referral Hospital. I am humbly requesting you to kindly respond to the questions asked as sincerely as possible. The ultimate goal of the study is to provide insight into factors that influence the provision of quality health services. I assure you that the information you will give will be treated with utmost confidentiality and will only be used for the purpose of this study.

I will be grateful for your co-operation.

1.0 <Part I> Population characteristics

Interviewer, the main interview starts from this part, please make sure that interviewee fill out the information below**.**

1.1 Name of Respondent	
1.2 Age	
1.3 Sex	a) Male b)Female
1.4 Marital Status	a)Married b)Unmarried c) Divorced d)Widowed e)Others
1.5 Occupation	
1.6 What are your professional qualifications	a)None b) Certificate in medicine c) Diploma in medicine d)Bachelor in medicine e) Masters in medicine f) Other professional

2.0 <Part II> The influence of employee knowledge on health service delivery

This part, we would like to ask several questions regarding the influence of employee knowledge on health service delivery

2.1 Do you have the required professional knowledge?

a=Yes b= No

2.2 Does your professional knowledge enhance provision of service quality?

a=Yes b=No

2.3 Do patients access quality health services easily?

a=Yes b= No

2.4 In your organization there is a quick service to patients in terms of accessibility to prescribed drugs?

a= Yes b = No

2.5 Is there any empowerment of medical staffs to set work goals in your organization?

a=Yes b= No

2.6 Poor communication channels between staffs is common in your organization

a=Yes b= No

2.7 Are you knowledgeable enough to make use of the available modern medical equipment's?

a=Yes b=No

3.0 <Part III>Application of modern technologies in provision of quality health services

This part, we would like to ask several questions regarding the application of modern technologies in provision of quality health services.

3.1 The Hospital employs modern technology techniques in its health practices	a; Strongly disagree	b: Disagree	c: Neutral	d: Agree	e: Strongly agree
3.2 There is adequate number of medical equipment in your organization					
3.3 There is adequate level of medical technology investment in your organization					
3.4 There is a good average of medical equipment's to patient ratio in your organization					

3.5 What modern technology techniques do you use in your organization?

a) E-Systems (computers, internet)

b) Bar coded medication

c) Automatic dispensing

d) Other

4.0 <Part IV>Availabilities of medical supplies in your organization

This part, we would like to ask several questions regarding the availability of medical supplies in your organization

4.1 Which of the following functions of stock management policy mostly influences supply chain management in Government hospital?

a) Fulfillment
b) Supply chain event management
c) Customer management
d) Cost Management
e) Forecasting & Planning

4.2 What is the stock status of pharmaceutical supplies at Morogoro Government hospital to date

a) Adequate
b) Average
c) Inadequate
d) No answer

4.3 Are all variety of drugs required by patients available in the stock?

a) Yes
b) No

4.4 Distribution process in Morogoro hospital of pharmaceutical supplies does it comply with the supply chain management policy?

a) Yes
b) No

4.5 How do you control/ Regulate the elapsed time between the replacement of an order and the receipt of the order due to delay of drug delivery? Or how do you meet the patient requirement of drugs?

……
……

4.6 Where do you get medical supplies when there is stock out from MSD?

……
……..

4.7 Mention challenges confronting medical supply chain management in your organization?

……

APPENDIX II: INTERVIEW GUIDES

INTERVIEW WITH KEY INFORMANTS

Dear respondents, I am a postgraduate student at the University of Mzumbe carrying out a research project on the factors influencing provision of quality health services in the public health sector a case of Morogoro Referral Hospital. I am humbly requesting you to kindly respond to the questions asked as sincerely as possible. The ultimate goal of the study is to provide insight into factors that influence provision of quality health services. I assure you that the information you will give will be treated with utmost confidentiality and will only be used for the purpose of this study.

Thus I will be very grateful if you would spare few minutes to answer these interview questions.

1. Does Morogoro referral Hospital offer effective and efficient health services according to the latest clinical guide and standard?
2. Does Morogoro referral Hospital employ modern technology techniques in its health practices?
3. With your opinion, does the hospital provide health services in the right way in the right place at the right time? Explain
4. With your opinion, do the medical staffs or practitioners in Morogoro referral hospital are skilled enough to provide the required health services? Explain
5. With your opinion, is there adequate number of medical staffs in the organization?
6. With your opinion, what are the main factors that hindering patients from accessing the required medical services in the organization?
7. Through your experience what should be done in order to enhance health services in the organization?