

**THE EFFECTS OF BUDGET CONTROL ON OPERATIONAL PERFORMANCE
OF
PUBLIC HOSPITALS IN KIAMBU COUNTY**

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DECLARATION

I hereby declare that this is my original work and has not been submitted for a degree in any other University

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DEDICATION

I dedicate this research work to my Loving Parents Mr. and Mrs. Gasper Gathecha, for their unwavering love and support in educating me since my elementary level. It's through their investment in my education that I have reached this far, my Wife and children, my two loving sisters and friends. Know that your words of encouragement were not in vain.

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ABSTRACT

This research examines the budgetary control in public hospitals and its effects on their operational performance. The aim of this paper is to determine the effects of budget control on operational performance of public hospitals in Kiambu County. The research target population consisted of 364 health facilities as provided for in the Kiambu County Government website. Twenty public health institutions were selected using convenience judgmental sampling technique for this study, in Kiambu County.

A descriptive survey design was used in the data collection, questionnaires were designed with closed ended questions and distributed to various public hospitals using the drop and pick method. The statistical package for social sciences version 17.0 was used to analyze the data using descriptive statistics, including means and standard deviation. The relationship between budgetary controls and operational performance of the public hospitals was analyzed using correlation and regression analysis methods.

The research findings established that there is a positive effect of budgetary control on operational performance public hospitals in Kiambu County. The research recommends that employees need to be sensitized on budgetary controls and the effect on operational performance of the organization. It also recommends that other factors that influence operational performance apart from budgetary controls should be investigated by these institutions . It also suggests that further research should be done on the same area but a larger sample should be used.

LIST OF ABBREVIATIONS

KHPF - Kenya Health Policy Framework

COK – County Government of Kiambu

GOK – Government of Kenya

ROE – Relative Operational Efficiency

WHO –World Health Organization

OECD - Organisation for Economic Co-operation and Development

NSE – Nairobi Securities Exchange

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CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Brownell (1982) established that submissions that comprise budgetary controls do not have straight influence on performance directly but in situations where budgetary control is great there is progressive association amongst performance and budgetary control involvement. Budget control has both merits and demerits which mostly reflected in performance of the institutions operations. In operations is considered as integral in many institutions because resources must be successfully and efficiently utilized. Minute attention has been rewarded to budgetary controls even though it is largely known as the focal tool for distributing funds to specific recurring and growth undertakings which have a direct impact on operational performance of any institution especially in the public sector. The need for efficiency in operations on service provision in communal organizations through Africa and Kenya puts communal institutions at the front in formation of control structures. Nevertheless, sometimes important resources are mismanaged by those that are responsible and put in charge (Rosen & Gayer, 2010).

Operational performance and budgetary control have been put in good relation by the theory of Constraints by Eliyahu (1984) stating how managing throughput is challenging especially with inadequate resources. The theory of Budget control as explained by Howard and Brown (2015) now comes in giving light on how this challenges revolving around inadequate resources to improve on efficiency comes in stating that financial

resources must be successfully and efficiently accomplished to anticipate results. Apart from the inadequate resources affecting performance, some other factors under budget control come about which are well highlighted by the Agency theory on the Principal agent relationship, agents working for the best interest of the institutions, the Goal setting theory whereby there has to be purpose and motivation to achieving goals with the most cost effective way to progress efficiency and the organization based budget theory to have precise resource allocation and proper planning for performance in any institution.

Public hospitals in Kenya are under more pressure, due to the increasing population and standards of living, there has been increased pressure on proper facilities, service delivery and facilitation in these institutions to the citizens. This has been a challenge to the local immediate public health providers in the community. For any institution, officers in charge of budget control mostly determine the allocations of resources that each department is authorized to spend. Therefore, budget controls establish institution performance for every unit in terms of income and spending. Premchand (2000) argues that if institutions provide impartially precise forecasts and controls in capital and operations allocations, then there's no doubt on the institutional performance. This study intends to show the effects of financial controls on operational performance in these institutions.

1.1.1. Budgetary Control

Scarlett (2008) refers to budgetary controls as the procedures and values of practice of reaching given aims by use of budgets. The budgetary control objective helps in allocating goals for the institution and collective efforts for its achievements. Batty (1979) well-defined budgetary control to be a system which practices budgets as a way of planning and controlling all characteristics of producing and or selling supplies or services. Budget control

can be determined through proper planning, adequate availability of financial resources, human resource capacity, involving all stakeholders and staff, Evaluation and control of budget process not to forget motivation (Srinivasan, 2005). Budgetary control is simply to regulate foreseen expenditures in an organization all through a specified time or purpose with proposed procedures of funding the budget goals (Karue, 2013). Apart from providing limits, budgetary controls will portray the guarantee that the critical requirements of the institutions are first met in order with the least important dealt with at the end until there are enough funds to deal with (Hill & Matthew, 2003).

Budget control can be well viewed through variables as, Proper Planning; a key to implementation of the programs set out is to have a realistic and accurate planning of finances. Abdulla and Joshi (1996) argues that planning has to be in agreement with the continuing projects approach using short term to achieve the targets set out. Hence before coming up with budget controls, policies backed by planning have to be established (Dunk & Hopwood, 2001). Budgets should be coordinated with one another to make sure that implementation is effective to save costs and time (Horngren & Dater, 2005). Another variable is Human Resource Capacity, to prepare an effective budget and budget controls. According to Silva and Jayamaha (2012) employees play an integral role in monitoring the expenditures, setting up revenue resources and evaluating performance of the said allocations to enable effective production of the institutions. Administrators in charge must have the needed capacity in preparation and implementation of budgetary controls. Involving of staff and stake holders, as a budgetary control variable, Stakeholders are of keen interest on the positive performance of the business enterprise they have interest in (Obigbemi, 2013). There

is attachment to the budgetary controls and allocations leading to motivate to achieve their goals using the budget allocations impacting performance.

One of the advantages of the budgetary control being profit maximization highlighted by Preetabh (2010) the purpose of the budgetary control through planning and critical control over expenditure and using then resources in the best use is to maximize profits. Secondly Coordination, this is achieved through coordination of different departments. It was noted that in any institution departments have a bearing on each other therefor making it necessary for the coordination of this departments to achieve the targets set by the budget. Preetabh (2010) also noted that budgetary controls also help achieve specific time aims. All efforts are normally put together to help achieve these goals by giving departments targets that they need to achieve. These efforts are targeted to specific goals. Budgetary controls will also provide a platform of comparing the actual budgets to the budget targets thus showing where there is deviation at an early stage. Performance is evaluated by each department heads which in turn enables management by exception.

1.1.2. Operational Performance

Performance refers to the degree to which an organization's goals and purposes are achieved effectively and efficiently while financial performance is overall degree of a business's general monetary status in certain period. Performance in public sector can be examined on different levels of aggregation (Pollitt & Bouckaer, 2004). There will be analyzing of incentives in performance of the managers involved. Extraordinary performance mirrors management value and efficiency in use of resources. According to Gavrea et al (2011) one of the most critical factors and arguably the most significant gauge in management research is organizational performance. Unceasing performance is the objective of any institution

since only through performance, these institutions are able to develop and progress. Public Health sector performance signs are categorized to three parts which are Quality-Effectiveness, Efficiency- Financing and Accessibility–Equity. Signs like the percentage of clinic regular duration of stay based on diverse diagnosis and the mean rate of inpatient period of waiting are considered with utmost priority performance signs of communal hospitals (Gholamzadeh, Beyrami, Jannati, & Jaafarabadi, 2013).

Performance measurement recommends a procedure where main emphasis is on the processes that tell the efficiency and efficiency of certain set actions (Neely, Gregory, & Platts, 1995). These measures and signs act as substitutes or representations for institutions activities (Ijiri, 1975). Measurement of performance characterizes administration and control systems that give information to be used by all users. Customarily, the accomplishment of an institution has been calculated through monetary measures. The performance scrutiny detects the business strengths and weaknesses by appropriately establishing associations between items of the financial statements and balance sheet Indian electronic thesis and dissertations.

Efficiency can be measured through benchmarking by comparing service providers and their services, individually or collectively, and also through economic assessment through comparing alternative hospital programs on cost–effectiveness, and measuring program outcomes based on physical unit of health status, such as the number of lives saved and disease reductions. Minimization of cost compares costs in programs where clinical evidence portrays the same outcomes for alternative health programs (Peacock, Chan, Mangolini, & Johnsen, 2001).

1.1.3. Relationship Between Budgetary Control and Operational Performance

According to Hope and Fraser (2003) budgetary control is not greatly as a fiscal planning but as a performance controlling process that leads to and achieves that plan. This procedure is about assenting upon and managing goals, rewards, strategies, and funds for the year in the future, and then measuring and Control performance in contradiction of that agreement. It can be said to talk about the situations regarding how certain services are handled, effectiveness in provision of services and performance and using the expertise and awareness efficiently. Therefore there is need for the administrators to look at factors which define performance in hospitals such as budget controls (Muliro, Nambuswa, & Namusonge, 2016). The need for efficiency and accountability of service delivery across positions institutions at the front line in establishing of control structures. Most public hospitals reform programs that have been in the emerging countries were made known as part of the SAP – Structural Adjustment Programs by the World Bank in the 1980’s.

An arguement by John and Ngoason (2008) that the practices of integrating strategic management and budgeting which enables it to be competitive and increase organizational performance. Budgetary control structures, at the middle of improving institutions proficiency and regulatory costs, then the necessity to scrutinize the role of the structure in the hospitals monetary and operational performance is of top importance. According to Jagongo and Oduor (2013) budgetary control in Kenyan public hospitals can well Productivity and efficiency: this is well portrayed as important funds in the institutions development; hence, they have to be reviewed and constantly scrutinized in the hospitals. Identifying operational efficiency and acknowledgment of aspects touching hospital efficiency are corresponding measures for size and value enhancements. Removal of factors

involved in hospital ineffectiveness can, bring about escalating efficiency, improve service delivery and in making more realistic, efficient and better decisions. Even though Otley and Pollanen (2000) make known that budgetary involvement, control and task uncertainty openly affect performance adversely. This research as a result anticipates further investigating the association between budgetary controls and the progressive effects on performance of public hospitals.

1.1.4. Public Hospitals in Kiambu County

World Health Organization (WHO) defines health systems as consisting of all organizations, people and actions whose primary intent is to promote, restore or maintain health (Musyoka, 2015). Budget control has been difficult to achieve in public hospitals as a number of factors including, adequate funds from the primary source, the government is never sufficient as the needs always outgrow the resources. Most public hospitals in Kenya are managed by administrators who are mostly do not have the needed capacity in running the institutions eventually affecting performance.

The government of Kenya in 1994 approved the (KHPF) Kenya Health Policy Framework to be used as a blue print in the management and development of the health sector. The Ministry of health, Kenya, developed an implementation and action plan whereby they established the (HSRS) Health Sector Reform Secretariat, in the year 1996, under a committee to lead and oversee the implementation process. This policy's initiative focused on responding to constraints such as inefficient funds utilization, expenditure, inadequate management skills among others (Muga, kizito, Gakuruh, & Mbayah, 2004).

Kiambu County in totality has 364 health facilities range. The county public facilities, are as follows Thika District Hospital as the only level-five hospital, 3 level-4 hospitals and 4 level-three hospitals. There are also 20 Health Centres level-two and 54 dispensaries, level-one all over the county. The rest are private hospitals and clinics (County Government Of Kiambu, 2017). It has been noted that in Kenya the growth of the facilities and fixed assets since attaining independence has not related with the growth of the recurrent budget allocations. This in turn has caused shortage of most important inputs in service delivery. Using the first report on poverty in Kenya, Kenyan Report (1998) some citizens in about 9% found that the public health care was too costly and 13% said that some of the facilities were too far, 54% said that there was scarcity of drugs or non-availability.

1.2 Research Problem

According to Howard and Brown (2002) budgetary control as a system of controlling costs includes comparing actual performance by acting upon results to achieve maximum operational efficiency in performance. Budget control in any institution has advantages and disadvantages which are mostly reflected on performance. The World Bank (2004) has however demonstrated to be virtually difficult to establish operational effective institutions and endure them over time especially due to perceived low financial resource management and standing of the public sector. An organization OECD (2008) urges that budgetary control on expenditure, improving allocation and efficient use of funds improves public sector performance. According to Dixon, (2011) the need for accountability, proper management and efficiency in operations has been faced by financial challenges among which is controls on expenditure.

A research by Bloom et al (2009) quantified performance in health institutions is poor related to other organizations they say that it's even of poorer quality in public than private hospitals. In the 2012/2013 financial year, operational performance of health institutions in general emerged as an subject of worry. In Kenya, introduction of Performance contracting by the government in 2004 was aimed to improve service delivery. It aimed to reform the mindset of the public service operations away from a culture of inward looking towards a business-like, focused on the customer and results. The introduction of the Result-based Management (RBM) strategy, in 2004, was also directed at improving operational performance, service delivery, and governance (John, Shedrack, & Douglus, 2015). The people of Kenya can benefit from an improved operational performance evidently having quality, accessible, and safe health services as a key obligation from the government institution.

A journal by Bingham University (2015) revealed that a compulsory and necessary condition for realizing an effective budgetary control is the contribution of all relevant interested party in the making of the budget, proper planning and Human resource capacity. Research conducted on the health sector has indicated that most challenges affecting the global health sector are attributed to human resource management; Performance management is an aspect of HRM (John, Shedrack, & Douglus, 2015). A study on the budgetary control in NGO's and its effects on their performance by Nyambura (2014) where her findings recommended that workers ought to be informed on budgetary controls and effects on performance to the institutions clearly demonstrating that there is a gap on the relationship on performance and budgetary control. A study on budgeting and budgetary control and performance evaluation by Gershon (2012) findings were that the key participants are not working with the budgetary

controls because no proper training and planning and role they were obligated potrying an opening between operations and budgetary controll.

The writings studied disclose that there should be efforts to implement budgetary controls seeking to disclose resource constraints, and operational proficiency, a gap remains on the impact of the financial controls on performance of public administrations. This research therefore sought to examine the effects of budget control on the operational performance of public hospitals in Kiambu County.

1.3 Objectives

The objective of this study is to evaluate the effects of budget control on the operational performance of public hospitals Kiambu County. This research seeks to show the relationship with the effects of the budgetary control and operational performance.

1.4 Value of the Study

This report highlights the effects of budget control on the operational performance of public hospitals in Kiambu County. This report gives the necessary recommendations to all stakeholders involved in public health in operations management the importance of proper and adequate budget controls for better operational performance of hospitals. This study seeks to show how operational functions have to support cost-containment efforts through proper planning and good human resource capacity and participation. The main beneficiaries of this writing shall be the public health care as they will be well advised on making the best financial management decisions for well-organized and operational output in terms of service

delivery and enhance accountability. The Patients / Clients of the public health sector as they will receive proper, efficient and effective services as they are the main contributors to the service through taxes. This study will also be of benefit to other researchers by gaining an insight of operational efficiency through budget control performance and also form a base for their research.

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

Chapter two covers the effects which can be resulted by usage of budgets controls gets control and operation performance, the observed studies on the matters relating to financial plan control and operation performance and the part summary.

2.2 Theoretical Literature Review

The theoretical literature review will revolve around the subjects involved in the budget control some of its effects and the players involved with an implication to the operational performance.

2.2.1 Agency Theory

Two of the theory's' scholars Jensen and Meckling (1976) define agency theory as a form which the principal appoints the agent to do services on their behalf that comprises decision making authority. There is always reason that the employee will not perform in the best interest of the principal. In turn there are limits that the principal can put in which include enticing the agent by incurring observing costs made to limit the abnormal activities of the agent. An important component of any principal-agent relationship is to stipulate an indicator that will be the main component of the bond. When the agent is heading the department, performance measure should preferably be based on a set of signs including output, outcome, and impact (Leruth & Paul, 2007) .

Budgetary control can only be effective if the agents have the capacity and motivation to come up with good controls and also work to the best interest of the principal who is the government by cost effectively using resources in achieving the desired results. Proper planning, right human resource capacity and participation are among the variables that can be undertaken through participation evident in this theory. The agency theory applies in this research where hospitals must engage on a proper principal agent relationship that is based on performance individually and through the line departments under which they are entrusted. Budgetary controls will provide a gauge for performance for the agents where the principal can follow the institutions performance.

2.2.2 Goal Setting Theory

An argument by Latham and Locke (1990), states that goal setting theory is based on the purposeful behavior of the human nature. Goal directedness shows the actions of all institutions or human being and organisms as plans thus the theory fall on both conscious and non-conscious action. In this theory, Locke and Latham urge that there is higher performance when people simply do their best. Such goals make impact on the performance of institution units and individuals over long periods. Goals in relations to performance can be put into content, intensity and specificity (Locke & Latham, 1990). Goals can impact motivation and presentation by influencing persons to focus on detailed objectives and make them escalate their effort, be persistent when faced with setbacks and plan strategies that will propel them to reaching these goals. By enduring the setbacks and challenges one attains recognition, promotions and other rewards.

Performance in operations can be measured mainly of there is achievement of goals set for the participants to achieve. Budgetary control measures have to be in a way that the

employees feel challenged. Public hospitals in Kiambu County can adopt the goal setting theory by setting targets that are directed through the budget on, patient lives saved, appropriate efficient medical care, number of patients attended too, response time, etc. This in turn motivates the staff to overcome the challenges and the need to achieve through the setbacks. Making tough challenges provokes individuals and departments to attain self-satisfaction and recognition promoting efficiency, effectiveness and self-satisfaction. Through this, the goal setting theory continually invokes raising standards by different departments and individuals and in overall the whole institution perfuming with great vision and mission to accomplish their goals.

2.2.3 Organization Based Budget Theory

According to Gianakis and McCue (2002) among many purposes of the budget, one of them is to boost the institutions management in making the précises resource allocation decisions. In search of this, the process of allocation of resource should work as a balance to the factors generated by characteristics of the many services provided in public institutions. The formats and processes of budgets should be scrutinized for their specific utility and considering the capacity of the management staff. The basic function of the professionals in charge of these public institutions is to maintain the institutions flow of resources. Public institutions' resource allocation process serves as a developing role for both the internal structure of the institution and its relationship with the external environment in regards to development. This approach provides a structure to inform and to guide the actions of the professionals in public institutions.

Budgetary control through proper planning in setting budgets, public hospitals can be able to allocate the scarce resources by either having formed strategies based on needs and historical

data from the public hospitals. The role of the finance official in the institution is to ensure there is future financial viability of the firm (Khan & Hildreth, 2002). Operations are bound to be efficient as there is known and precise allocation of resources to support these operations. The institution based approach to the budget allows normative theorists put importance on the public institutions, role of the finance, distinctive competencies of the professional. Therefore one suggestion of a normative theory for the institution in the public sector budgeting is that the finance officials should endeavor to protect the future financial viability of the public hospitals.

2.3 Determinants of Operational Performance in Public Hospitals

Operational performance of health care institutions has not had harmony between researchers. Provan (1985) has defined health care institutions performance in relations of bed occupancy, mortality rate among others. He on the other hand acknowledges that these processes lack generalizability. Generalizability may be affected mainly due to the type / Level of hospital in question, the size of the institution in terms of resources available for the hospital. Bloom et al. (2009) argue that administration in health care institutions is not similar with that of industrial firms. He says that public hospitals have worse practices than private ones. Healthcare bodies have unique complications for supervision since industrial choice makers have to contemplate fundamentals such as patient right to services, dependability and importance of care. These components distinguish health care providers from different kinds of customer related establishments since failures in these sectors, even at a small scale level, could result in death (Ray, Plowman, & McDaniel, 2010). Some of the operational measures are as below (Dylan, 2016):

2.3.1. **Budgetary Control:** for an effective budgetary control, this can be determined through contribution of all relevant interested parties in the making of the budget, proper planning and Human resource capacity. Weights shall be applied to the determinants through likert scale questionnaires giving a view of how they perceive the controls.

2.3.2. **Patient Waiting Period:** This can be referred to as the extent of time a patient wait for service. It's an aspect that affects operation of healthcare services. Patients identify long waiting as obstacle to obtaining services and keeping patients waiting needlessly can be a cause of stress for both patient and doctor this shows the ordinary aggregate time a patient has to wait when they get to the facility and when they are attended to. This can benefit with proper scheduling and attending to of patience.

2.3.3. **Staff-To-Patient Share:** According to Hodge et al. (2004) better staff to patient ratio results in higher quality patient care. This will illustrate how many health care providers in terms of doctors and how many they are able to attend to in a facility. This also may be influenced by the nature and size of the facility and location, with the recommended one medical staff to 8 patients.

2.3.4. **Bed or Room Turnover:** Shows how fast doctors attend to patients and their movement in and out of the facility and or bed. This offers a ration of the resources available for delivering services to inpatients in hospitals and also includes an indicator of bed occupancy rate. This impacts the good organization of the facility and ought to be well-thought-out when considering at patient satisfaction.

2.3.5. **Civic Health Education Programs:** This is whereby the institutions engage the community, provide people with factual information about topics revolving on health inform people about diseases and tell people how to protect and treat themselves. This will

determine how frequently various programs have been done to increase awareness and prevent contracting diseases.

2.4 Empirical Literature Review

A study by Amalokwu and Ngoasong (2008) in their paper Budgetary and management control practices, in Guinness Nigerian. The study objective was to suggest the most appropriate management control tool (focus being on the budget) in Guinness Nigeria Plc. Based on their findings through qualitative approach and data collected being primary data, he used a sample of 50 respondents. His conclusion financial planning could assist the creating and supporting of competitive benefits and that budgetary control were an effective tool which enhances competitiveness which in turn affected high performance in the organization. Adapting this research to the public hospitals is bound to reveal lack of budgetary control in Kenyan public hospitals, the results from the above study do not replicate our public institutions. This identifies the gap which this study seeks to determine.

A study by Onduso (2013) on effects of budgets on fiscal performance of manufacturing companies in Kenya's Capital city Nairobi, his main objective was to determine how effects on the performance financially of Nairobi county manufacturing companies budgets. His methodology was cross sectional enquiries technique with eighteen respondent companies listed in the NSE employing a census survey. He used both primary and secondary data. His findings were that there's a great progressive effect of budgets on financial performance measured through ROA Return on Assets. He recommended that proper carrying out of the budget has to be recommended through capacity building and observing for evaluation. Public hospitals in Kiambu need to adapt his findings which are focused on capacity building

to improve on performance in the institutions and also through proper budget implementation as a control measure. This reveals the two as gaps in public operational performance as effects from budgetary control that need to be reviewed.

A case study with the title challenges of budgeting at national social security fund was conducted by Wamae (2008) with an objective to establishing the challenges faced when making the budget to be used determine how to effectively face these challenges. He used the descriptive methodology to analyses his data from 15 people top management and BOD. His findings were the biggest challenges comprised; commitment by the management to the budget, limited time in preparation of the budget, poor management of expenditures. In relations to this study, public hospitals undergo similar challenges which this study seeks to reveal the gap in regards to budgetary control and operational performance. Public institutions have not embraced budgetary control which in turn has affected their performance. Highlighting the variables involved will give light in resolving the issues on performance in the public hospitals and other public institutions.

A study on budgeting and budgetary control and performance evaluation: All terrain Service Group (ATS) by (Gershon, 2012). In his objective was to ascertain the role budgets played in the studied company and the key factors that contribute to the daily operations of the company. This research was work conducted with special. He collected data from 44 workers in different departments and tiers of management through questionnaires using both quantitative and qualitative methods in analyzing the data. His data was primary and secondary. His findings were that the key participants are not working with the budgetary control because no proper training and planning, were obligated. This has been replicated in this study as proper training and capacity have been highlight as one of the main variables

that affect performance. Gershons study was more in a private company showing the gap in relations to budgetary controls and performance giving path to this study in public hospitals in Kiambu County.

2.5 Conceptual Framework

Figure 2.1 below shows the effects of budget control on operational performance of public hospitals in Kiambu County. From the literature, the research intends to use the independent variable of the study to see how they affect the dependent variable of the study which is operational performance. Operational performance will be measured mainly through resource management and statistical indicators from recorded hospital service delivery data. The control variables internal administrative characteristics such as size and location are regarded as important factors in strategic decision making. In previous health care studies, institutional characteristics such as the number of beds, patient type, number of nurses, have been considered. The environmental and organizational characteristics used as control variables in this study are the same as those used in previous studies as highlighted in this text.

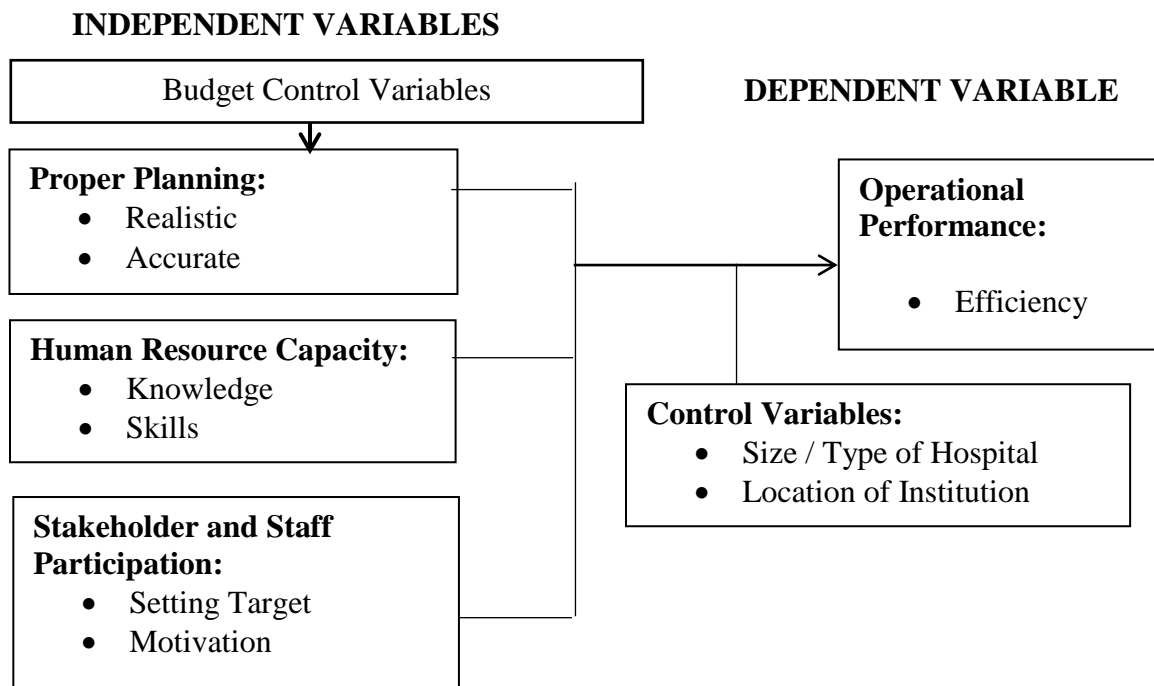


Figure 2.1: Conceptual model

2.6 Summary Literature Review

The review of literature has focused largely on empirical opinions of performance centered on the effects of budgetary control. At a broad view from the local studies, the budgetary control variables not practiced in the right manner give limitations on the reactions or performance occurring in the different firms with positive effects vice versa. At the macro level, budgetary control variables on operational performance have been well thought-out in terms of variables such as Proper planning, The right human capacity and stakeholder participation.

General budgetary control as an executive technique must be given sufficient consideration it deserves in any institution, it is certain that proper planning deprived of an effective control for the purpose of computing performance will result in sub optimality and inefficiency, Bingham University (2015). The theories reviewed support the importance of budgetary control measures giving impact such as in motivation, preparedness and attachment in achieving set goals leading to improved performance of our public hospitals. All budgetary control and performance theories are centered to support their importance. Thus this Chapter provides a basis for the next in which the development of budgetary control variables are outlined, and various design calculations are critically analyzed.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Research Design

In this study, the research process will be utilized so that the conclusions of the study can be thoroughly recognized. The first part refers to the methodology portion. The second part illustrates the strategies that can be used in interpreting the results of the findings.

This study will adapt descriptive research method practices. Descriptive method of research is to bring together information about the contemporary existing condition. This is kind of research is opted considering the desire of the scholar to obtain firsthand data from the respondents so as to formulate rational and sound conclusions and recommendations for the study.

3.2 Study Population

Kiambu County in totality has 364 health facilities range. The county public facilities, are as follows Thika District Hospital as the only level-five hospital, 3 level-4 hospitals and 4 level-three hospitals. There are also 20 Health Centres level-two and 54 dispensaries, level-one all over the county. The rest are private hospitals and clinics. (County Government Of Kiambu, 2017)

3.3 Sample Study

The study area Kiambu County public hospitals, its constituents and its environs the target population being the 2 institution administrators of the public health hospitals from the Thika level 5 District Hospital, three level-4 in Gatundu South, Kiambaa and Kikuyu Constituencies, four level-three in Gatundu North, Juja, Kiambaa and Limuru Constituencies. There are 12 level-two (Health Centres) giving a total of 20 public health insitutions and a total of 40 respondents.

3.4 Data Collection

Data collected shall be in the form of both Primary and secondary data. The primary source of data shall be from the questionnaires and interview questions constructed by the researcher. The primary data will give the detailed statistical units used in the study further broken down into detailed classifications. The secondary sources of data will come already collected data from the hospital data bases and the management. Secondary data is more convenient to use because it is already condensed and organized. Furthermore, analysis and interpretation will be more easily done.

3.5 Data Analysis

Data analysis is described by Marshall and Rossman (1999) the process of getting order, configuration and sense to the bulk of collected data. The coding and analyses of this study will follow the methods and guidelines of commonly used by other researchers for ease of understanding the information.

3.6 Reliability and Validity Test

When planning a questionnaire for the primary data, the researcher ought to make sure it is valid, reliable and instantly recognizable (Richards & Schmidt, 2002). The Validity of the data collection tools was done with the help of an expert (the research supervisor). The reliability will be tested using the Cronbach's Alpha value whereby each variable under study should not be less than 0.6 for them to be deemed reliable.

3.7 Diagnostic Test

In diagnostic tests, an evaluation should be made of the reproducibility, accuracy, validity of the study, expression of the results, and assessment of the generalizability of the results.

3.7.1. Normality Test:

For each mean and standard deviation combination a theoretical normal distribution can be determined. The method of assessing whether data are normally distributed or not fall into two broad categories graphical through that histogram and statistical through chi square normality test (statistics How To, 2017).

3.8 Analytical Model

To measure budget control, top administrators will be given questions that look to determine how set budgets controls affect their daily operations and how significant they consider meeting budget objectives affects the way their top managers gauge their performance. Measuring of the variables shall be by use of a five point likert scale will be used to interpret the level of classification. Questions used to measure variables such as Proper Planning, Human resource Capacity, Staff and Stakeholder Participation and Adequate resources

adopted from other research resources to provide consistency with other researches for comparison purposes. . It will also be more efficient and time-saving than developing your own questions.

The conceptual model shall be as below:

$$Y=F(X)$$

Y = Operational Performance measured by Relative Operational Efficiency (ROE)

X = Budgetary control variables measured by the five point likert scale questionnaires. This will be represented with the dependent variable as (Operational Performance) and independent variable (proper Planning, Human resource Capacity, Staff and Stakeholder Participation) in the below equation.

$$Y = \beta_0 + \beta_1x_1 + \beta_2X_2 + \beta_2X_3 + e$$

Where: - Y = Operational performance as measured by Relative Operational Efficiency

X1 = Proper Planning measured by Likert scale by choosing the Mean value of the respondents

X2 = Human resource Capacity measured by Likert scale by choosing the Mean value of the respondents

X3 = Staff and Stakeholder Participation measured by Likert scale by choosing the Mean value of the respondents

β_0 = Intercept

β = Coefficient of independent variables

e = error term

The study will use secondary data to quantify the operational performance the key type of measure was efficiency measure. The independent variables X1 to X3 are variables of Budget control used for this study which was dignified using the several queries asked the respondents in the questionnaire.

3.9 Test of Significance

This research hypothesis seeks to show the relationship between budgetary control and operational performance. Whereby operational performance is being affected by how budget controls are implemented. Research hypothesis: budgetary controls affect the operational performance in public hospitals in Kiambu county. Null hypothesis: budgetary controls do not affect the operational performance in public hospitals in Kiambu county.

CHAPTER FOUR

DATA ANALYSIS AND PRESENTATION OF FINDINGS

4.1 Introduction

This chapter covers the data presentation of the collected data on planning, monitoring and control, participative Budgeting and performance including summary and interpretation of the findings of the research. It also discusses the major findings and compares with previous studies to understand how they conflict or similar.

4.2 Data Presentation

4.2.1 Long And Short Term Budget Plans

Data showing the response on presence of long and short terms plans in the organization

Table 4.1: Long And Short Term Budget Plans

	Frequency	Percent
Disagree	1	2.5
Not sure	2	5.0
Agree	14	35.0
Strongly agree	23	57.5
Total	40	100.0

Source: Primary Data

Table 1 show that most of the respondents in this study had a positive attitude towards the planning process undertaken in their respective institutions. 57% of the respondents strongly agreed while 35% responded to in agreement with the organization are planning process.

This is an indicator that the employees were involved in decision making and planning of healthcare institutions in Kiambu County.

4.2.2 Organization's Budget Clear Goals And Objectives

Distribution table showing responses on whether the organization has clear goals and objectives

Table 4.2: Organization's budget clear goals and objectives

	Frequency	Percent
Not sure	3	7.5
Agree	12	30.0
Strongly agree	25	62.5
Total	40	100.0

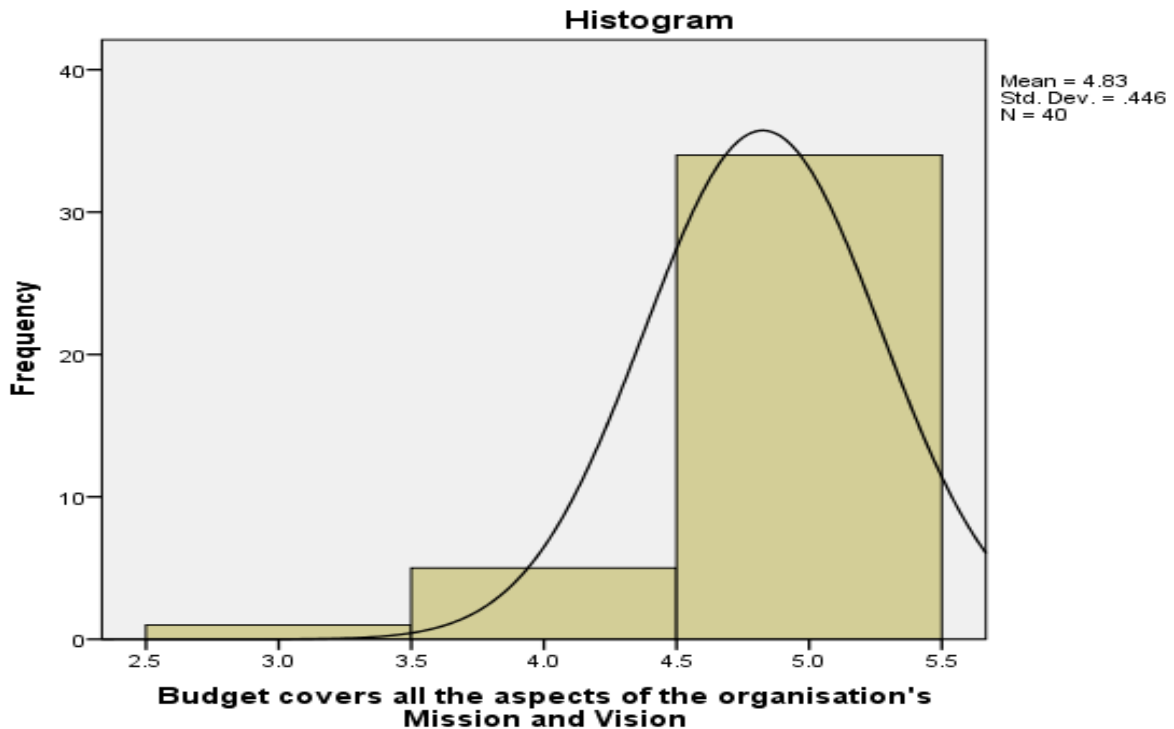
Source: Primary Data

Table 2: The distribution table reveals that majority of the respondents (62.5%) strongly agreed that the organization's budget had very clear goals and objectives. Additional 12% of the respondents agreed with the same sentiment while only 7.5% were unsure. This statement was used to test whether the hospitals had proper planning mechanisms that can be integrated in the budgeting process.

4.2.3 The Organization's Mission And Vision

Histogram showing data distribution of the respondents in regards to budgets covering the organization's mission and vision.

Figure 4.1: The Organization's Mission And Vision



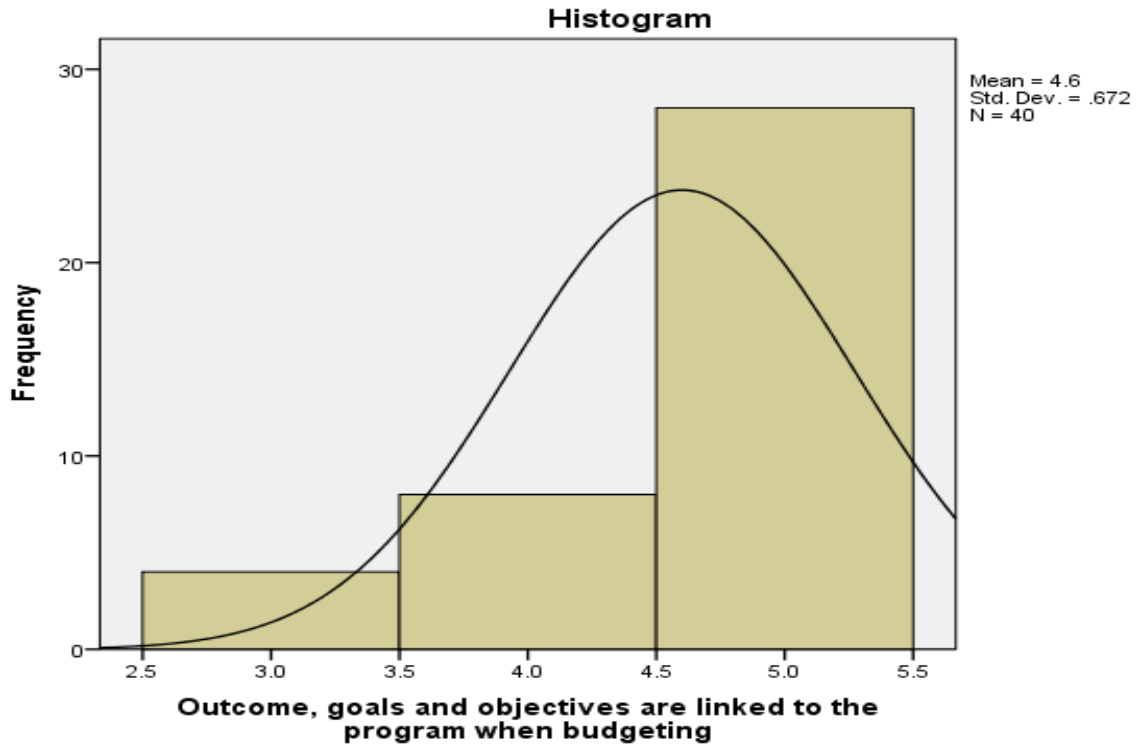
Source: Primary Data

According to the histogram in Figure 1, the distribution of interviewee responses is skewed to the right. This skewed nature indicates that the responses appear to be centered on 'agreed' (number 5). Also, the data ranges of the histogram are from 2.5 to 5.5, so the approximate range is 3 (obtained as 5.5-2.5) with an asymmetrical unimodal peak. This figure portrays a situation where most of the respondent agreed that with the statement that the budget content covered all the aspects of the organization's mission and vision objectives.

4.2.4 Linked Outcomes, Goals And Objectives

Graph showing respondent's view on whether the budget covered all aspects of the organization's mission and vision

Figure 4.2: Linked Outcomes, Goals And Objectives



Source: Primary Data

The illustration in Figure 2 shows that most of the respondents in this study believed that all the aspects of the organization goals, objectives and outcomes were linked when making their annual budget. The histogram is highly skewed on the right side which implies that majority were in agreement with the statement. There were no cases of disagreement or strong disagreement was captured in the research. This trend indicates that hospitals in

Kiambu County set vision and mission statements that were within the scope of the respective institution to accomplish.

4.2.5 Linking Planning, Outcomes, Goals To The Organizational Activities

Distribution of the respondent's views on the planning outcome

Table 4.3: Linking Planning, Outcomes, Goals To The Organizational Activities

	Frequency	Percent
Not sure	3	7.5
Agree	9	22.5
Strongly agree	28	70.0
Total	40	100.0

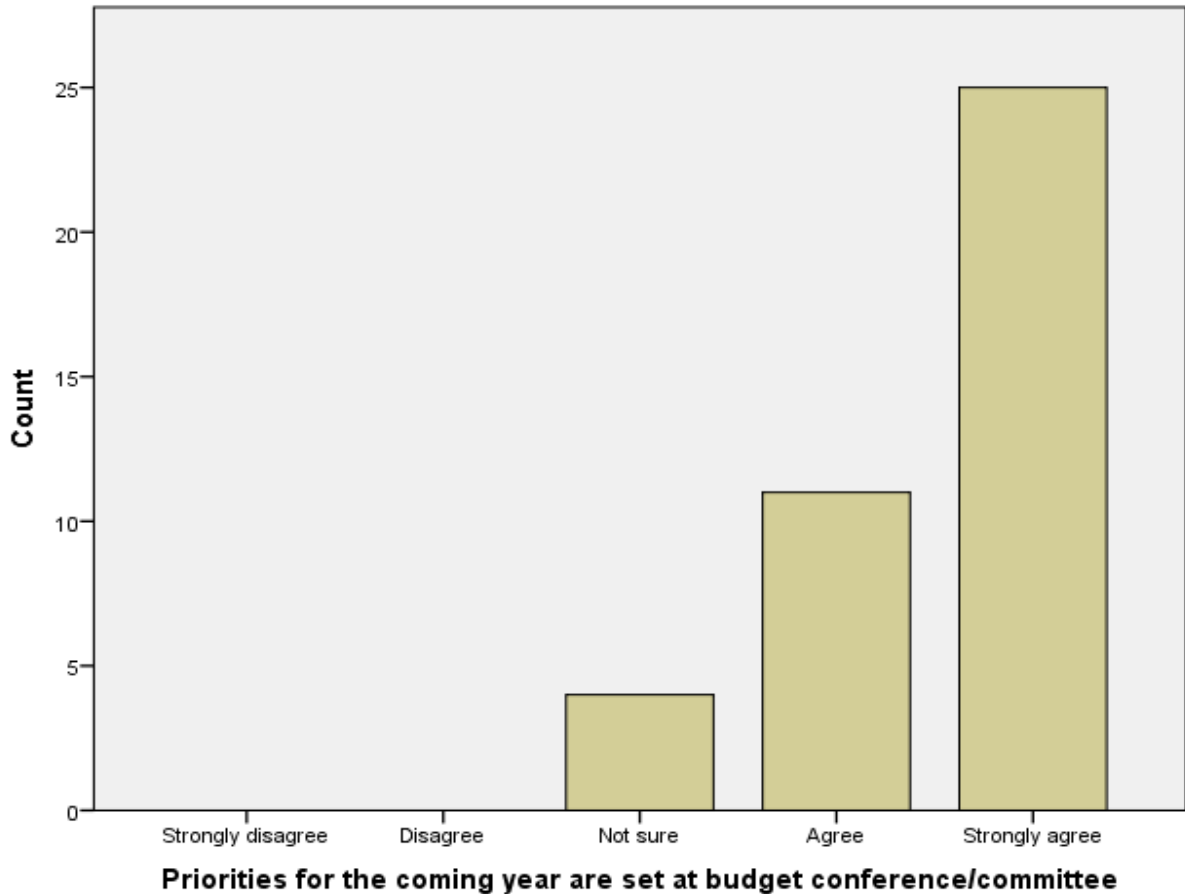
Source: Primary Data

According to the figures in Table 3, most of the respondents agreed that the organization's planning process considered the goals, objectives and outcomes of the hospital by linking them to its organizational activities. A further 22.5% of the respondents also agreed that the statement was true while only 7.5% were unsure of the situation in their organization. This implies that most of activities undertaken in Kiambu County hospitals were geared towards achieving the goals, objectives and outcomes of the organization at large.

4.2.6 Prioritizing Of The Coming Year Goals

Bar graph showing respondents view on setting priorities for coming year

Figure 4.3: Prioritizing Of The Coming Year Goals



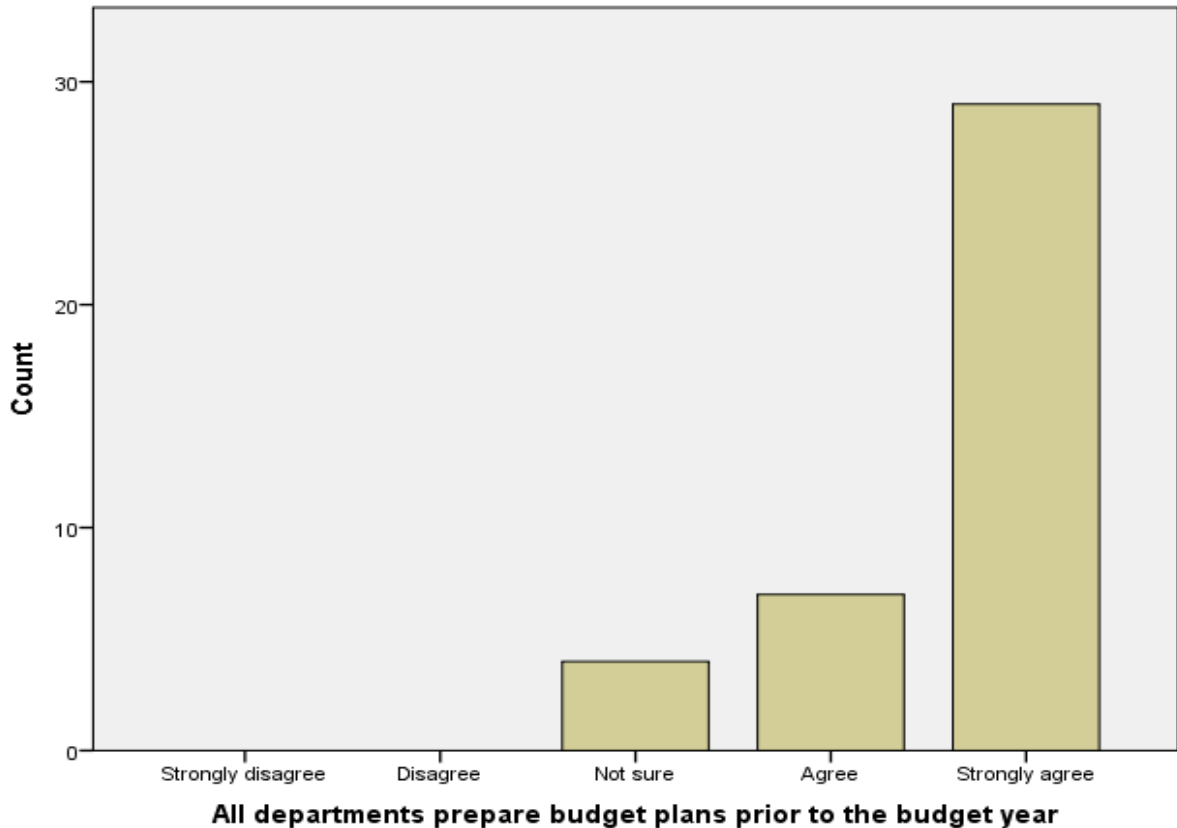
Source: Primary Data

According to Figure 3, most of the respondents agreed with the statement that priority setting for next year's budget was set at the at the budget committee level and only a less significant number was unsure. There was no respondent who disagreed with the statement. This can be an indicator that the hospitals and the county authorities guide the various departments in the hospital to plan ahead for purposes of financial allocation at a higher level.

4.2.7 Preparation of Budget Plan Before The Budget Year

Graph showing respondent's views in regards to preparation of budget by different departments

Figure 4.4:Preparation Budget Plan Before The Budget Year



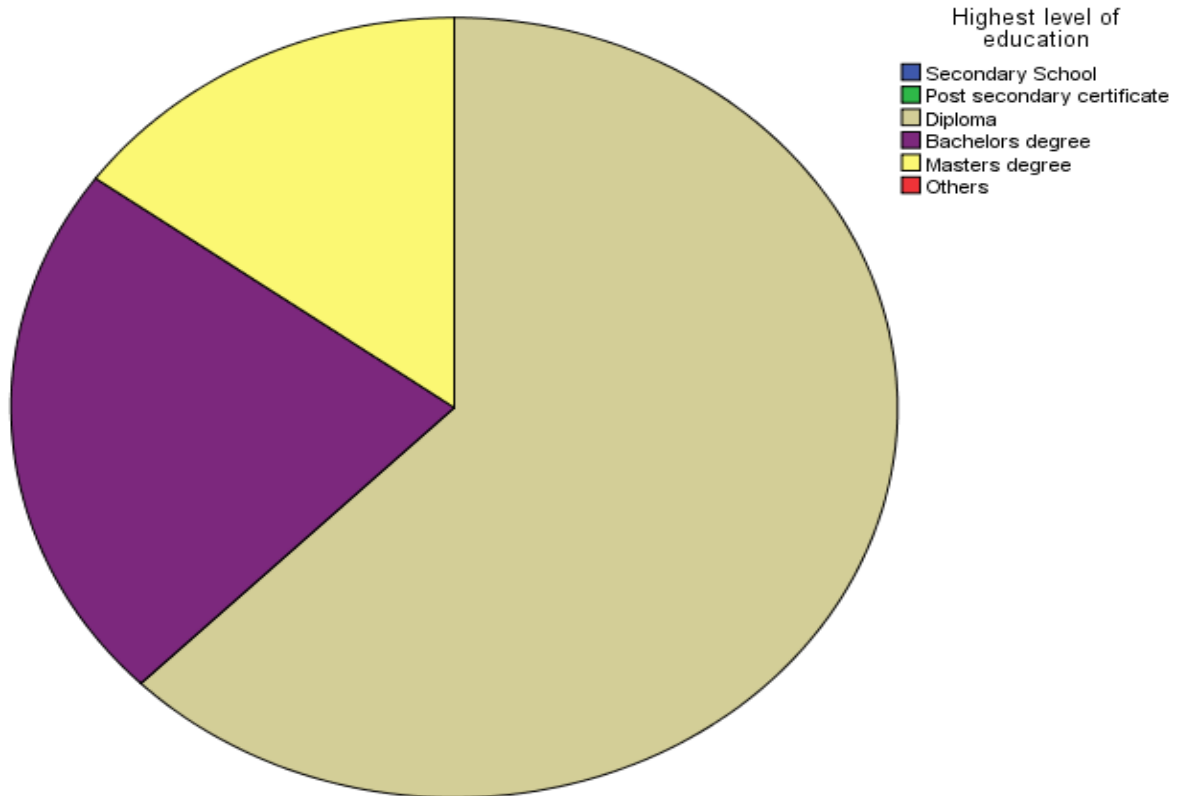
Source: Primary Data

According to the figure 4 above, the respondents affirmed the statement in the previous question. The figure shows that most of the respondents agreed with the statement and no one was in disagreement. Since the departments set priorities on budgeting a year before, it was also implied that the departments also had to prepare the accompanying budgetary plans the same time.

4.2.8 Level Of Education

Pie chart showing the highest level of education obtained by the respondents

Figure 4.5:Level of education



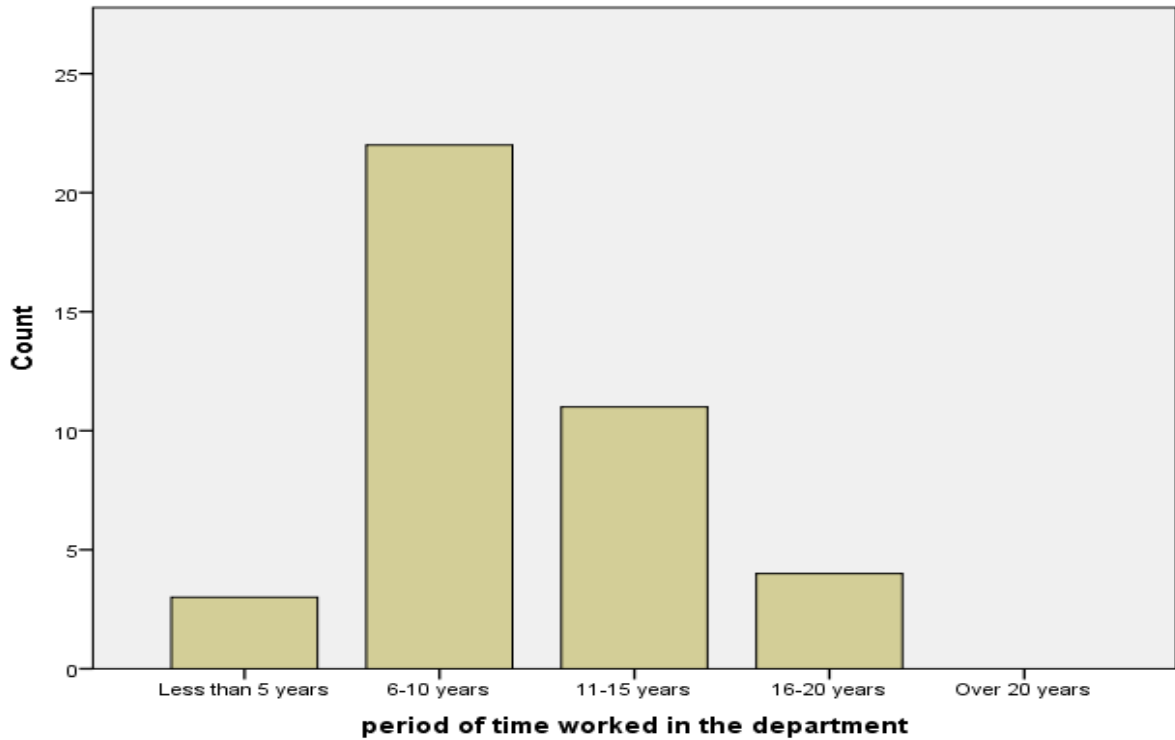
Source: Primary Data

Figure 5 shows that majority of the respondents (more than half) had diploma as their highest level of education while the rest had either a bachelor's degree or masters level. The most likely explanation for this trend is due to the fact that most of the respondents who were available and willing to respond to the questionnaire were the registered nurses.

4.2.9 Department Work Experience

Bar graph showing the amount of time the respondent has worked in the department

Figure 4.6: Department Work Experience



The bar graph in Figure 6 reveals that most of the employees working in Kiambu County hospitals have worked for between 6 and 15 years, while the rest were either new entrants working for at most five years or veterans who have worked between 16 and 20 years. There was no respondent recorded to have worked for over 20 years. This is an indicator that Kiambu County hospitals are mainly dominated by a young and vibrant workforce who can provide better service than an aging labor force.

4.2.10 Strong Organization Structure

The bar graph shows the views of the respondent towards the relationship between HR capacity and the management structure.

Figure 4.7: Strong Organization Structure

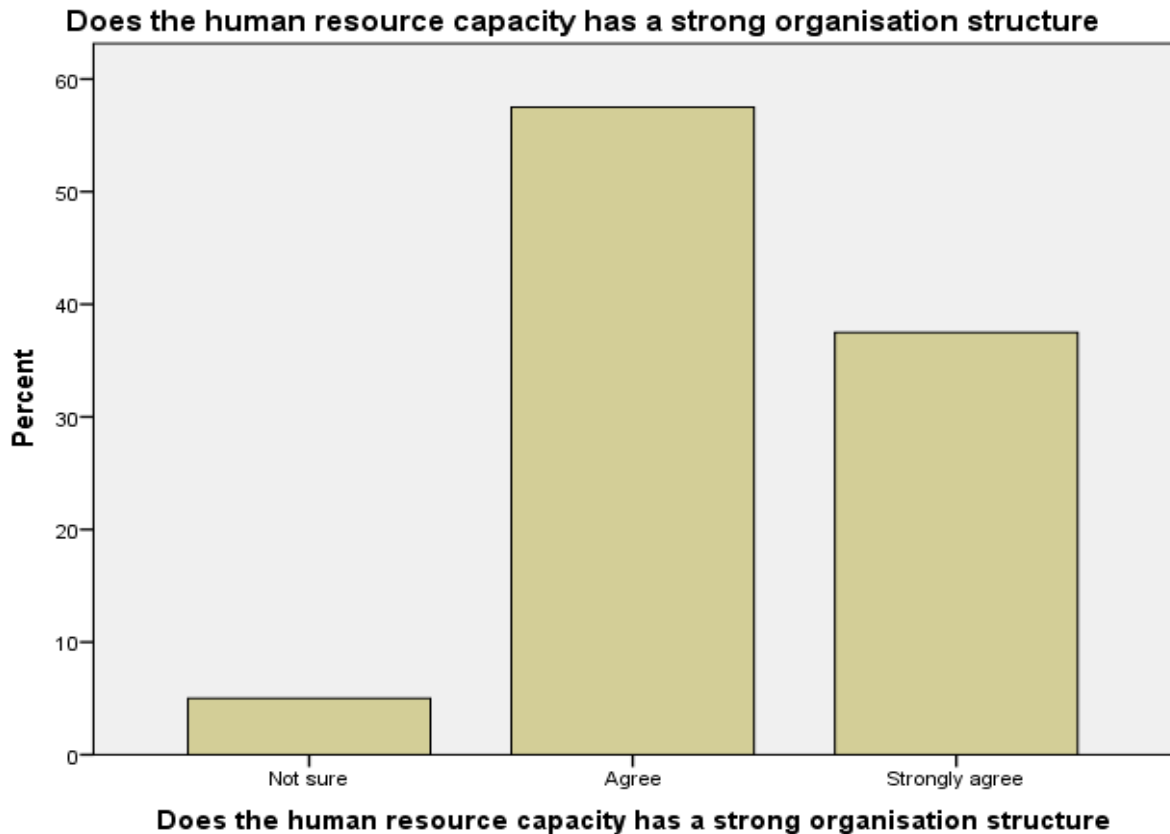


Figure 7 demonstrates that majority of the respondents believed that the human resource capacity in Kiambu County hospitals had a strong organisation structure to cater for the needs of the employees. While 58% of the respondents agreed with the statement, 38% were strongly in agreement while the rest were not sure. There was no respondent who felt that the statement was not correct.

4.2.11 Continuous Training

Effectiveness of continuous training in budgetary controls

Table 4.4: Continuous Training

	Frequency	Percent
Not sure	1	2.5
Agree	14	35.0
Strongly agree	25	62.5
Total	40	100.0

Source: Primary Data

Table 4 illustrates the effectiveness of continuous training in budgetary control is as represented in the distribution table above. 62% of the respondents strongly approved the statement, 35% agreed but 2.5% of the respondents were unsure. There was no report in any of the 20 hospitals that respondents negated the account. The Human Resource Management had a very elaborate plan for training the hospital staff at the entire county on how to manage finances and so as to maintain the budget according to plan.

4.2.12 Development Integration Of Employees

Results showing the level of integration of training and development into the organization

Table 4.5: Development integration of employees

	Frequency	Percent
Agree	10	25.0
Strongly agree	30	75.0
Total	40	100.0

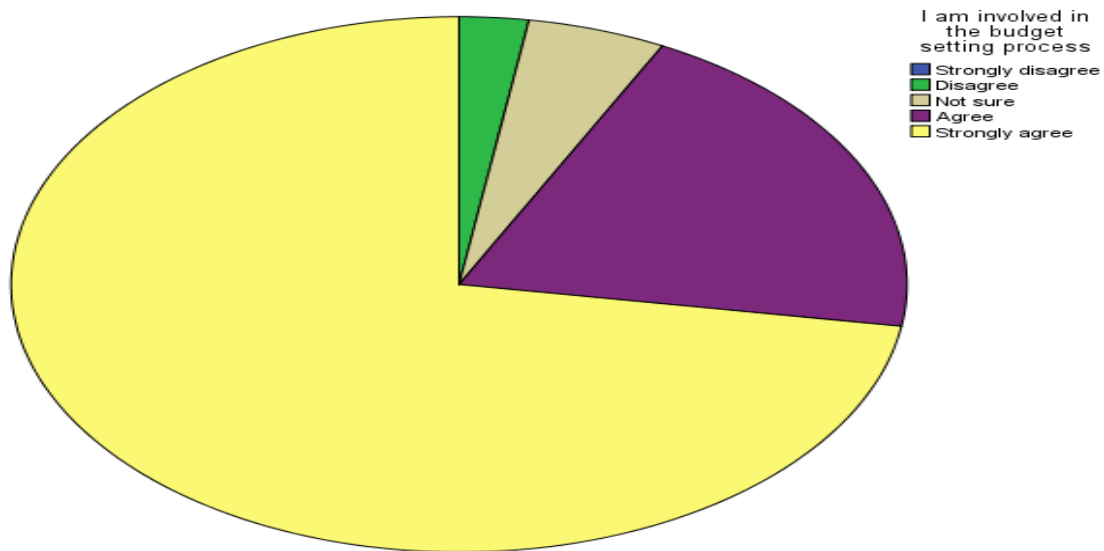
Source: Primary Data

According to the table 5 above, the figures represent an illustration that shows a near total agreement that training and development has been integrated in the organisation to facilitate development. There is zero disagreement with the statement. This implies that training and development is conducted almost in all county hospitals with the aim of developing the enhancing development and service delivery amongst the staff members.

4.2.13 Involvement In Budget Setting Process

pie chart showing the level of involvement of individuals in the budget setting process

Figure 4.8: Involvement In Budget Setting Process



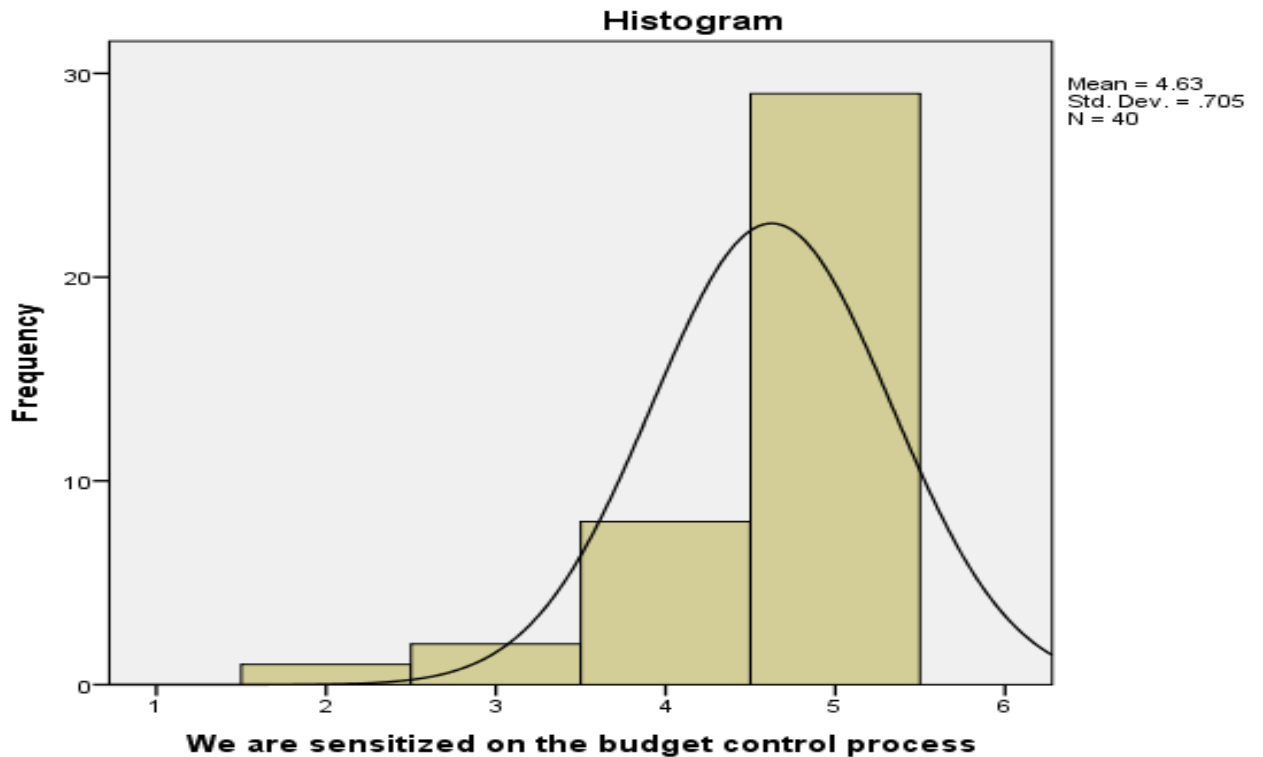
Source: Primary Data

The pie chart Figure 8 shows that the number of people (respondents) who were involved in budget making process was more than those who denied being involved. This implies that since the budget making is a process that requires consultation, there was a need to involve everyone whenever possible.

4.2.14 Sensitization In The Budget Control Process

Histogram showing the frequency distribution of the respondent's opinion on the level of sensitization of the budget control process

Figure 4.9: Sensitization In The Budget Control Process



Source: Primary Data

According to the histogram in Figure 9, the distribution of responses are skewed to the right which indicates that the responses appear to be centered on 'agreed' (figure 5). Also, the data ranges from 2 to 5, so the approximate range is 3 (obtained as 5-2) with a unimodal peak. This figure portrays a situation where most of the respondent agreed that with the statement that the institutions sensitized the staff members on the need to have budget controls in the organization.

4.2.15 Involvement of All The Stakeholders

Frequency distribution for establishing whether all stakeholders were involved in budgeting

Table 4.6: Involvement of All The Stakeholders

	Frequency	Percent
Disagree	1	2.5
Not sure	2	5.0
Agree	8	20.0
Strongly agree	29	72.5
Total	40	100.0

Source: Primary Data

The data in table 6 above shows that 72.5% of the respondents strongly agreed on the involvement of all stakeholders in making the budget. A further 20% also agreed to the statement while 5% were not sure and the rest disagreed. This demonstrates how Kiambu Government had been effective in engaging all stakeholders in decision making about healthcare in the county.

4.2.16 Departments Involvement In The Budgeting Process

Frequency distribution for establishing if all departments were involved in budget making

Table 4.7: Departments Involvement In The Budgeting Process

	Frequency	Percent
Disagree	1	2.5
Not sure	1	2.5
Agree	6	15.0
Strongly agree	32	80.0
Total	40	100.0

Source: Primary Data

The data in Table 7 shows that 80% of the respondents strongly agreed on the involvement of all departments in making the budget. A further 15% also agreed to the statement while 5% were not sure and the rest disagreed. This question supports the results in the previous question demonstrating how Kiambu Government had been effective in engaging all stakeholders in decision making about healthcare in the county.

4.2.17 Sharing Of Approved Budgets In Departments

Frequency distribution showing the rate at which approved budget is shared with other departments

Table 4.8: Sharing Of Approved Budgets In Departments

	Frequency	Percent
Disagree	1	2.5
Not sure	2	5.0
Agree	5	12.5
Strongly agree	32	80.0
Total	40	100.0

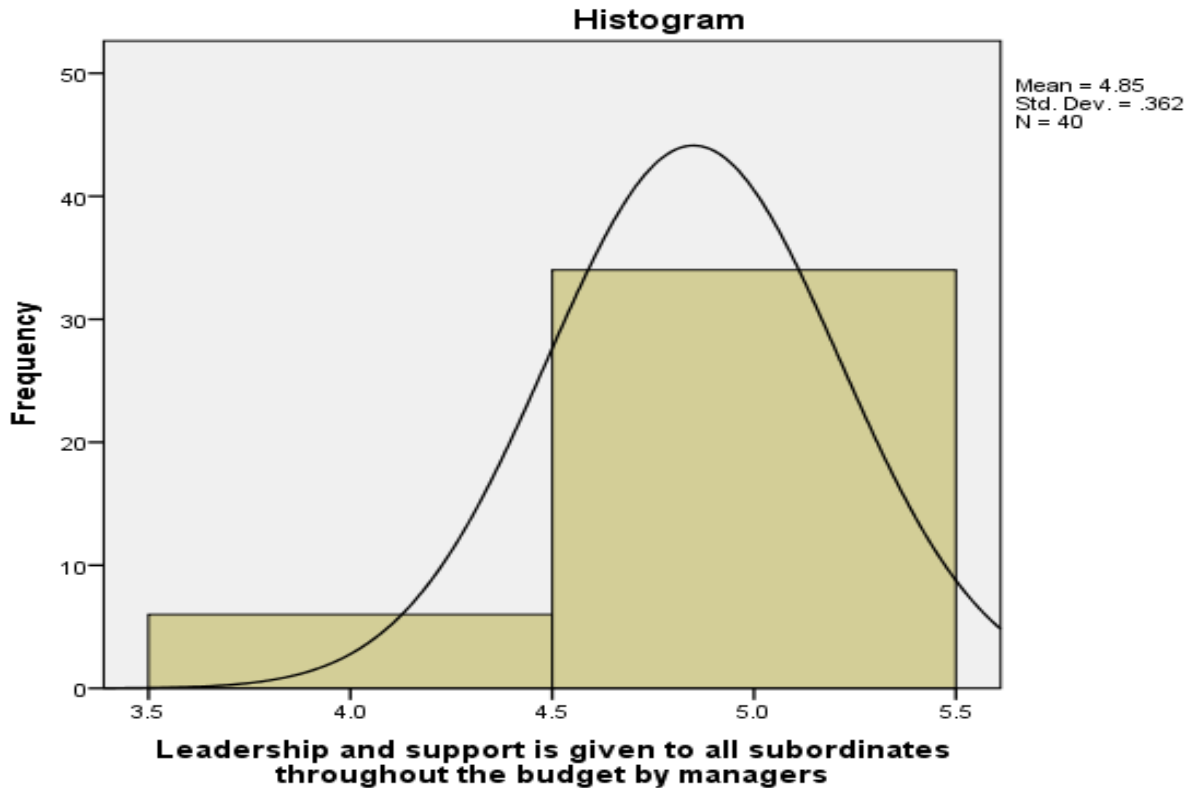
Source: Primary Data

The frequency distribution table 8 reveals that at least 80% of the respondents had a strong agreement with the statement that all the departments were served with the approved budgets, 12% just agreed while 5% were unsure of whether that happened. Only a small percentage (2.5%) disagreed with the statement. This distribution shows that the management of Kiambu County hospitals had a strong policy that required the engagement of all departments in each hospital when setting the budgets.

4.2.18 Support And Leadership During Process

Histogram showing how leadership and support is provided for to the subordinates during the budget making process.

Figure 4.10:Support And Leadership During Process



Source: Primary Data

According to the histogram in Figure 11, the distribution of interviewee responses is also skewed to the right. This skewed nature indicates that the respondents viewed the management as supportive and leading during the budget making process. This figure portrays a situation where most of the respondent agreed that with the statement that there was leadership and support during budget making process.

4.2.19 Budget Preparation Prior To The Overall Budget

Frequency distribution of the respondent's view on whether the department prepares their own budget in advance

Table 4.9: Budget Preparation Prior To The Overall Budget

	Frequency	Percent
Strongly disagree	1	2.5
Disagree	1	2.5
Not sure	2	5.0
Agree	6	15.0
Strongly agree	30	75.0
Total	40	100.0

Source: Primary Data

According to Table 9, 75% of the respondents strongly agreed with the researcher's statement that each department was expected to prepare its own budget to guide in preparation of the overall budget. 15% also agreed with the statement even though 5% were not sure and the rest disagreed. This high percentage of agreement shows that there must be an elaborate procedure of preparing the budget at individual level and presenting them to the committee responsible for budget planning at institutional level.

4.2.20 Motivation To Achieve Objectives

Frequency distribution of the respondent's view on whether budgetary controls motivates department to achieve their objectives.

Table 4.10: Motivation To Achieve Objectives

	Frequency	Percent
Disagree	2	5.0
Not sure	3	7.5
Agree	5	12.5
Strongly agree	30	75.0
Total	40	100.0

Source: Primary Data

The figures in Table 10 reveal that 75% of the respondents had the opinion that the budget control had a motivating effect on the employees' ability to achieve the objectives and hence establishing a control over the resources. 12% of the respondents also agreed with the statement while 7.5% were not sure whether this was the case. Those who disagreed with the statement were less than 5%. This trend implies that the budgetary controls that are implemented at the department level help the organization as a whole to manage and control resources.

4.2.21 Operational Efficiency

Table 4.11:Regression Analysis Of Time Taken Based On Number Of Nurses

Correlations			
		patient wait time	number of nurses
Pearson Correlation	patient wait time	1.000	.387
	number of nurses	.387	1.000
Sig. (1-tailed)	patient wait time	.	.007
	number of nurses	.007	.
N	patient wait time	40	40
	number of nurses	40	40

There was a moderate correlation between the number of nurses available in a hospital and the patient waiting time.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.387 ^a	.150	.127	.907

a. Predictors: (Constant), number of nurses

b. Dependent Variable: patient wait time

The r and r^2 were obtained to be 0.387 and 0.150 respectively with a standard error estimate of 0.907. R^2 can be interpreted to mean that the only 15% difference between one additional nurse and the amount of time a patient had to wait.

The coefficient values are as follows;

Coefficients ^a						
Model	Unstandardized Coefficients		Standardized t Coefficients	Sig.	95.0% Confidence Interval for B	
	B	Std. Error Beta			Lower Bound	Upper Bound
(Constant)	1.557	.604	2.576	.014	.333	2.780
1 number of nurses	.387	.150	.387	2.586	.084	.690

a. Dependent Variable: Operational performance through patient wait time

Using the regression model $Y = \beta_0 + \beta_1x_1 + e$

Where Y= expected waiting time and x is the number of nurses available, the regression equation for this relationship can be expressed as;

$Y = 1.557x + 0.604$ based on the constants represented in the coefficient table.

Regression equation

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.148 ^a	.022	-.060	.561

a. Predictors: (Constant), Leadership and support is given to all subordinates throughout the budget by managers, Budget covers all the aspects of the organisation's Mission and Vision, I am involved in the budget setting process

b. Dependent Variable: Is continuous training effective in terms of budgets and controls

This table shows the results of R and R² values obtained from the study. R represents the value of simple correlation which was obtained to be 0.148 (as indicated in the R column and this means that the three variables had a lower degree of correlation. R² values which are 0.022 represents the degree of total variation that is in the dependent variables (x1, x2 and x3) and can be explained in the independent variable (y) which in this case it can be said to be 2.2% which is very small.

The next is the Anova table that aims at reporting how well the regression equation was able to fit in the data as shown below.

ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	.252	3	.084	.267	.849 ^b
Residual	11.348	36	.315		
Total	11.600	39			

a. Dependent Variable: Is continuous training effective in terms of budgets and controls

b. Predictors: (Constant), Leadership and support is given to all subordinates throughout the budget by managers, Budget covers all the aspects of the organisation's Mission and Vision, I am involved in the budget setting process

This table shows that the independent model predicted the dependent variable effectively as shown in the 'Regression' row and the 'Sig.' column. The point of intersection shows a p-value of 0.849 which is obviously more than 0.05 and this means that the overall regression model was statistically significant in predicting the outcome variable.

The following table presents coefficient values and provides the necessary information for predicting the dependent variable (y) from the independent variables (x1, x2 and x3) as well as determining whether each variable significantly contributed to the model.

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
(Constant)	4.214	1.617		2.606	.013	.935	7.493
1 Budget covers all the aspects of the organization's Mission and Vision (x1)	.160	.210	.131	.764	.450	-.265	.585
I am involved in the budget setting process (x2)	.020	.135	.026	.152	.880	-.253	.294
Leadership and support is given to all subordinates throughout the budget by managers (x3)	-.099	.261	-.066	-.381	.706	-.628	.429

a. Dependent Variable: Is continuous training effective in terms of budgets and controls

The constant is 4.214 and therefore, the regression equation $Y = \beta_0 + \beta_1x_1 + \beta_2x_2 + \beta_3x_3 + e$ can be rewritten as:-

$$Y=4.214 + 0.160X_1 + 0.020X_2 -0.099X_3 + e$$

4.3 Summary and Interpretation of Findings

The above show that most of the respondents in this study had a positive attitude towards the planning, Human resource capacity and Stake holder involvement. Where budgetary control is high, there is a meaningful positive relation between performance and budgetary participation. This is an indicator that the employees were involved in budgetary control in Kiambu County Hospitals.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

This research established the existence of budgetary controls in hospitals, their performance and also determine the effects of budgetary controls on their performance. This research examined how budgetary controls affect performance in hospitals in Kiambu County in Kenya, 20 organizations were sampled using convenience judgmental sampling.

Planning in healthcare sector is an important aspect of service delivery. This is one of the steps that need to be taken into consideration and done right for the first time to ensure that the entire process of healthcare management is done in an effective and efficient way. Since, the objective of this study was to assess the effects of budget control on the operational performance of public hospitals in Kiambu County. This research also sought to show the relationship with the effects of the budgetary control and operational performance. The study was conducted through descriptive design with a target of 40 respondents from 20 hospitals in Kiambu County. The data was collected using a structured questionnaire where 50 questionnaires were issued and 40 were filled by the respondents. The response rate was 80% and such a high response rate is helpful in ensuring that the results from the sample selected are representative of the population.

From the findings, the respondents indicated that budget controls was a very efficient way of maintaining operational costs in public hospitals in Kiambu. Proper planning was a major determinant of the organization's ability to meet its objectives as it allowed the hospital to have the most adequate human resource capacity to allow the employees and the stakeholder's participation in budgeting thus improving the efficiency of the operations.

5.1.1 Effect of proper planning

The questions asked in this section were aimed at assessing whether hospitals in Kiambu County made proper plans in relation to budgeting. More than 75% of the respondents agreed that their organizations had short and long term goals, 62% agreed that the budget had clear goals and objectives, over 50% agreed that the budget covers all aspects of the organization and that the budgets were linked to the goals, and objectives. It was also established that over 60% of the hospitals had budgets planned over one year before presentation. This level of preparedness allowed the hospitals plan for normal activities and any eventualities that may arise.

5.1.2 Effect of human resource capacity

Majority of the staff in Kiambu County hospitals had the highest level of education as Diploma and had worked for a period ranging from 6 to 15 years in the same institution. This experienced provided them with the capacity to understand whether the organization had a strong human resource capacity and majority agreed with the statement. Continuous training was found to be more effective in enhancing budget controls as it was able to integrate employees into the organization to facilitate the growth and development of the hospital.

5.1.3 Employees stakeholder participation

The data obtained from the research showed a strong relationship between the hospital management, employees and other stakeholders in the process of setting the budget. The employees and the stakeholders were also sensitized on the budget control process through the support and leadership of the managers in before arriving at the requirements of the overall budget.

Therefore, this paper concludes that budget control was found to be a motivational factor to achieve the objectives of the organization and the entire healthcare system. This means that budget control process is essential as it reduces conflicts of interest between various stakeholders and allows productivity and effectiveness in the hospitals.

5.2 Policy Recommendations

Budgetary controls are important in influencing performance therefore more efforts should be made by management of organizations both profit and non-profit to sensitize the employees on its importance so as to enhance performance. It also recommends that organizations should develop more formal practice in the development of budgetary controls, that is, Planning, Monitoring and Control and budget participation. Most organizations have minimal formal budget controls in their organizations hence the need to develop a clear policy on budget control processes.

Based on the findings ,organizations need to investigate other factors that contribute to better performance apart from budgetary controls, like employees motivation and invest more in staff development in order to enhance their performance. Monitoring and Controls shows the

highest contribution towards performance hence more training should be done to the managers on how to conduct more efficient controls and monitoring.

5.3 Limitations of the Study

The researcher experienced various limitations in the course of the study; financial constraints, one of the major problems that the researcher encountered is inadequate financial support which consequently slowed down the process of data collection and production of the final report of the study in time.

Time constraints was a limitation as the research involved distributing questionnaires to different institutions most of whom were busy to spare enough time to respond. The duration within which the research was undertaken was also short leading to so much strain in time management and that's why the research focus on Kiambu area only.

Lack of corporation, the researcher experienced a lot of unwillingness to cooperate among most of the respondent organization, some never even responded and others even delayed in responding to the questionnaires. It was difficult to have face to face communication as most of the respondents preferred use of emails and this was the main challenge during the whole research period.

The likert scale that was used might have produced some bias as it is possible that the respondents provided non-committal answers by responding to neutral range of scale. Some respondents were biased while giving information due to reasons such as privacy and busy Schedules at their work place.

5.4 Suggestions for future Studies

The sample size used may have been quite small to enable get an overall picture of the total hospitals in Kiambu. Therefore more research in this area should focus on increasing the sample size and cover a larger number of organizations both in Nairobi and outside so as to enhance better generalization of the results. More research has to be done on the individual aspects of budget controls such as planning, participative budgeting, monitoring and control and relationship with organizational performance.

This study dwelt on hospitals and measures on performance were difficult to measure especially because they involve non-financial indicators. Hence more research should also be done in other sectors like the parastatals and private sectors. This research concluded that there is a high positive relationship between budgetary controls and performance hence other factors may have influence on performance apart from budgetary controls. Therefore more research need to be done on factors that influence performance on hospitals.

REFERENCES

Abdulla, M., & Joshi, J. (1996). Budgetary control and performance evaluation systems in corporations in bahrain. *Asian Review of Accounting*, 125 –144.

Adwuor, K., & Jagongo, A. (2013). Budgetary control as a measure of financial performance of state corporations in kenya. *International Journal of Accounting and Taxation*, 39.

Batty, J. (1979). *Accounting for Managers*. Heinemann Publishers.

Bingham University. (2015). A Systematic Review of Budgeting and Budgetary Control in Government Owned Organizations . *Research Journal of Finance and Accounting* .

Blakeman Hodge, M., Romano, P.S., Harvey, D., Samuels, S.J., Olson, V.A., Sauve, M.J., & Kravitz, R.L. (2004). Licensed caregiver characteristics and staffing in California acute care hospital units. *Journal of Nursing Administration*, 34(3), 125-133.

Bloom, N., Propper, C., Seiler, J., & Reenen, J. V. (2009). Health Econometrics and Data Group. *Management practices in Hospitals*.

County Government Of Kiambu. (n.d.). *County Government Of Kiambu*. Retrieved August 25, 2017, from County Government Of Kiambu: <http://www.kiambu.go.ke/about/health-access-and-nutrition>

Dixon, N. S. (2011). *Doctors on Strike in Kenya Seek Higher Pay and Better conditions*. Retrieved September 14, 2017

Dunk, A. S., & Hopwood, A. G. (2001). Role of budgeting and budget process. *Journal of Management Accounting*, 1-8.

Dylan, M. (2016, 05 26). *25 healthcare metrics kpis*. Retrieved 09 26, 2017, from clear point strategy: <https://www.clearpointstrategy.com/25-healthcare-metrics-kpis/>

Gavrea, C., Ilies, L., & Stegorean, R. (2011). Determinants of organizational performance. *Management & Marketing Challenges for the Knowledge Society*, 285-300.

Gershon, K. (2012). *Budgeting, budgetary control and performance evaluation: A case study of allterrain service group (ats)*. Ghana: Kwame Nkrumah University of Science and Technology.

Gholamzadeh, R. N., Beyrami, H. J., Jannati, A., & Jaafarabadi, M. A. (2013). Selecting Hospital's Key Performance Indicators, Using Analytic Hierarchy Process Technique. *Journal of Community Health Research.*, 30-38.

GoK. (1998). *First report on poverty in kenya: Poverty and social indicators*. Nairobi: Government Printer.

Gianakis, G., & McCue, C. (2002). Budget theory for public administration and public administrators. In A. Khan, & W. Hildreth.

Hill, H., & Matthew, A. (2003). The impact of traditional budgeting systems on the effectiveness of performance-based budgeting. *International Journal of Public Administration*, 135–155.

Hope, J., & Fraser, R. (2003). how managers can break free from the annual performance trap. In *Beyond Budgeting*. USA: Harvard Business.

Horngren, C., & Dater, D. (2005). *Cost accounting: A managerial emphasis*. San Francisco,: Simon and Schuster co.

Howard, L., & Brown, J. (2002). *Principles and practice of management Accountancy*. London.: Macdonald and Evans ltd.

Howard, L., & Brown, J. (2015). *Budget & Budget Control*. Retrieved 10 2, 2017, from linkedin: <https://www.linkedin.com/pulse/budget-control-engr-johnson-e-duru>

Ijiri, Y. (1975). Theory of accounting measurement. *Studies in Accounting Research* , 10.

Indian electronic thesis and dissertations. (n.d.). Retrieved from Shodhganga: http://shodhganga.inflibnet.ac.in/bitstream/10603/705/11/12_chapter3.pdf

Jagongo, A., & Oduor, K. (2013). Budgetary control as a measure of financial performance of state corporations in kenya. *International Journal of Accounting and Taxation*, 39.

Jensen, M., & Meckling, W. (1976). *Theory of the firm: Managerial behavior, agency costs and ownership structure*. Harvard University Press.

John, A. O., & Ngoason, L. (2008). *Budgetary and Management control Process in a Manufacturing Case of Guinness Nigerian PLC*. Malardalen University.

John, C., Shedrack, M., & Douglus, M. (2015). Role of Performance Management System on Service Delivery, Case Study of Kakamega County General Hospital, Kenya. *International Journal of Sciences Basic and Applied Research*.

Karue, M. (2013). *Finance*. Retrieved from University Of Nairobi: <http://finance.uonbi.ac.ke>

Khan, A., & Hildreth, B. (2002). *Budget theory in public sector*. London.

Koske, N., Simiyu , R., & Machyo , R. (2015). An assessment of the effects of budget interpretation on budgetary control: A case study of uasin gishu district hospital. *European Journal of Business and Management*, Vol.7, No.5.

Lee, C.-Y., & Johnson, A. (n.d.). *Operational efficiency*. Retrieved July 20, 2017, from <http://polab.imis.ncku.edu.tw/Book%20Chapter/Operational%20Efficiency.pdf>

Leruth , L., & Paul, E. (2007). A principal-agent theory approach to public expenditure management systems. *OECD Journal on Budgeting*.

Locke, E., & Latham, G. (1990). *A theory of goal setting & task performance*. Maryland.

Lyaruu, M. J. (2014). *An assessment of the budget and budgetary control in enhancing financial performance of an organization a case of tanzania electric supply company limited*. Daresalam: Mzumbe University.

Marshall, & Rossman. (1999). *Designing qualitative research*. CA: Sage Publications.

Muga, R., kizito, P., Gakuruh, T., & Mbayah, M. (2004). *Overview of the health system in kenya*. Nairobi: MOH.

Muliro, B., Nambuswa, E., & Namusonge, G. (2016). *Effects of budgetary participation on hospital performance: A survey of public hospitals in trans nzoia county*. Nairobi: European Journal of Business and Management.

Musyoka, F. N. (2015). *Journal of global health care systems*, 2.

Neely, A, M. Gregory, & K. Platts. (1995). "Performance measurement system design: a. *International Journal of Operations & Production Management*, 80-116.

- Nyambura, R. K. (2014). *The effect of budgetary control on effectiveness of non governmental organisations in kenya*. Nairobi: UON.
- Obigbemi, I. (2013). Employee participation in Budgeting and budgetary control: A tool for enhancing organizational performance. *Tactful Management*, Vol. 1, Issue 11.
- OECD. (2008). Performance Budgeting Guide. *Policy Brief*.
- Onduso, E. O. (2013). *The effect of budgets on financial performance of manufacturing companies in nairobi county*. Nairobi: University of Nairobi.
- Otley, D., & Pollanen, R. (2000). *Budgetary Criteria in Performance Evaluation: A Critical Appraisal Using New Evidence*. Accounting, Organization & Society.
- Peacock, S., Chan, C., Mangolini, M., & Johnsen, D. (2001). *Techniques for measuring efficiency in health services*. Australia: Productivity Commission.
- Pollitt, C., & Bouckaer, G. (2004). *Public management reform: a comparative analysis*. Oxford: Oxford University Press.
- Preetabh. (2010). *Advantages of budgetary control*. Retrieved July 18th, 2017, from <http://expertscolumn.com/content/advantages-budgetary-control>.
- Premchand, A. (2000). Planning and budgeting in control of public money. *The Fiscal Machinery In Developing Countries*, pp.230-239.
- Provan, K. (1985). Implementation of Effective Management policies in Non for profit Hospitals. *Academy of Management proceedings*, 309 – 323.

Ray, J. L., Plowman, D., & McDaniel, R. R. (2010). Participation in decision making one more time: A look at hospital decision making and performance. *Academy of Management Proceedings*.

Richards, J. C. (2002). *Longman dictionary of language teaching and applied linguistics*. London: Longman.

Rosen, H. S., & Gayer, T. (2010). *Public Finance*. New York: Mc Graw Hill.

Silva, L., & Jayamaha, A. (2012). Budgetary process and organizational performance of apparel industry in sri lanka,. *Journal of Emerging Trends in Economics and Management Sciences*, 354-360.

Srinivasan, U. (2005). *Current budgeting practices in us industry*. New York: Quorum Books.

Statistics How To. (2017). *Statistics for the rest of us!* Retrieved September 23, 2017, from statisticshowto: <http://www.statisticshowto.com/assumption-of-normality-test/>

The World Bank. (2004). *Capital Integration in the East African Community* . Washington D.C: The World Bank.

The world health organization. (2007). *The world health report*. Geneva: WHO.

Vasilache, S. (2013). *Cross-cultural training and teamwork in healthcare*. New York.

Wamae, M. (2008). *Challenges of budgeting at national social security fund*. Nairobi: University Of Nairobi.

QUESTIONNAIRES AND TABLES

August, 2017

The Human Resource Manager,

.....,

P.O Box.....

Nairobi.

Dear Sir / Madam,

RE: REQUEST TO COLLECT DATA FOR MBA RESEARCH PROJECT

I am a student at the University of Nairobi pursuing a Masters of Business Administration program specializing in finance.

Pursuant to the pre-requisite course work, I would like to conduct a research project on The Effects Of Budget Control On Operational Performance Of Public Hospitals In Kiambu County.

The focus of my research will be on the public hospitals and in Kenya and this will involve use of questionnaires administered to members of the management team.

I kindly seek your authority to conduct the research in this company through questionnaires and use of relevant documents. I have enclosed an introductory letter from the University.

Your assistance is highly valued. Thank you in advance.

Yours faithfully,

PART A: PROPER PLANNING.

Please respond to the following statements by indicating the extent to which you agree or disagree with the activities. Tick your choice

Strongly disagree (1) / Disagree (2) / Not Sure (3) / Agree (4) / Strongly Agree (5)

STATEMENTS ON PROPER PLANNING		(1)	(2)	(3)	(4)	(5)
1	Our organization has Long term and short term Budget Plans					
2	Our budgets have clear goals and objectives					
3	Our Budgets cover all the aspects of our Mission and Vision					
4	When budgeting, outcome goals and objectives are linked to programs					
5	During planning, outcomes, goals and objectives are linked to programs and organizational activities					
6	We set priorities for the coming year at budget conference/Committees.					
7	All departments prepare budget plans prior to the budget year					

PART B: HUMAN RESOURCE CAPACITY

Please respond to the following statements by indicating the extent to which you agree or disagree with the activities.

1. Kindly indicate your highest level of education

Certificate []

Master’s degree []

Diploma []

Other, please specify.....

Bachelor degree []

2. Indicate your job title

3. For how long have you worked in this department (Your Expertise)?

Less than 5 years []

15 – 20 years []

11-15 years []

Over 20 years []

6-10 years []

Tick your choice **Strongly disagree (1) / Disagree (2) / Not Sure (3) / Agree (4) / Strongly Agree (5)**

.STATEMENTS ON HUMAN RESOURCE CAPACITY		(1)	(2)	(3)	(4)	(5)
1	Do you consider that the Human Resource Capacity has a strong Organization Structure					
2	Is the continuous Training effective in terms of Budgets and its control?					
3	Training and development integrate employees into the organization and then to facilitate their development.					

PART C: EMPLOYEE AND STAKEHOLDERS PARTICIPATION

Please respond to the following statements by indicating the extent to which you agree or disagree with the activities.

Budgetary controls can be realistic and accurate if there is full participation. Where budgetary control is high, there is a meaningful positive relation between performance and budgetary participation.

Tick your choice **Strongly disagree (1) / Disagree (2) / Not Sure (3) / Agree (4) / Strongly Agree (5)**

STATEMENTS ON PARTICIAPTION		(1)	(2)	(3)	(4)	(5)
1	I'm involved in the budget setting process					
2	We are sensitized on the budget control process					
3	All the stakeholders to the budget are involved					
4	All departments are always involved in the budgeting process					
5	Approved Budgets are shared with all Departments					
6	Leadership and support is given to all the Subordinates Throughout the budget by managers					
7	Each department prepares a budget prior to the Overall budget					
8	Budget controls motivate to achieve objectives and thereby establish control of resources					
9	Budget controls motivate to achieve objectives and thereby establish control of resources					

PART D: OPERATIONAL EFFECIENCY DATA COLLECTION FORM

Hospital Name: _____

Level: _____

Number of Doctors: _____

Number of Nurses: _____

hat & Why

MEASURE	BEST OBSERVED OUTPUT	ACTUAL OUTPUT
Patient Wait Time	_____ (Minutes)	_____ (Minutes)
Staff-To-Patient Ratio	_____ per Staff	_____ per Staff
Bed Or Room Turnover	_____ Patients per room /bed	_____ Patients per room /bed
Civic health education programs	_____ Programs per year	_____ Programs per year