DETERMINANTS OF SUSTAINABILITY OF HEALTH PROJECTS: A CASE OF PUBLIC HOSPITALS IN NAIROBI COUNTY, KENYA

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DECLARATION

This research project report is my original work and has never been submitted for an award of a degree in any other university.

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This research project report has been submitted for examination with my approval as the university supervisor.

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DEDICATION

This work is dedicated to my spouse Ephy Beryl Atieno Osele and my son Alex Radull for their love, understanding and invaluable support. My father Raphael Okoth, mother Patricia Akumu Okoth and my sister Ghorrety Adhiambo always encouraged me to keep on with the work until it is done. My uncle Engineer Patrick Onyango Airo's encouragement increased the eagerness to accomplish the task. My foster mother Mrs. Patricia Radull's belief in my ability to achieve this level of study filled me with the energy to continue even when at my lowest. This achievement has been possible because of your support.

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TABLE OF CONTENT

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

ADB	:	Asian Development Bank
CBO's	:	Community Based Organizations
CT	:	Complexity Theory
FY	:	Financial Year
GoK	:	Government of Kenya
HRITF	:	Health Results Innovation Trust Fund
IFAD	:	International Fund for Agricultural Development
IPMA	:	International Project Management Association
NGOs	:	Non-Governmental Organizations
NWFP	:	North West Frontier Province
OECD	:	Organization for Economic Co-operation and Development
PMBOK	:	Project Management Body of Knowledge
PSC	:	Project Steering Committee
RDT	:	Resource Dependence Theory
SPSS	:	Statistical Package for Social Science
USAID	**:**	United States Agency for International Development
WB	:	World Bank

ABSTRACT

In Kenya, National and County Governments, local and international NGOs and other concerned organizations invest large sums every year for the implementation of health projects. Failure of these projects has been attributed to lack of stakeholder involvement, clarity of mission and goals of the project, the capacity of the project managers and funds availability among others. Sustainability of such projects has therefore not been achieved despite major efforts from various development partners. This study sought to establish the determinants of sustainability of health projects in public hospitals in Nairobi County. The study adopted descriptive research design. The target population for this study was 8 health projects in Public Hospitals within Nairobi County, from where 168 respondents involved in implementation of health projects were selected. Stratified random sampling was used to select a sample size of 84 respondents. Questionnaire was used to collect data. Quantitative data collected was analyzed by the use of descriptive statistics using SPSS (Vversion 22) and presented through percentages, means, standard deviations frequencies and in prose-form. Multiple regression analysis was used to establish the relations between the independent and dependent variables. The study found that stakeholders play a role and interact at multiple levels and their role and interaction determine the effectiveness of project sustainability and that satisfying key stakeholder requirement is central to achieving a successful project outcome. Project mission and goals influence sustainability of health projects. Project Manager's understanding of important issues for each stakeholder group is an important success factor; the extent to which the project manager is able to organize the people, ideas and resources to achieve the objectives of the project determines the sustainability of the project. Availability of funds on sustainability of health projects, sources and composition of project finance is key factor that influence the project sustainability. Financial and economic analysis is crucial for any health project to be sustainable. In order to strengthen community participation in managing health projects, the researcher recommends that a lot of groundwork should be done during community entry. Communities should be made aware of their roles, responsibilities and expectations. Health project agencies should ensure that an effective user fee collection system is put in place for every health project facility that is constructed, if sustainability is to be achieved. Financial policies of projects should be well prepared and project mission and goals be made clear.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Project sustainability is defined by many economists and international development agencies as the capacity of a project to continue to deliver its intended benefits over a long period of time (Bamberger and Cheema, 2010). A development program is said to be sustainable when it is able to deliver appropriate level of benefits for an extended period of time after major financial, managerial and technical assistance from an external donor is terminated (US Agency for International Development, 2008).

Sustaining a project implies the process of ensuring that the institutions supported through projects and the benefits realized are maintained and continue after the end of the project (IFAD, 2007). Assessment of sustainability therefore entails determining whether the results of the project will be continued in the medium or even longer term without continued external assistance (IFAD, 2006). A project can be defined as an endeavor in which human, material and financial resources are organized in a novel way, to undertake a unique scope of work of given specification, with constraints of cost and time, so as to achieve beneficial change defined by quantitative and qualitative objectives (Bolles, 2012). It can also be considered to be the achievement of specific objectives, which involves a series of activities and tasks which consume resources (Munns & Bjeirmi, 2006). A project has to be completed within a set specification, having definite start and end dates.

Health facility-based projects are motivated and built around the need to improve health care service delivery and by extension quality of people's lives. Such projects can be supported by

strengthening and financing community groups, facilitating community access to information, and promoting an enabling environment through relevant policies, guidelines and implementation frameworks (Dongier, 2002). Health development project is about capacity building that enables the county health management team, hospital administration, community and staff members to identify opportunities and together develop strategies for exploiting these opportunities. As such health projects are aimed at bringing positive change that impact positively to the living standards of the people in the long run.

Sustainability of projects has been a major problem for many donors funded projects in the Health sector in Kenya. In many cases, donors usually fund health projects in public hospitals, assist in their start-up process and continue to support them for a period until they start delivering benefits to its target population. The donors then withdraw financial support, but may continue providing technical support for a little bit longer or as the need arises. The government is then expected to run the health project and ensure that the project continues to provide the benefits it was intended to deliver (USAID, 2015). However, sustaining the health project has been a major problem, especially for public hospitals, in which projects start deteriorating soon after the funding organization has withdrawn (WB, 2013). This study seeks to establish the determinants of sustainability of health projects in public hospitals in Nairobi County

1.2 Problem Statement

The concept of sustainability is understood intuitively, but is not easily expressed in concrete operational terms (Briassoulis, 2001). Projects in health care just like in other sectors, are meant to make a contribution to the sustainable development of the organizations.

The *PMBOK Guide* identifies a successful project as that whose manager is able to 'balance the competing demands of scope, time, cost, quality, resources and risk' (Project Management Institute 2008), whereas a sustainable project should 'produce' a result, being a change in assets, systems and/or behavior and continue to produce benefits long after major donor support has been withdrawn, (Labuschagne and Brent 2006). The asset produced should also be considered over its full life cycle.

Development initiatives in the public hospitals in Kenya have seemed to perform poorly and many seemingly becoming non-operational soon after termination of funding. Cases abound where donor initiated projects become non-operational even for those with the best of intentions. According to the Health Policy Project Report (2015), over the period from FY 2013/14 to FY 2017/18, the health sector is projected to cost US$13,142 million (KSh 1,103 billion). Management and delivery of Kenya Essential Package for Health (KEPH) interventions through health projects will require the largest share of the health sector cost at 43 percent. Projects on Human Resources for Health, logistics and health infrastructure make up 55 percent of the total health sector project cost, while health information systems, health financing, and governance make up 2 percent (USAID, 2015).

Despite marked progress in many areas over the past decades, Kenya continues to grapple with challenging health problems and issues of health service delivery. The national and County Governments, local and international NGOs and other concerned organizations invest large sums every year for the implementation of health projects (Gebrehiwot, 2006). However, these projects do not help as they fail after a short time. Report from World Bank (WB) reveals that the Government of Kenya receives massive donor aid from various sources

to fund a number of health projects in public hospitals (WB, 2013). For the period 2013 to 2016, a total of UD$ 61 million was disbursed to support various health initiatives (US$41 Million from the International Development Association (IDA) and US$20 Million from Multi Donor Trust Fund for Health Results Innovation (HRITF)).

Further statistics from Government of Kenya (GoK) reveal that 63% of the health projects fail after a short time after implementation, thereby being not sustainable (GoK, 2014). The Organization for Economic Co-operation and Development (OECD) shows that health projects in public hospitals collapse one year after completion of the projects (OECD, 2014). Despite all the efforts from the various development partners, most of the health projects in public hospitals experience major hurdles in their life cycle and barely overcome the implementation stage. Most of the projects have failed and others struggle to survive and sustain jobs created by the projects, (World Bank, 2013).

The issue of sustainability of projects in the health sector is major challenge in the world and more specifically in Kenya (WB, 2013). There is need to address this challenge in order to ensure that the gains made so far by donors in the health sector in contributing to the improvement of the health indicators in the country and thus achievement of vision 2030 are not lost. This study therefore focuses on determinants of sustainability of health projects in public hospitals in the health sector in Nairobi that despite playing a very big and crucial role within the Kenyan health sector, face the threat of losing all the gains made so far through their projects which have most of the times proved unsustainable. This study sought to establish the determinants of sustainability of health projects in public hospitals in Nairobi County.

1.3 Purpose Of The Study

The purpose of the study was to establish the determinants of sustainability of health projects in public hospitals in Nairobi County.

1.4 Objectives of the Study

The study was guided by the following objectives

i. To determine the influence of stakeholder's involvement on sustainability of health projects in public hospitals in Nairobi County.
ii. To explore the influence of clarity of project mission and goals on sustainability of health projects in public hospitals in Nairobi County.
iii. To assess the influence of project manager's competence on sustainability of health projects in public hospitals in Nairobi County.
iv. To examine the influence of availability of funds on sustainability of health projects in public hospitals in Nairobi County.

1.5 Research Questions

The study sought to answer the following research questions

i. To what extent does stakeholder's involvement influence sustainability of health projects in public hospitals in Nairobi County?
ii. To what extent does clarity of project mission and goals influence sustainability of health projects in public hospitals in Nairobi County?
iii. To what extent does project manager's competence influence sustainability of health projects in public hospitals in Nairobi County?

iv. To what extent does availability of funds influence sustainability of health projects in public hospitals in Nairobi County?

1.6 Significance Of The Study

This study is significant in that it unearths the circumstances responsible for lack of sustainability that many health projects in public hospitals experience when donor support has been withdrawn. It therefore identifies these factors, which can then be used by project managers and sponsors to take precautionary measures to ensure that health projects in public hospitals do not fail soon after withdrawal of donor support. The study can therefore act as a means of reference by project initiators, managers and administrators of public hospitals to ensure that initiated projects are sustained.

The study also provides useful information to project leaders, county representatives, community health workers, civic organizations and other government officials about challenges facing health projects in public hospitals. It provides relevant information to government officials responsible for development of policies, guidelines and implementation frameworks for the management of health projects in public hospitals.

This study is hoped to contribute to the existing knowledge, address and provide the background information to research organizations, individual researchers and scholars who want to carry out further research in this area. It is hoped that the study will help researchers and academicians to expand their research into the factors influencing sustainability of health projects in Kenya.

1.7 Assumption of the Study

The study assumed that the respondents would freely fill the questionnaire without fear of their employers. It also assumed that the researcher would get the support required from relevant sources in getting information needed. The researcher also assumed that the respondents would give all the information required in an accurate manner.

1.8 Delimitations of the Study

This study focused on establishing the determinants of sustainability of health projects in public hospitals in Nairobi County. Nairobi County was selected due to high number of health projects carried out by various donors. The study sought to determine how stakeholders' involvement, clarity on project mission and goals, project manager's competence and availability of funds influence the sustainability of health projects in 8 public health hospitals that were studied in Nairobi County.

1.9 Limitation of the Study

The respondents approached were reluctant to giving information fearing that the information sought would be used to intimidate them or print a negative image about them or the organization. Some respondents initially turned down the request to fill questionnaires but later agreed after they were shown an introductory letter from the University and assuring them that the information they give would be treated confidentially and would be used purely for academic purposes.

Employees in public hospitals operate on tight schedules; some respondents were not be able to complete the questionnaire in good time and this threatened to overstretch the data

collection period. However, the study made use of networks to persuade targeted respondents to fill and return the questionnaires.

The researcher also encountered problems in eliciting information from the respondents as the information required was subject to areas of feelings, emotions, attitudes and perceptions, which cannot be accurately quantified and/or verified objectively. This almost led to lack of response due to the veil of confidentiality surrounding the institutions. The researcher reassured the respondents to participate without holding back the information that they might be having which could be useful to the study.

1.10 Definitions of Key Terms in the Study

Fund Availability: In this study funds availability refers to the actual financial support provided by donors, government and other local agencies to the health projects.

Government Policies: In this study government policies are laws and procedures formulated by government to govern the design, implementation and operation of health projects.

Health projects: these are special endeavors in which human, material and financial resources are organized in a novel way, to undertake a unique scope of work of given specification aimed at improving human health in given region, mostly carried out within health centers.

Mission and goals: In this study mission and goals denote values or the business rationale for existing and what it intends to achieve.

Project Manager's Competence: Project manager's competence encompasses the soft skills or interpersonal skills that help motivate a team's performance and collaboration

through empathy, influence, communication, creativity and facilitation. It also includes the technical skills that will be required of a project manager.

Project Sustainability; Project sustainability is the capacity of a health project to continue to deliver its intended benefits over a long period of time.

Stakeholder involvement: Stakeholders are those who are directly or "indirectly" affected by a process or activity and who could affect the outcome of a proposed intervention or are affected by it.

1.11 Organization of the study

This research is organized in five chapters. Chapter one presents the problem statement, purpose of the study, research questions, significance of the study and assumptions of the study. The chapter also focuses on delimitations of the study, limitation of the study and definition of key terms. Chapter two encompasses the literature review on the various factors influencing sustainability of health projects and theoretical framework. Chapter three discusses the methodology that was used to collect and analyze data while showing the research design used, target population, sampling procedure used, sample size, data collect procedure employed, data presentation and analysis. Chapter four presents the results of the study findings, data presentation and analysis of the same. Chapter five contains summary of the findings, discussion, conclusion and recommendations of the results obtained from the data analyzed and the information gathered in chapter four.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviews the existing literature, information and publication on the topic related to the research problem by accredited scholars and researchers. This section examines what various scholars and authors have said about the determinants of sustainability of health projects in public hospitals. In particular it will cover the theoretical review of literature, empirical review of the literature and conceptualization of the research problem.

2.2 Sustainability of Health Projects

EU (2004) defined sustainability as the likelihood of a continuation in the stream of benefits produced by the project after the period of external support has ended. Mulwa (2010) noted that project sustainability concerns itself with the continuity of a project until it attains its set objectives. Sustainability of a project is a development that aimed to meet the present needs without compromising the ability of future to meet its needs (World Bank, 2009). The essence of sustainable project is determined by the people, authority which can be attributed to change of peoples or authority attitudes, leading to a change in their habits. Robert (2008) argued that, sustainability is an essentially vague concept, and it would be wrong to think of it as being precise, or capable of being made precise. Sustainable development seeks to meet the needs and aspirations of the present without compromising the ability to meet those of the future (UN 1987). Sustainable development is a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development, and institutional change are made consistent with future as well as present needs.

Jalan and Ravallion (2008) noted that community participations were a crucial determinant of project implementation stage and sustainability. They argue that this can be made effective by offering equal participation of the stakeholders involvement without discriminating them in basis of who is influential than other. Sustainable project requires that donors and well-wishers support project life-cycle, using the resources pooled together or available. Donors and manager of a project should ensure that the distribution of the benefits of development is done in a more transparent manner and equitably (Elizabeth, 2006). On the same Ismail and Richard (2008) also cited that there is a need to move from improving living standards to improving the quality of life. This would happen when development becomes fully, participatory and people centered, driven by spiritual values that embrace caring and nurturing at their core.

Competent project managers play a number of different roles in a given projects by ensuring effective management. According to Mbata (2009) the sustainability of any projects requires a team of highly competent managers owing to many dynamics of the project implementation. The failure of a project is largely blamed on lack of professionalism and management skills of the project implementers owing to lack of experience on project management and poor academic background. In order to establish good rapport leaders need time, resources and authority to invest in a project. Flexibility is critical in the way leaders interpret their own and others' roles and in the activities they and the projects undertake (Carter, 2009). Good leadership play a number of different roles in community based projects, all of which require trust and good working relationships with local people and professionals. Leadership offer management to the project and thus ensures sustainability.

According to Niyi (2007) inappropriate policy or legislation, insufficient institutional support, unsustainable financing mechanisms, ineffective management systems and lack of technical backstopping are key causes of failure of projects. He further pointed that in a community based project; stakeholders usually have strong cultural relations with each other and would hardly deny their neighbors to have access to the benefit that accrues from the project. This in turn results to effective project sustainability as they look forward on benefiting with that project. Gebrehiwot (2006) pointed that community participation and other stakeholders in a project should consider the effects of this culture of 'no denial' on the capacity of the facility they provide since it may serve neighboring communities.

Williams (2008) observed that failure by community and stakeholders to take up ownership of projects have plunged projects into immense financial huddles threatening the sustainability and hence threatening them to seize operations daily. Involvement of stakeholders and partners whose concerns and experience are intrinsic to the project's success is an important factor for sustainability of projects (Admassu, 2008). The level of community support determines whether a project becomes established, how quickly and successfully it consolidates, and how it responds and adapts to meet changing needs (USAID, 2009). It is therefore important that local communities be involved right from the beginning of the project when decisions are being made about what type of project is required as this would ensure that he project is sustained.

2.3 Stakeholder Involvement and Project Sustainability

The World Bank defines stakeholders as those who are "directly" or "indirectly" affected by a process or activity and who could affect the outcome of a proposed intervention or are

affected by it. In recent years, participation of the communities in development initiatives intended to benefit them has been acknowledged as important in achieving sustainable development. Ahmed & Palermo (2010) observe that people themselves can better understand their economic and social environment and probably have insights that can help shape initiatives intended to benefit them. Ideally, a good stakeholder participation program will enable those who are interested in, or affected by a decision, have an opportunity to influence the outcome. Stakeholders play role and interact at multiple levels-from local to global level and their role and interaction determine the sustainability of a development intervention.

IPMA annual publication (2012) shows that much research (Chauvet, Collier & Duponchel, 2010) has been done on the best project success measurements, and that these studies all recognize the importance of considering key stakeholders' perceptions for project success.
A research done in Pakistan involving eighty randomly selected projects demonstrated the importance of stakeholder involvement. The researcher sought to establish why the rate of forest depletion in North West Frontier Province (NWFP) and adjacent northern areas remained one of the most threatened environmental issues despite the various forests related development projects that had been implemented. The final findings indicated that there was a low perceived interaction between the Forest Department and the project beneficiaries (local communities) and local Community Based Organizations (Cheung, Zolin, Turner & Remington, 2010).

Adopting a new model of success whereby success was assessed by project managers and different project stakeholders, Cheung in his research among the public organization of

Australia's defense industry, found that Project Managers appear to understand most important issues for each stakeholder group; which was rated as a very important success factor (Cheung *et al*, 2010). Telephone survey was conducted in late 2009 and data analyzed using Krippendorff's Kappa alpha reliability test.

Further, Ahmed and Palermo (2010) posited that stakeholder involvement in natural resource management in Northern Congo, where the researcher pointed out that if projects are to be sustainable and yield long-term benefits, communities must be more explicitly involved in design and implementation and in defining their own contribution (Colclough & De, 2010). Therefore, analysis and exploration of stakeholder interaction, their role in decision making process according to their relative position and power relations is obligatory for the success of any project (Gale, Sellar, Parker, Hattam, Comber, Trante & Bills, 2010). This also is in agreement with Kimani's detailed case study analysis on CDF projects in Embakasi where he concluded that it was only through participatory planning, monitoring and evaluation, that meaningful development can be realized. He further stated that satisfying key stakeholder requirement is central to achieving a successful project outcome (Kimani, 2009).

The existence of good and well-functioning health project is vital for economic growth, poverty reduction and wealth and employment creation. Stakeholders' involvement is paramount in development projects. Even though, minor decisions and emergency situations are generally not appropriate for stakeholder participation, a complex situation with far-reaching impacts warrant stakeholder involvement and when done proactively, rather than in response to a problem, helps to avoid problems in the future (Maina, 2013). The focus of public participation is usually to share information with, and gather input from, members of

the public who may have an interest in a project. The Constitution of Kenya 2010 gives citizen the right to take part in activities that have a direct bearing on their lives (Mbaabu, 2012).

Stakeholder management is critical to the success of every project in every organization. Stakeholders are defined as any group or individual who can affect or is affected by the achievement of the organization's objectives (Freeman 1984). In a project environment, these stakeholders are usually numerous, and can vary significantly in the degree of influence in both directions. Mitchell, Agle and Wood (1997) suggest that power, legitimacy and urgency are key stakeholder characteristics. As such, a project manager is required to develop sufficient understanding of such characteristics, which are in fact changing variables within the various stakeholders in a project environment.

The number and nature of stakeholders will vary with the life of the project; it would therefore make sense to carry out the review of identification throughout the project (Moodley 2002). Participation can take place in different places of the project cycle and at different levels of society, and take many different forms. These can range along a continuum from contribution of inputs to predetermined projects and programmes, to information sharing, consultation, decision making, partnership and empowerment.

2.4 Clarity of Project Mission and Goals and Project Sustainability

Project mission would shape up the implementation of the project as it is the rationale for its existence. According Pinto and Slevin (1987) mission denotes values or the business rationale for existing. Project mission would then denote the project’s rationale for existing.

According to March (2011), the aim of the mission is to make sure everyone is on the same level of understanding with regard to the project. It provides guidelines on what is to be done (product), for whom (customer) and how (strategy). A project is developed from a concept into a full approved and funded project. According to Lewis (2007) mission statements are important since they describe the business of an entity, provide a guiding philosophy when the direction is not clear, outline the area in which the entity is operating, enhance the communication of a common culture throughout the entity and inspire deliberations on how the mission can be implemented. Similarly, project's mission can as be interpreted as such.

Sustainability is recognized as one of the most important challenges of our time. Following the success of Al Gore's 'inconvenient truth', awareness seems to be growing that a change of mindset is needed, both in behavior and in policies. Project ustainability is at the core of project management (Labuschagne and Brent, 2006). Association for Project Management (past-) chairman Tom Taylor recognizes that "the planet earth is in a perilous position with a range of fundamental sustainability threats" and "Project and Program Managers are significantly placed to make contributions to Sustainable Management practices" (Association for Project Management, 2006). At the 22nd World Congress of the International Project Management Association (IPMA) in 2008, IPMA Vice-President Mary McKinlay stated in the opening keynote speech that "the further development of the project management profession requires project managers to take responsibility for sustainability" (McKinlay, 2008). It is for that reason inevitable that 'sustainability' will find its way to project management methodologies and practices in the very near future. For a long time, development agencies have had a long standing history of implementing projects, which fail

shortly after these agencies have withdrawn major support. Most of the interventions implemented are not effective in achieving set goals and objectives (NPA, 2010). According to Ingle (2005), for a project to achieve sustainability, it needs to be implemented through a strategic approach. The strategic approach incorporates four main elements, future orientation: assuming things will change, and planning to maximize benefits which can be derived during and from that change; external emphasis: recognizing the diversity of the project environment and the many dimensions which impact on project outcomes, including technology, politics, society, and economics; environmental fit: planning for a continual fit between the project and its environment, including mission, objectives, strategies, structures, and resources; and process orientation: planning and management priorities evolve in an iterative cycle of conscious and deliberate learning from experience as the reality changes Ingle (2005).

According to Greenall and Revere (1999) project implementing agencies both local and international encounter several difficulties when engaging in a project right from the design stages to withdrawal, citing slow implementation and failure of the projects due to poor sustainability plans. However, Karl (2000) pointed that projects will achieve their objectives if the people who are most affected are actively involved and when the objectives are clear to the beneficiary and implementers. Consequently, a project will be successful and sustainable when people have a voice in determining their objectives, to support their implementation, to evaluate their outcomes, and to make indigenous knowledge available. However, it is disappointing to note that most donor funded projects do not give much consideration to clarification of the objective to the community and beneficiary of the projects hence

becoming unsustainable. Aras and Crowther (2008) argue that the determinant factors for the sustainability of any project are pre and post-implementation factors.

2.5 Project Manager's Competence and Project Sustainability

Classical scientific management theorists like Mintzberg saw a project manager as the chief executive, the leader and diplomat while Fayol saw project manager in terms of planning, controlling, organizing and directing (Franks & Curswoth, 1993). Management puts into consideration people who are not only subordinates, but also the essential resources available to managers for transforming ideas, inspirations, materials, capital and technical competence and account for why some projects are more successful than others (Franks & Cursworth, 1993). The extent to which the leaders are able to organize the people, ideas and resources to achieve the objectives of the project determines the sustainability of the project. If the leaders are able to mobilize the three factors effectively, there are higher chances of successful implementation and hence high chances of sustaining the project even when external donors have withdrawn; otherwise, there would be higher chances of project failure, or lack of sustainability of the project.

According to Anschutz (1996) a community based organization leader has a role in networking with authorities, carrying out education and awareness (among the members), enhance membership behavior control and engage in community mobilization. If the leader or manager of a project or the entire management committee of a project succeeds in providing the necessary networking and member mobilization, there are higher chances of successful project implementation and hence higher chances of sustaining the project for as long as it is required. The converse is true since the membership will lack a leader to lead

them from the front. Every member's activity will be disjointed from those of the rest and even though they may be contributing to the total project implementation, the fact that there would be little convergence in their efforts would lead to haphazard process with little synchrony. This is a euphemism for the entire project failure despite the positive intentions of the individual members of the project team. Such a project cannot be sustained for long periods.

According to Public Procurement Oversight Authority (2009), the project manager has a responsibility to ensure that risks are identified and managed appropriately; objectives and benefits are achieved within budget and time, and to the required quality. This is because, they bring together resources, skills, technology and ideas to achieve business objectives and deliver business benefits. Franks and Cursworth (1993) observe that a project can succeed or fail because of lack of strong management and leadership that often accompanies it, the cultural misfit of project objectives and activities within the environment and lack of local knowledge and understanding leading to rejection of the project by intended beneficiaries. They further note that such a project will succeed if it builds on the existing strengths and reduces duplication of effort.

Management of projects is complex and requires multifaceted management skills for a project sustainability (Weinberg, 2008). A project manager (PM) has to manifest not only project management related skills, but also technical and expertise as required by the project (Thite, 2001). Project management activities include but are not limited to defining project scope and requirements gathering, managing resources and relevant training issues within a project, advising about technical architecture, identifying specific and general project

management practices and escalation procedures, estimating project schedule and budget, ascertaining and managing risks within a project and preparing risk mitigation.

Management of projects during it sustainability stage involves increasing the alignment of development projects with host communities priorities and coordinating aid efforts at all levels (local, national, and international) to increase ownership and efficient delivery of services. It is therefore basically offering leadership to achieve certain laid objectives. According to McDade (2004), good management ensures that sufficient local resources and capacity exist to continue the project in the absence of outside resources or donor involvement.

2.6 Funds Availability and Project Sustainability

The sources and composition of project finance is another key factor that may influence the success of project implementation. Analysis on a number of researches has shown that sources of finance have a positive influence on projects. In his study, Kasoo (2010) reiterated in his findings that besides community participation, sources and composition of project finance has a bearing on project success as well. This was confirmed by Ayodele (2011) when he reported that one major cause of abandonment of construction projects in Nigeria was due to inadequate funding and finance. His study report further emphasizes the importance of financial resources in project implementation. The study is in consonance with Yang and Jackson's affirmation on the stalled pumped-hydro energy storage in the United States that financial uncertainties was the project's limiting factor (Yang & Jackson, 2011).

Nturibi (2004) states that for a development project to be financially sustainable, it requires a sound financial base arising from reliable sources of funding, financial systems to facilitate accountability and cash flow projections and development of marketable products to generate excess income over the expenditure of the project. For a project to move towards sustainable approaches to service delivery new models and prototypes need to be developed, tested, accepted and implemented. Aid therefore should be part of the process of change and donors should ensure that their assistance is not delaying progress towards sustainability but actually supporting it.

Financial and economic analysis is crucial for any sustainable project. If a program or project does not deliver clear and equitable financial or economic benefits, which are apparent to the stakeholders, it is most unlikely to be sustained after donor funding finishes (Bossert, 2009). For example, health service users will not pay for government health services if the service is poor or their expectations of benefits are extremely limited. Benefits are not sustainable if the net benefit arising is negative or very small when all the costs are considered. Better financial analysis is often required, particularly in the formulation of programs and projects' activities.

Donor funding policies often focus on new capital investments to the exclusion of supporting operation and maintenance budgets. This can have adverse effects on sustainability, particularly in economies undergoing severe internal budget deficit problems. New capital projects require additional operation and maintenance funds that have to be drawn from the same limited pool of funds that finance other ongoing programs (Heeks & Baark, 2008). As a consequence, either the new investment is not maintained or existing infrastructure or services suffer funding cuts. A longer-term and more transitional approach to operation and

maintenance cost funding is required, based on a rigorous and realistic assessment of the local capacity to meet these costs. The project managements need to consider whether or not some assets should be maintained or replaced i.e. computers which rapidly become obsolete and whether project-specific depreciation funds should be set up. This would help a great deal in cost maintenance and this would ensure the project become sustainable in the long run (Nturibi, 2010).

Nturibi (2004), in his study of family programs promotion services on Integrated Community Care and Support Project in Kenya, established that the level of sustainability of income generating activities often depends on perceived and actual returns to the beneficiaries i.e. orphans, grandparents giving care, project implementers community health workers and committee members. He established that although the proceeds are primarily meant to assist the first group, all the others also expect to benefit. Unfortunately, the magnitude of the projects initiated mostly does not allow for this, due to the fact that the products are sold in fairly poor neighborhoods. Kotler (2006) defined product as anything that can be offered to satisfy a need or want. A product can consist of as many as three components; physical good(s), service(s) and idea(s). According to Roseland, (2005) in a study on an evaluation of agricultural projects in Kenya by Development Bank revealed that the essence of capacity building is sustainability, but many of the barriers to sustainability have the same root cause: the inadequacy of local resources such as fund to support project activities after donor funds have been drawn down.

According to Asian Development Bank (ADB, 2004), there are three aspects of financial sustainability. These are the availability of adequate funds to finance project expenditures,

especially funds drawn from the government budget, the recovery of some of the project costs from the project beneficiaries, and the financial incentive necessary to ensure participation .in the project. Consequently, a financial plan at constant financial prices is necessary to ensure there will be adequate funds to finance project expenditures. This applies to the implementation period to ensure capital funds are available to cover investment and working capital requirements, and to the operating period to ensure sufficient funds to cover operating expenditures. For indirectly productive projects that do not generate sufficient funds to cover operating expenditures, the full fiscal impact of the project for each year of its life should be calculated.

2.7 Theoretical Framework

This study is anchored on the resource dependency theory (RDT) as propounded by Pfeffer and Salancik (1978). Resource dependence theory (RDT) is the study of how the external resources of organizations affect the behavior of the organization. RDT is based upon how the external resources of organizations affect the behavior of the organization. The theory is based upon the following tenets: organizations are dependent on resources, these resources ultimately originate from the environment of organizations, the environment to a considerable extent contains other organizations, the resources one organization needs are thus often in the hand of the organizations, resources are a basis of power, legally independent organizations can therefore be dependent on each other (Pfeffer and Salancik, 1978).

In as much as organizations are inter-dependent, the theory of Resource Dependence needs a closer examination. Its very weakness lies in its very assertions of dependence. With

changing trends of financial uncertainties, there is need to lean towards other theories of uncertainties. According to this theory, organizations depend on resources for their survival; therefore, for any organization to achieve sustainability, resources are indispensable. For community based projects to achieve sustainability, resources are important. These resources will come in the form of human resource - therefore the need to involve all the stakeholders in the project for sustainability. Other resources include land and finances.

This study was anchored on the Resource Dependence Theory. The resource dependence theory was used to explain how resources of organizations affect sustainability of organization projects. The sustainability of organization project is affected by the resources of organizations. These resources come in the form of human resource - therefore the need to involve all the stakeholders in the project for sustainability, other resources of land and finances. The study used the resource dependency theory to explain factors that affects sustainability of health projects in public hospitals in Nairobi County.

2.8 Conceptual Framework

Conceptual framework is a scheme of concept (variables) which the researcher operationalizes in order to achieve the set objectives, (Mugenda & Mugenda, 2003). A variable is a measure characteristic that assumes different values among subject, (Mugenda and Mugenda, 2003). This is illustrated in figure 2.1 showing the two types of the variables.

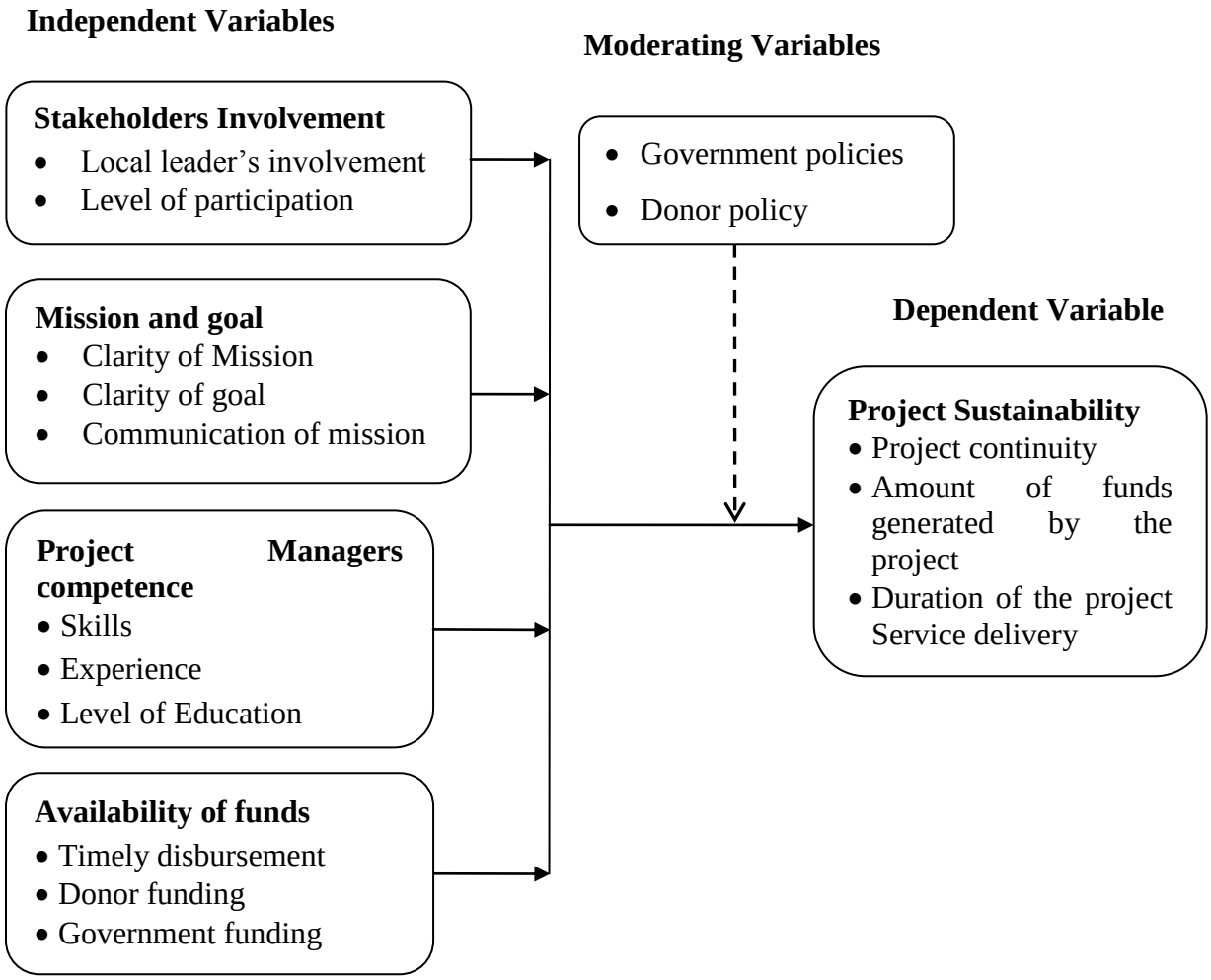

Figure 2.1: Conceptual Framework

2.9 Summary of Literature Review

Baker, (2000) asserts that despite the billions of dollars spent on development assistance year after year, there is very little known about the actual impact of projects on the poor and this implies that sustainability of such development is still a great challenge. The literature reviewed reveals that in spite of what is known about the value of enhancing sustainability and what has been instituted by different institutions, there are still indicators of poor and even no sustainability of health projects. However, there is little that has been done regarding the effect of stakeholder's involvement, clarity of project mission and goals, project manager

competence and funds availability on sustainability of health projects in Kenya as observed by Kasoo (2010). Literature reviewed reveals the need for further studies on the determinants of health projects sustainability in order to achieve generalization of results.

2.10 Knowledge Gap

Research has shown that most of projects in sub-Saharan Africa, often demonstrate low levels of sustainability (Gebrehiwot, 2009). The key causes for this include inappropriate policy or legislation; insufficient institutional support; unsustainable financing mechanisms; ineffective management systems; and lack of technical backstopping (Niyi et.al, 2007). However, due to a number of postcolonial issues such as dynamic political change, rapid population growth, environmental degradation, climate change, misguided development policies, and the shift from agrarian economies to market economies, these systems are in jeopardy of losing their resilience and effectiveness (USAID, 2009).

A World Vision (2011) evaluation report analysis shows that most of the projects across range of sectors have failed to sustain themselves, become self-reliant and the donors have failed to continue running them after funding organizations withdrew their support. Some factors which should have been worked out, in order to stop this trend of projects collapsing are not done despite support being meant for a specified period with the objective of making the projects self-reliant. Ravallion (2008) noted that a desire to ensure a broad geographic spread of participants can weaken project sustainability. It is against this realization that the current study aimed to investigate determinants of sustainability of health projects in public hospitals in Nairobi County.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes methodology that was used for collecting and analyzing the data in the study. It describes the research design, population, sample and sampling techniques, instruments for data collection and procedures, pilot tests and data processing as well as data analysis methods suitable for the achievement of the stated objectives.

3.2 Research Design

The research design is the overall plan and structure which the research was executed. The research design that was adopted for this study is a descriptive research design because it allows the researcher to study phenomena and not to allow for manipulation of variables as noted by Kombo & Tromp (2006). Borrowing from Mugenda and Mugenda (1999) descriptive research is a self-report study which requires the collection of quantifiable information from the sample.

This research design is suitable for establishing the determinants of sustainability of health projects in public hospitals in Nairobi County. By using this design, the researcher was able to find answers to questions by analyzing specific variable related to sustainability of health projects in public hospitals in Nairobi County. The advantage of this design is that information and data obtained was used in defining the problem and offering solutions to sustainability of health projects in public hospitals in Nairobi County (Creswell, (2002).

3.3 Target Population

Target population in statistics is the specific population about which information is desired. According to Kombo and Tromp (2006) a population is a well-defined set of people, services, elements and events, group of things or households that are being investigated to generalize the results. The target population for this study was 8 health projects in Public Hospitals within Nairobi County.

Table 3.1 shows the distribution of the respondents in the targeted health project facilities.

Project facility	**Respondents**	**Sample**
Eastleigh	21	11
Embakasi	17	8
Karen	23	12
Kayole 1	17	8
Kibra D.O	31	16
Mutuini	16	8
Riruta	25	12
Waithaka	18	9
Total	**168**	**84**

The study targeted respondents in charge of health projects in public hospitals in Nairobi County from different categories in the following order; 56 Project Steering Committee (PSC) Members, 56 Project Coordinators and 56 Heads of Departments in charge of health projects, thus total respondents of the study were 168 respondents involved in oversight of health projects in public hospitals in Nairobi County.

3.4 Sample Size and Sampling Procedure

The study used purposive sampling technique to select health projects in public hospitals in Nairobi County. Purposive sampling was used in this study since it enabled the researcher to get specific information related to sustainability of health projects from specific public hospitals. Teddlie and Fen (2007) pointed that purposive sampling technique has a great advantage since it enables the researcher to reach the targeted sample size quickly. It is easy to get a sample of subjects with specific characteristics. Additionally, researchers are able to draw on a wide range of qualitative research designs. The health facilities were selected because of their endeavor to sustain and improve maternity health services, outpatient and pharmaceutical components in provision of health care services.

3.4.1 Sample Size

From the target respondents, a sample of 50% was selected from within each group in proportions that each group bears to the study population. Furthermore, owing to the big number of target population and given the time and resource constraints, sampling of at least 30 elements is recommended by Mugenda and Mugenda (1999). This generates a sample of 84 respondents which the study sought information from. This made it easier to get adequate and accurate information necessary for the research. The selection was conducted as depicted in table 3.1 below.

Table 3.1: Sampling Size

Project facility	Respondents	Sampling ration	Sample
Eastleigh	21	0.5	11
Embakasi	17	0.5	8
Karen	23	0.5	12
Kayole 1	17	0.5	8
Kibra D.O	31	0.5	16
Mutuini	16	0.5	8
Riruta	25	0.5	12
Waithaka	18	0.5	9
Total	**168**	**0.5**	**84**

3.4.2 Sampling Procedure

According to Cooper and Schindler (2003) a sampling frame is a list of all population units from which the sample of a study is drawn. Stratified random sampling technique was used to select the respondents. According to Kothari, (2006) the technique produces estimates of overall population parameters with greater precision and ensures a more representative sample is derived from a relatively homogeneous population. The study grouped the targeted respondents into three strata i.e. project coordinators, project steering committee and heads of departments. This in turn increased the precision of the estimation method used.

Cooper & Schindler (2006) argue that if well chosen, samples of about 10% of a population can often give good reliability. Stratified random sampling technique was used since population of interest is not homogeneous and could be subdivided into groups or strata to obtain a representative sample. The study selected a section and particularly the staffs that

included Project Steering Committee (PSC) Members, Project Coordinators and Heads of Departments in finance, procurement, audit, monitoring and evaluation of health projects in public hospitals in Nairobi County since they are the ones conversant with the determinants of sustainability of health projects in public hospitals in Nairobi County.

3.5 Piloting of the Instrument

A pilot test was conducted with 10 respondents to test the reliability and the validity of the data to be collected using the questionnaire (Kothari, 2004). The questionnaire was tested with a selected sample which was similar to the actual sample. Subjects in the actual sample were not used in this pilot study. Same procedures to be used in the actual data collection exercise were used for the pretesting exercise.

3.5.1 Reliability of the Instrument

According to Gliem and Gliem (2003), reliability refers to the consistency of measurement. The study used the Cronbach's (Alpha–α) model to test the reliability of the data. Brown (2002) indicates that Cronbach's alpha reliability coefficient normally ranges between 0 (if no variance is consistent) and 1 (if all variance is consistent). The closer the coefficient is to 1.0 the greater the internal consistency of the items in the scale. An alpha (α) score of 0.70 or higher is considered satisfactory (Gliem and Gliem, 2003).

Reliability of the questionnaire was evaluated through Cronbach's Alpha which measures the internal consistency. Cronbach's alpha was calculated by application of SPSS for reliability analysis. The value of the alpha coefficient computed was 0.82 indicating that data collection

instrument was reliable. Cooper & Schindler (2008) has indicated 0.7 to be an acceptable reliability coefficient.

3.5.2 Validity of the Instrument

Validity refers to the accuracy and meaningfulness of inferences based on the research results (Kothari, 2004) can be enhanced by absence of errors in the data collected. The research instrument was piloted with ten respondents who were part of the respondents selected for the final study. This was ensured by going through the questionnaire with the respondents to ascertain that each of the items is framed in the least ambiguous way. The pilot study aimed at establishing construct validity of the instruments (Mugenda and Mugenda, 2008). The pilot study assisted in identifying the problems which the respondents may encounter in the process of answering the questions put across to them. The piloted questionnaires were revised and ambiguous items modified.

3.6 Data Collection Methods

According to Cooper and Schindler (2011) there are many methods of data collection. The choice of a tool and instrument depends mainly on the attributes of the subjects, research topic, problem question, objectives, design, expected data and results. This is because each tool and instrument collects specific data. Primary data on the determinants of sustainability of health projects in public hospitals in Nairobi County was collected using questionnaires. Secondary data was obtained from relevant publications and literature review from libraries, health Project journals and magazines.

The researcher used a questionnaire as the data collection tool to collect views from the respondents on the study. The questionnaire was structured in a way that all relevant information would be given. The question had six sections, Section A contained questions on the demographic information of the respondents, section B contained questions on stakeholder involvement, section C contained questions on clarity on project mission and goals, section D had questions on project manager's capacity, section E covered questions on availability of funds and section F contained questions on sustainability of health projects. The questionnaire consisted of open ended and closed ended questions.

3.8 Data Analysis and Presentation

Before processing the responses, the completed questionnaires were edited for completeness and consistency. Quantitative data collected was analyzed by the use of descriptive statistics using SPSS (Version 22) and presented through percentages, means, standard deviations, and frequencies. The information was displayed by use of frequency tables and in prose-form. This was done by tallying up responses, computing percentages of variations in response as well as describing and interpreting the data in line with the study objectives and assumptions through use of SPSS (Version 22) to communicate research findings.

Content analysis was used to analyze data that is qualitative in nature or aspect of the data collected from the open ended questions. In addition, the study conducted a multiple regression analysis. Multiple regression analysis was used to establish the relations between the independent and dependent variables. Multiple regression is a tool that was used because it is the procedure that uses two or more independent variables to predict a dependent variable. The multiple regression equation was:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Whereby Y = Sustainability of Health Projects in Public Hospitals

X_1= Stakeholders Involvement

X_2= Clarity of project Mission and Goals

X_3=, Project Managers competence

X_4=, Availability of funds

While β1, β2, β3 and β4 are coefficients of Xi variables and ε is the error term.

3.9 Ethical Consideration

The researcher exercised utmost caution while administering the data collection instruments to the respondents to ensure their rights and privacy are upheld. Prior to actual administration of the instruments, an introduction on the aim and purpose of the study was made to the respondents in the language they best understand. The study also sought the consent of the respondents before they are provided with all the requirements of the study. To ensure confidentiality, the respondents' names did not appear on the questionnaire. Furthermore, no respondent was coerced into the excise at any level. The study findings were presented without any manipulation or influence by the researcher in any way.

3.10 Operational Definition of Variables

Table 3.2: Operational Definition of Variables

Variable	Indicators	Scales	Data collection tool	Type of Analysis
Independent variable Stakeholders Involvement	• Community involvement • Local leader's involvement • Level of participation	Ordinal	Questionnaire	Descriptive
Independent variable Project Mission and Goals	• Clarity of Mission • Clarity of goal • Communication of mission	Nominal	Questionnaire	Descriptive
Independent variable Project Manager's competence	• Skills • Experience	Ordinal	Questionnaire	Descriptive
Independent variable Availability of funds	• Timely disbursement • Donor funding • Government funding	Ratio	Questionnaire	Descriptive
Dependent variable Sustainability of Health Projects in Public Hospitals	• Project continuity • Amount of funds generated by the project • Duration of the project service delivery	Ratio	Questionnaire	Descriptive

CHAPTER FOUR

DATA ANALYSIS, INTERPRETATION AND PRESENTATION

4.1 Introduction

This chapter focuses on the data analysis, interpretation and presentation of the findings. The main purpose of this research was to examine determinants of sustainability of health projects with focus on public hospitals in Nairobi County, Kenya. The study also sought to establish whether stakeholder's involvement, clarity on project mission and goals, project manager's competence and availability of funds have influence on sustainability of health projects in public hospitals in Nairobi County. The researcher made use of frequency tables, percentages, mean and standard deviation to present data.

4.2 Questionnaire Return Rate

The study sampled 84 respondents from the target population of 168 in collecting data with regard to determinants of sustainability of health projects where the focus was public hospitals in Nairobi County, Kenya. Table 4.1 shows the return rate results.

Table 4.1 Response Rate

Response	Frequency	Percentage
Responded	62	74
Non response	22	26
Total	**84**	**100**

From the study, 62 out of 84 target respondents filled in and returned the questionnaires contributing to 74%. This commendable response rate can be attributed to the data collection procedure, where the researcher engaged research assistants to administer questionnaires and

waited for respondents to fill in, while respondents who left with questionnaires were frequently reminded to fill in the questionnaires through frequent phone calls and the questionnaires picked once fully filled. Any clarifications needed by the respondents were accorded. This response rate was good and representative and conforms to Mugenda and Mugenda (1999) stipulation that a response rate of 50% is adequate for analysis and reporting; a rate of 60% is good and a response rate of 70% and over is excellent. The questionnaires that were not returned was due to reasons like, the respondents were not available to fill them in at that time and with persistence follow-ups there were no positive responses from them. The response rate demonstrates willingness of the respondents to participate in the study.

4.3 Demographic Characteristics of the Respondents

As part of the general information, the researcher requested the respondents to indicate their gender, age, working duration, highest level of education and position held. The analysis relied on this information so as to categorize the different results according to respondents' acquaintance with the health projects.

4.3.1 Gender of the Respondents

Table 4.2 shows how participants of this study were distributed on the basis of gender.

Table 4.2 Gender of the Respondents

Gender	Frequency	Percentage
Male	47	76
Female	15	24
Total	**62**	**100**

From the findings, the study established that majority (58%) of the respondents were male while the rest (42%) were female. This shows that there are more males than females who are involved in health project sustainability.

4.3.2 Age Bracket

Table 4.3 shows the summary of the findings on age bracket of the respondents.

Table 4.3 Age Bracket

	Frequency	Percent
Below 30 years	11	18
30-39 years	27	44
40-49 years	17	27
50 years and above	7	11
Total	**62**	**100**

From the study 44% of the respondents were aged 30-39 years, 27% aged 18 years, 18% aged below 30 years while the rest 11% were above 50 years.

4.3.3 Working Duration

The study further aimed to investigate the working duration of the respondents in their respective projects. The findings are as shown in Table 4.4.

Table 4.4 Working Duration

	Frequency	Percentage
Below 3 years	11	18
3-6 years	15	21
7-10years	21	35
11-14 years	9	16
15 years and above	6	10
Total	**62**	**100**

Majority (35%) of the respondents had worked in the organization for a period of 7-10 years, 21% had worked for a period of 3-6years, 18% had worked for a period of below 3 years, 16% had worked for a period of 11-14 years while the rest (10%) had served in the project sustainability for a period of above 15 years. This implies that most of the respondents of this study had worked for an ample time within the organization thus they were conversant of the information that the study sought pertaining to the organization.

4.3.4 Level of Education of the Respondents

The study sought to determine the highest level of the academic qualification of the respondents. Table 4.5 shows the findings.

Table 4.3 Level of Education of the Respondents

	Frequency	**Percentage**
Diploma	14	23
Graduate	29	47
Post graduate	19	30
Total	**62**	**100**

Most (47%) of the respondents were graduates, 31% were post graduate (masters holder) while the rest (23%) had diploma as their highest level of education. This depicts that most of the staff working at health projects have adequate knowledge hence they are capable to adopt any strategic issues that the organization formulates with aim of improving project sustainability as well as achieving their goals.

4.3.5 Position held by the Respondents

The study aimed to investigate position held by the respondents within their organizations. The findings of the study are as shown in table 4.5.

Table 4.5 Position held by the Respondents

	Frequency	Percent
Project Steering Committee Member	14	23
Project Coordinator	29	47
Heads of Department	19	30
Total	**62**	**100**

Most (47%) of the respondents were project coordinators, 30% were heads of department while 23% were project steering committee member. Holbrough (2008) recommended that ranks or position one held in the workplace leads to easier application and strategic practices that leads to better perfomance of the organization towards achieving organizational goals and objectives. This depicts that all participants of the study were within the ranks which the study targeted.

4.4 Stakeholder Involvement

This section presents the respondents' view on the influence of stakeholder involvement on sustainability of health projects.

4.4.1 Influence of Stakeholder Involvement on Project Sustainability

Further the study requested the respondents to indicate whether stakeholder involvement influence project sustainability. Table 4.6 summarizes the study findings.

Table 4.6 Influence of Stakeholder Involvement on Project Sustainability

	Frequency	Percent
Yes	49	79
No	13	21
Total	**62**	**100.0**

From the findings, majority (79%) of the respondents were of the opinion that stakeholder's involvement influences project sustainability while the rest (21%) of the respondents opined that stakeholder involvement does not influence project sustainability.

4.4.2 Influence of Stakeholder Involvement on Sustainability of Health Projects

Table 4.7 illustrates the finding of the study on the extent that stakeholder involvement influence sustainability of health projects.

Table 4.7 Influence of Stakeholder Involvement on Sustainability of Health Projects

	Mean	STDev
Local leaders involvement by way of discussion before the commencement of a project, their role in decision making process according to their relative position and power relations is obligatory for the success of the health project	3.52	1.168
It is only through participatory planning, monitoring and evaluation, that meaningful development and sustainability of the health projects can be realized	3.77	1.297
Satisfying key stakeholder requirement is central to achieving a successful project outcome	4.01	1.196
A good stakeholder participation program enables those who are interested in, or affected by a decision, have an opportunity to influence the outcome	3.64	1.284
Stakeholders play role and interact at multiple levels and their role and interaction determine the effectiveness of a project sustainability	4.11	0.851

From the findings, most of the respondent pointed that stakeholders play role and interact at multiple levels and their role and interaction determine the effectiveness of project sustainability as indicated by a mean of 4.11. Satisfying key stakeholder requirement is central to achieving a successful project outcome as illustrated by mean score of 4.01. It is only through participatory planning, monitoring and evaluation, that meaningful development and sustainability of the health projects can be realized to great extent as depicted by mean of 3.77. Local leaders' involvement by way of discussion before the commencement of a project, their role in decision making process according to their relative position and power relations is obligatory for the success of the health project to great extent as illustrated by mean of 3.70.

4.5 Project Mission and Goals

This section present the respondents' view on the influence of the Project mission and goals on sustainability of health projects.

4.5.1 Influence of Project Mission and Goals on Sustainability of Health Projects

Table 4.8 summarizes the study findings, on whether project mission and goals on sustainability of health projects.

Table 4.8 Influence of Project Mission and Goals on Sustainability of Health Projects

	Frequency	Percent
Yes	43	69
No	19	31
Total	**62**	**100.0**

Majority (69%) of the respondents indicated that project mission and goals influence sustainability of health projects while the rest (31%) opined that that project mission and goals does not influence sustainability of health projects.

4.5.2 Clarity on Project Mission and Goals on Sustainability of Health Projects

Table 4.9 illustrates the finding of the study on the respondent level of agreement on the aspects related to procurement procedures.

Table 4. 9 Clarity on Project Mission and Goals on Sustainability of Health Projects

	Mean	STDev
The aim of a projects' mission is to make sure everyone is on the same level of understanding with regard to the project	4.45	0.862
Project mission shape up the implementation of the project as it is the rationale for its existence	3.89	1.01
Project mission provides guidelines on what is to be done for whom and the strategy to be used	4.26	0.723
Mission statements are important for sustainability of a project, they provide a guiding philosophy and outline area that project is operating	4.16	0.498
Mission statements enhance the communication of a common culture throughout the project and inspire deliberations on how the mission can be implemented	3.19	1.48

From the findings, most of the respondent agreed that the aim of a project's mission is to make sure everyone is on the same level of understanding with regard to the project, project mission provides guidelines on what is to be done for whom and the strategy to be used and mission statements are important for sustainability of a project since they provide a guiding philosophy when the direction is not clear and outline the area in which the project is operating as depicted by mean score of 4.45, 4.26 and 4.16 respectively. Project mission shape up the implementation of the project as it is the rationale for its existence and that mission statements enhance the communication of a common culture throughout the project and inspire deliberations on how the mission can be implemented as illustrated by mean score of 3.89 and 3.19 respectively.

4.6 Project Manager's Competence

This section presents the respondents' view on the influence of the Project Manager's competence on sustainability of health projects.

4.6.1 Influence of Project Manager's Competence on Sustainability of Health Projects

Further the study requested the respondents to indicate whether project manager's competence on sustainability of health projects. The findings are as shown in table 4.10.

Table 4.10 Influence of Project Manager's Competence on Sustainability of Health Projects

	Frequency	Percent
Yes	49	79
No	13	21
Total	**62**	**100.0**

From the findings, majority (79%) of the respondents were of the opinion that project manager's competence influences sustainability of health projects while the rest (21%) of the respondents opined that project manager's competence does not influence sustainability of health projects.

4.6.2 Influence of project Manager's Competence on Sustainability of Health Projects in Public Hospitals

Table 4.11 illustrates the finding of the study on the respondent level of agreement on the aspects related to influence of project manager's competence on sustainability of health projects in public hospitals.

Table 4.11 Influence of Project Manager's Competence on Sustainability of Health Projects in Public Hospitals

	Mean	STDev
Project Manager's understanding of important issues for each stakeholder group is a very important success factor	4.55	0.67
The extent to which the project manager is able to organize the people, ideas and resources to achieve the objectives of the project determines the sustainability of the project	4.52	0.646
Management puts into consideration people and the essential resources available for transforming ideas, inspirations, materials, capital and technical competence required for the project	4.23	0.777
A project can succeed or fail in sustainability because of lack of strong management	3.16	1.244

Majority of the respondents agreed that project manager's understanding of important issues for each group of stakeholders is a very important success factor as depicted by a mean score of 4.55. The extent to which the project manager is able to organize the people, ideas and resources to achieve the objectives of the project determines the sustainability of the project and management puts into consideration people and the essential resources available for transforming ideas, inspirations, materials, capital and technical competence required for the project as depicted by mean score of 4.52 and 4.23 respectively. However, respondents were neutral to the statement that a project can succeed or fail in its sustainability because of lack of strong management as illustrated by mean score of 3.16.

4.7 Availability of Funds

This section presents the respondents' view on the influence of availability of funds on sustainability of health projects in public hospitals.

4.7.1 Influence of Availability of Funds on Sustainability of Health Projects in Public Hospitals

The researcher requested the respondents to indicate the extent to which availability of funds on sustainability of health projects in public hospitals. Table 4.12 shows the finding of the study.

Table 4.12 Influence of Availability of Funds on Sustainability of Health Projects in Public Hospitals

	Mean	STDev
Sources and composition of project finance is a key factor that influence the success of project implementation	3.84	0.746
For a development project to be financially sustainable, it requires a sound financial base arising from reliable sources of funding	3.63	0.808
Financial and economic analysis is crucial for any sustainable project	3.67	1.131
Project does not deliver clear and equitable financial or economic benefits, which are apparent to the stakeholders, it is most unlikely to be sustained	3.56	0.913
Better financial analysis is often required, particularly in the formulation of programs and projects' activities	3.51	0.948

Majority of the respondents pointed that availability of funds influence sustainability of health projects. Sources and composition of project finance is a key factor that influences the project sustainability. For any health project to be financially sustainable, it requires a sound financial base arising from reliable sources of funding to a great extent as depicted by mean score of 3.84, 3.67 and 3.63 respectively. Respondents also opined that if a project does not deliver clear and equitable benefits to the stakeholders, it is most unlikely to be sustained. Financial analysis is often required, particularly in the formulation of projects' activities to a great extent as shown by mean score as illustrated by mean score of 3.56 and 3.51 respectively.

4.8 Sustainability of Health Projects

This section analyses the parameters of projects sustainability as discussed in this paper.

4.8.1 Respondents Opinion on Sustainability of Health Projects

Table 4.13 summarizes result of the findings on whether they believe health projects in public hospitals in Nairobi County are sustainable.

Table 4.13 Respondents Opinion on Sustainability of Health Projects

	Frequency	**Percent**
Yes	52	84
No	10	16
Total	**62**	**100**

Majority (84%) of the respondents indicated health projects in public hospitals in Nairobi County are sustainable while 16% felt otherwise.

4.8.2 Aspects of Sustainability of Health Projects in Public Hospitals

The researcher requested the respondents to indicate their level of agreement on the statement relating to sustainability of health projects in public hospitals.

Table 4.14 Aspects of Sustainability of Health Projects in Public Hospitals

	Mean	STDev
A sustainable health project should continue to deliver services even after the external donor support has been withdrawn.	4.77	0.422
Health project should make a positive difference in issues like waste, energy and water usage, and promote wellness of the community and the environment.	3.74	1.041
Health projects should continue to generate revenues to ensure it continues to operate long after the donor has stopped giving major financial and technical support.	3.66	1.133

Most of the respondents agreed that a sustainable health project should continue to deliver services even after the external donor support has been withdrawn as indicated by mean score of 4.77. Further, respondents agreed that health project should make a positive difference in issues like waste, energy and water usage, and promote wellness of the community and the environment and that health projects should continue to generate revenues to ensure it continues to operate long after the donor has stopped giving major financial and technical support as depicted by mean score of 3.74 and 3.66 respectively.

4.9 Inferential Statistic

To establish the relationship between the independent variables and the dependent variable, the study conducted inferential analysis which involved coefficient of correlation, coefficient of determination and multiple regression analysis.

4.9.1 Coefficient of Correlation

In trying to show the relationship between the study variables and their findings, the study used the Karl Pearson's coefficient of correlation (r). Table 1.15 shows the summary of the study findings.

Table 4.15 Coefficient of Correlation

		Sustainability of Health Projects	Stakeholders Involvement	Project Mission and Goals	Project Managers competence	Availability of funds
Sustainability of Health Projects	Pearson Correlation	**1**				
	Sig. (2-tailed)					
Stakeholders Involvement	Pearson Correlation	.5210	1			
	Sig. (2-tailed)	.0032				
Project Mission and Goals	Pearson Correlation	.6180	.3421	1		
	Sig. (2-tailed)	.0021	.0014			
Project Managers competence	Pearson Correlation	.5870	.1240	.0621	1	
	Sig. (2-tailed)	.0043	.0120	.0043		
Availability of funds	Pearson Correlation	.5530	.3420	.0011	.1660	1
	Sig. (2-tailed)	.0172	.0031	1.000	.0031	

According to the findings, it was clear that there was a positive correlation between sustainability of health projects in public hospitals and stakeholders involvement as shown by a correlation figure of 0.521, it was also clear that there was a positive correlation between sustainability of health projects and project mission and goals with a correlation figure of 0.618, there was also a positive correlation between sustainability of health projects and project managers competence with a correlation value of 0.587 and a positive correlation between sustainability of health projects and availability of funds with a correlation value of

0.553. This shows that there was a positive correlation between, stakeholders' involvement, project mission and goals, project managers' competence and availability of funds.

4.9.2 Coefficient of Determination of Variables

The coefficient of determination was carried out to measure how well the statistical model was likely to predict future outcomes. The findings of the study are as depicted in table 4.16.

Table 4.16 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.742	0.551	0.641	0.0438

The coefficient of determination, r^2 is the square of the sample correlation coefficient between outcomes and predicted values. As such it explains the contribution of the four independent variables (stakeholders' involvement, project mission and goals, project managers' competence and availability of funds) to the dependent variable. The four independent variables that were studied explain only 55.1% of the sustainability of Health Projects as represented by the R^2. This therefore means that other factors not studied in this research contribute 44.9% on sustainability of health projects. Therefore, further research should be conducted to investigate the other factors (44.9%) that influence sustainability of Health Projects.

4.9.3 Multiple Regression

The researcher further conducted a multiple regression analysis so as to identify the determinant of sustainability of health projects. The main purpose of multiple regressions is

to learn more about the relationship between several independent or predictor variables and a dependent or criterion variable. The researcher applied the statistical package for social sciences (SPSS) to code, enter and compute the measurements of the multiple regressions for the study. This is presented in table 4.17 below.

Table 4.17 Regression Coefficients

	Unstandardized Coefficients		**Standardized Coefficients**		
Model	**B**	**Std. Error**	**Beta**	**t**	**Sig.**
(Constant)	1.279	1.316		1.451	0.357
Stakeholders Involvement	0.508	0.310	0.172	4.242	.0276
Project Mission and Goals	0.613	0.322	0.067	3. 452	.0202
Project Managers competence	0.525	0.156	0.210	3. 382	.0285
Availability of funds	0.514	0.245	0.148	3.358	.0249

The following equation was generated.

($\mathbf{Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon}$) becomes:

$Y= 1.279+ 0.510\ X_1+ 0.613X_2+ 0.525X_3+0.531X_4$

The regression equation above has established that taking all factors into account (stakeholders' involvement, project mission and goals, project managers' competence and availability of funds) constant at zero, sustainability of health projects in Kenya will be 1.279. The findings presented also shows that taking all other independent variables at zero, a unit increase in stakeholders involvement will lead to a 0.508 increase in sustainability of

health projects; a unit increase in clarity of project mission and goals will lead to a 0.613 increase in sustainability of health projects; a unit increase in project managers competence will lead to a 0.525 increase in sustainability of health projects and a unit increase in availability of funds will lead to a 0.514 increase in sustainability of health projects. This infers that Project Mission and Goals determine sustainability of health projects to a great extent followed by project managers competence then availability of funds while stakeholders involvement determine the least to sustainability of health projects.

CHAPTER FIVE

SUMMARY OF FINDINGS, DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter provides the summary of the findings, the conclusions and recommendations of the study based on the objectives of the study. The chapter also presents the suggestions for further studies.

5.2 Summary of Findings

The findings on each variable are discussed in this section.

5.2.1 Stakeholder's Involvement

The study found that majority of the respondents indicated that stakeholder's involvement influence project sustainability. Also the study found that stakeholders play role and interact at multiple levels and their role and interaction determine the effectiveness of project sustainability and thus satisfying key stakeholder requirements is central to achieving a sustainability of project outcome. It is only through participatory planning, monitoring and evaluation, that meaningful development and sustainability of the health projects can be realized to great extent.

5.2.2 Project Mission and Goals

The study found that project mission and goals influence sustainability of health projects as indicated by majority (69%) of the respondents while (31%) opined that that project mission and goals does not influence sustainability of health projects. The aim of a projects' mission is to make sure everyone is on the same level of understanding with regard to the project,

project mission provides guidelines on what is to be done for whom and the strategy to be used and mission statements are important for sustainability of a project since they provide a guiding philosophy when the direction is not clear and outline the area in which the project is operating.

5.2.3 Project Manager's Competence

The study found that project manager's competence influences sustainability of health projects. Project Manager's understanding of most important issues for each stakeholder group is a very important success factor; the extent to which the project manager is able to organize the people, ideas and resources to achieve the objectives of the project determines the sustainability of the project. Management puts into consideration people and the essential resources available for transforming ideas, inspirations, materials, capital and technical competence required for the project.

5.2.4 Availability of Funds

On the objective of availability of fund the study found that availability of funds on sustainability of health projects, sources and composition of project finance is a key factor that influences the success of project sustainability, financial and economic analysis is crucial for any sustainable project and for a development project to be financially sustainable, it requires a sound financial base arising from reliable sources of funding to a great extent. If a project does not deliver clear and equitable financial or economic benefits, which are apparent to the stakeholders, it is most unlikely to be sustained. Thus better financial analysis is often required, particularly in the formulation of programs and projects' activities to a great extent.

5.3 Discussion of the Findings

The study sought to establish the extent that stakeholder's involvement influence sustainability of health projects in public hospitals in Nairobi County, to examine the extent that clarity on project mission and goals influence sustainability of health projects in public hospitals in Nairobi County, to assess the extent that project manager's competence influence sustainability of health projects in public hospitals in Nairobi County, to establish the extent that availability of funds influence sustainability of health projects in public hospitals in Nairobi County.

On stakeholder's involvement, the study established that majority (79%) of the respondents were of the opinion that stakeholder's involvement influence project sustainability. Further, most of the respondents agreed that stakeholders play role and interact at multiple levels and their role and interaction determine the effectiveness of project sustainability. Also respondents agreed that satisfying key stakeholder requirement is central to achieving a successful project outcome. Finally, the study found that it is only through participatory planning, monitoring and evaluation, that meaningful development and sustainability of the health projects can be realized to great extent.

To project mission and goals, majority (69%) of the respondents indicated that project mission and goals influence sustainability of health projects. Further, respondent agreed that the aim of a projects' mission is to make sure everyone is on the same level of understanding with regard to the project; project mission provides guidelines on what is to be done. This study conforms to March (2011) that the aim of the mission is ensure all participant in the project understood the core objectives of the project through providing guidelines on what is to be

done (product), for whom (customer) and how (strategy). Strategy to be used and mission statements are important for sustainability of a project since they provide a guiding philosophy when the direction is not clear and outline the area in which the project is operating. According to Lewis (2007) pointed that mission statements of a projects are crucial to the project from it is initial stage since they analyze the business of an entity and provides a guiding which gives a clear direction and outline the area in which the entity is operating. Also, respondents agreed that project mission shape up the implementation of the project as it is the rationale for its existence and that mission statements enhance the communication of a common culture throughout the project and inspire deliberations on how the mission can be implemented. Lewis (2007) purported that project mission and vision statements enhance the communication of a common culture throughout the entity and inspire deliberations on how the mission can be implemented.

Further, on project manager's competence, majority (79%) of the respondents were of the opinion that project manager's competence influence sustainability of health projects. According to Public Procurement Oversight Authority (2009), the project manager has a responsibility to ensure that risks are identified and managed appropriately; objectives and benefits are achieved within budget and time, and to the required quality (Franks & Cursworth, 1993). Most of the respondent agreed that project manager's understanding of most important issues for each stakeholder group is a very important success factor. According to Franks and Curswoth (1993) the extent to which the leaders are able to organize the people, ideas and resources to achieve the objectives of the project determines the sustainability of the project. If the leaders are able to mobilize the three factors

effectively, there are higher chances of successful implementation and hence high chances of sustaining the project even when external donors have withdrawn; otherwise, there would be higher chances of project failure, or lack of sustainability of the project. Further, most of the respondents strongly agreed the extent to which the project manager is able to organize the people, ideas and resources to achieve the objectives of the project determines the sustainability of the project and management.

On availability of funds on sustainability of health projects, most of the respondents pointed that availability of funds on sustainability of health projects, sources and composition of project finance is a key factor that influence the success of project implementation, financial and economic analysis is crucial for any sustainable project and for a development project to be financially sustainable. In his study, Kasoo (2010) reiterated in his findings that besides community participation, sources and composition of project finance has a bearing on project success as well. Finally, most of the respondents strongly agreed that project does not deliver clear and equitable financial or economic benefits, which are apparent to the stakeholders, it is most unlikely to be sustained and better financial analysis is often required, particularly in the formulation of programs and projects' activities to a great extent. This was confirmed by Ayodele (2011) when he reported that one major cause of abandonment of construction projects in Nigeria was due to inadequate funding and finance.

5.4 Conclusion of the Study

Based on the finding concludes that stakeholder involvement influences project sustainability. The study also concluded that stakeholders play role and interact at multiple levels and their role and interaction determine the effectiveness of project sustainability and

that satisfying key stakeholder requirement is central to achieving a successful project outcome. It is only through participatory planning, monitoring and evaluation, that meaningful development and sustainability of the health projects can be realized.

The study concluded that clarity of project mission and goals influence sustainability of health projects. The aim of a projects' mission is to make sure everyone is on the same level of understanding with regard to the project, project mission provides guidelines on what is to be done for whom and the strategy to be used and mission statements are important for sustainability of a project since they provide a guiding philosophy when the direction is not clear and outline the area in which the project is operating.

The study concluded that project manager's competence influence sustainability of health projects. Project Manager's understanding of most important issues for each stakeholder group is a very important success factor; the extent to which the project manager is able to organize the people, ideas and resources to achieve the objectives of the project determines the sustainability of the project. Management puts into consideration people and the essential resources available for transforming ideas, inspirations, materials, capital and technical competence required for the project.

On the objective of fund availability the study concluded that availability of funds on sustainability of health projects, sources and composition of project finance is a key factor that influence the success of project implementation, financial and economic analysis is crucial for any sustainable project and for a development project to be financially sustainable, it requires a sound financial base arising from reliable sources of funding to a great extent.

Project does not deliver clear and equitable financial or economic benefits, which are apparent to the stakeholders, it is most unlikely to be sustained and better financial analysis is often required, particularly in the formulation of programs and projects' activities to a great extent.

5.5 Recommendation

Based on the findings, the study recommends that health being critical element in development of the country's economy, there is need to allocate more funds to finance the projects that aim to improve the wellbeing of the citizens to ensure the projects are sustainable. To strengthen stakeholders' participation in managing health projects, the study recommends that a lot of groundwork should be done during community entry. A situation analysis should be carried out with communities so that they are involved from the beginning. This would help in identifying community needs which will assist in determining whether the project is the priority for respective communities, the determination of communities' willingness to contribute resources towards development and sustainability of the health project. During community entry, the health project sponsors, promoters should ensure that they involve all stakeholders and local leadership at an early stage. Communities should be made aware of their roles and responsibilities, expectations and health education.

The study recommends that involvement of stakeholders can bring into the sustainability of health projects. Right from project design to control and implementation, the involvement of stakeholders can play a bigger role. The involvement of stakeholders should be aware that any commissioned project is like a debt that needs to be re- paid through proper management to ensure attainment of stated objectives and its sustainability.

Further the study recommends that since the success or failure of a project is directly related to its goals and objectives which form the baseline to measure the degree of project sustainability and success. Thus there is need to set realistic goals that will help to ensure that the project is sustainable and oriented to its mission and vision.

There should be created a health project committee to manage and oversee the operations of the projects after the sponsors of the projects have ceased major financial and technical support to the project. This committee should oversee maintenance of the projects including repairs, keeping records of financial transactions, manuals and blueprints, and sanctioning people for non-payment. For many health projects, the creation of a health committee is a prerequisite for receiving project assistance. However it is recommended that communities are allowed flexibility in deciding what kind of organization they want to operate and maintain the system.

5.6 Suggestion for Further Studies

From the study model of the four factors explained, they contribute to 55.1% on sustainability of the health projects, thus a study is need to investigate the other (44.9%). It is therefore suggested that more studies be undertaken in the same topic in future to determine consistency in the factors affecting the sustainability of health projects. The study also recommends that a study be done on determinant of health project sustainability in other counties.

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APPENDICES

Appendix I: Introductory Letter

Okoth Alphonce Ochieng
University of Nairobi
Box 30197 - 00100
NAIROBI.
30th May, 2016

TO WHOM IT MAY CONCERN

RE: INTRODUCTORY LETTER- RESEARCH PROJECT

Dear Sir/ Madam,

I am a graduate student at the School of Continuing and Distance Education, University of Nairobi. In partial fulfillment of the requirements of the degree of Master of Arts in Project Planning and Management, I am conducting a research for my project on "***Determinants of sustainability of health projects: a case of public hospitals in Nairobi county, Kenya".***

I kindly request for your assistance in gathering data for this study by filling the attached questionnaire. Your honest responses will be strictly confidential and used purely for academic purpose. I recognize the many demands placed on your time and am grateful for your participation in this study.

Thank you in advance for your assistance.

Yours Sincerely,

Okoth Alphonce Ochieng
Reg. No. L50/75994/2014
El: +254 721 294727
Email: alphokoth@gmail.com

Appendix II: Questionnaire to the respondents

Please fill in the required information in the spaces provided by putting a tick (√) where appropriate.

Section A: Demographic information

1. Gender of the respondent

Male	[ ]
Female	[ ]

2. Age of the respondent

Below 30 years	[ ]	30-39 years	[ ]
40-49 years	[ ]	50 years and above	[ ]

3. Period of service in the Project

Below 3 years	[ ]	3-6 years	[ ]
7-10years	[ ]	11-14 years	[ ]
15 years and above	[ ]		

4. Level of Education

College education	[ ]
Degree	[ ]
Post graduate	[ ]

5. What is your position in the health project in which you were involved?

Project Steering Committee Member	[ ]
Project Coordinator	[ ]
Heads of Department	[ ]

Section B: Stakeholder's Involvement

6. Does stakeholder's involvement influence sustainability of health projects in public hospitals in Nairobi County?

   Yes ( )

   No ( )

   Not Sure ( )

7. Indicate the extent to which you agree or disagree with the following statements relating to the influence of stakeholder's involvement on sustainability of health projects in public hospitals in Nairobi County. (5-Strongly Agree, 4-Agree, 3-Nether Agree nor Disagree, 2-Disagree,1- strongly disagree)

Statements	**1**	**2**	**3**	**4**	**5**
Local leaders involvement by way of discussion before the commencement of a project, their role in decision making process according to their relative position and power relations is obligatory for the success of the health project					
It is only through participatory planning, monitoring and evaluation, that meaningful sustainability of the health projects can be realized					
Satisfying key stakeholder requirement is central to achieving a successful project outcome					
A good stakeholder participation program enables those who are interested in, or affected by a decision, have an opportunity to influence the outcome					

Stakeholders play role and interact at multiple levels and their role and interaction determine the effectiveness of a project sustainability					

8. In your own opinion, how else does stakeholder's involvement influence sustainability of health projects in public hospitals in Nairobi County?

   ……

   ……

   ……

Section C: Clarity on Project Mission and Goals

9. Does clarity on project mission and goals influence sustainability of health projects in public hospitals in Nairobi County?

   Yes ( )

   No ( )

   Not Sure ( )

10. Indicate the extent to which you agree or disagree with the following statements relating to the influence of clarity on project mission and goals on sustainability of health projects in public hospitals in Nairobi County. (5-Strongly Agree, 4-Agree, 3-Moderate, 2-Disagree, 1- strongly disagree)

Statements	**1**	**2**	**3**	**4**	**5**
The aim of a projects' mission is to make sure everyone is on the same level of understanding with regard to the project					
Project mission shape up the implementation of the project as it is the rationale for its existence					
Project mission provides guidelines on what is to be done for whom and the strategy to be used					
Mission statements are important for sustainability of a project since they provide a guiding philosophy when the direction is not clear and outline the area in which the project is operating					
Mission statements enhance the communication of a common culture throughout the project and inspire deliberations on how the mission can be implemented					

11. In your own opinion, how else does clarity on project mission and goals influence sustainability of health projects in public hospitals in Nairobi County?

……

……

……

Section D: Project Manager's Competence

12. Does project manager's competence influence the sustainability of health projects in public hospitals in Nairobi County?

    Yes ( )

    No ( )

    Not Sure ( )

13. Indicate the extent to which you agree or disagree with the following statements relating to the influence of project manager's competence on sustainability of health projects in public hospitals in Nairobi County. (5-Strongly Agree, 4-Agree, 3-Moderate, 2-Disagree,1- strongly disagree)

Statements	**1**	**2**	**3**	**4**	**5**
Project Manager's knowledge of most important issues for each stakeholder group is a very important success factor					
Project Manager's competence, i.e., the extent to which the project manager is able to organize the people, ideas and resources to achieve the objectives of the project determines the sustainability of the project					
Project Manager's specialization and technical competence are key to the project sustainability					
A project can succeed or fail in sustainability because of lack of management skills					

14. In your own opinion, how else does project manager's competence influence sustainability of health projects in public hospitals in Nairobi County?

……

……

……

Section E: Availability of Funds

15. Does availability of funds influence the sustainability of health projects in public hospitals in Nairobi County?

Yes ( )

No ( )

Not Sure ( )

16. Indicate the extent to which you agree or disagree with the following statements relating to the influence of availability of funds on sustainability of health projects in public hospitals in Nairobi County. (5-Strongly Agree, 4-Agree, 3-Moderate, 2-Disagree, 1-strongly disagree)

Statements	**1**	**2**	**3**	**4**	**5**
Composition of project finance is a key factor that influence the success of project implementation					
For a development project to be financially sustainable, it requires a sound financial base arising from reliable sources of funding					
Financial and economic analysis is crucial for any sustainable project					

Project does not deliver clear and equitable financial or economic benefits, which are apparent to the stakeholders, it is most unlikely to be sustained					
Better financial analysis is often required, particularly in the formulation of programs and projects' activities.					

17. In your own opinion, how else does availability of funds influence sustainability of health projects in public hospitals in Nairobi County?

    ……

    ……

    ……

Section F: Sustainability of Health Projects

18. In your opinion do you believe health projects in public hospitals in Nairobi County are sustainable?

    Yes ( )

    No ( )

    Not Sure ( )

19. Indicate by a tick (√) the extent to which you agree or disagree with the following statements relating to the sustainability of health projects in public hospitals in Nairobi County. (5-Strongly Agree, 4-Agree, 3-Moderate, 2-Disagree, 1- strongly disagree)

Statements	**1**	**2**	**3**	**4**	**5**
A sustainable health project should continue to deliver services even after the external donor support has been withdrawn.					
Health project should make a positive difference in issues like waste, energy and water usage, and promote wellness of the community and the environment.					
Health projects should continue to generate revenues to ensure it continues to operate long after the donor has stopped giving major financial and technical support.					

20. Indicate by a tick (√) the factors that you think determine the sustainability of health projects in public hospitals in Nairobi County?

Stakeholder involvement ( )

Clarity of project mission and vision ( )

Project manager capacity ( )

Availability of funds ( )

Others (Kindly list them)

……

……

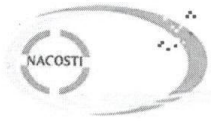
……

THANK YOU

Appendix III: List of Health Projects

Health Facility	Project
Eastleigh	Construction of maternity wing to offer improved maternity services
Embakasi	Maternity services delivery improvement
Karen	Construction of Maternity and emergency outpatient wings
Kayole 1	Construction of maternity wing
Kibra D.O	Supply chain improvement systems for pharmaceutical supplies
Mutuini	Outpatient casualty services improvement
Riruta	Construction of Emergency outpatient care and maternity
Waithaka	Water and sanitation

Appendix IV: Research Permit from NACOSTI



NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

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NAIROBI-KENYA

Ref: No.

NACOSTI/P/16/58922/12711

Date:

1st August, 2016

Alphonce Ochieng' Okoth
University of Nairobi
P.O. Box 30197-00100
NAIROBI.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on ***"Determinants of sustainability of health projects: A case of public hospitals in Nairobi County,"*** I am pleased to inform you that you have been authorized to undertake research in **Nairobi County** for the period ending 29th **July, 2017.**

You are advised to report to **the County Commissioner, the County Director of Education and the County Coordinator of Health, Nairobi County** before embarking on the research project.

On completion of the research, you are expected to submit **two hard copies and one soft copy in pdf** of the research report/thesis to our office.

DR. STEPHEN K. KIBIRU, PhD.
FOR: DIRECTOR-GENERAL/CEO

Copy to:

The County Commissioner
Nairobi County.

The County Director of Education
Nairobi County.

The County Coordinator of Health
Nairobi County.