Stakeholders’ Participation and Performance of Medical Managed Equipment’s Services Project in Nairobi County, Kenya

King’ori Mwangi Peter  
MBA Student  
School of Business  
Kenyatta University

Dr. Lucy Ngugi  
Lecturer  
Kenyatta University

Abstract
The government has been committed in providing the best healthcare services for its citizens. However, this has been faced by numerous challenges due to insufficient funding, changes in technology, changes in disease pattern, inaccessibility of health facility, lack of political goodwill and the escalated disease burden. In an effort to mend the delivery of healthcare services, the government of Kenya collaborated with a private company to provide medical equipment services over a period of 10-15 years. After its inception, the project has faced a number of challenges relating to stakeholders’ participation. The specific objectives of the study were to establish the effect of stakeholders’ participation in the project life cycle: project identification, project planning, project implementation and project monitoring and evaluation on performance of the Managed Equipment Services project in Nairobi County. The study employed three theories; the Stakeholders’ Theory, the Theory of Performance and the Reasoned Action Theory. The study employed descriptive research design. Stratified random sampling research design was used with a target population of 150 heads of department and senior management of Mbagathi Hospital, Mathare hospital, Mama Lucy Kibaki Hospital, and Kenyatta National Hospital to get a sample size of 60. Primary data was collected using self-administered structured questionnaires. Data was analyzed using descriptive statistics (frequency, mean, mode and standard deviation), correlation coefficient and multiple regression. Presentation was done through charts, percentages and tables.

The study established that there was a relationship between stakeholder’ participation and MES project performance. The findings also revealed that stakeholders’ were minimally involved in project identification, and planning whereas, there was great extent involvement in project implementation and monitoring. The study also found that project monitoring and planning significantly affected project performance. The study therefore recommended that stakeholders’ should be involved in the entire process to increase MES project performance. In addition, the research recommended that the management should enhance internal and external communication to increase the MES project awareness, train and increase manpower capacity to equip them with skills needed to manage the MES project.

Key Words: Project performance, Stakeholder participation, MES Projects, Project Planning, and Project Implementation, Project monitoring, Project evaluation

I. Background of the Study
Healthcare has been facing numerous challenges everywhere in the world from developed countries to developing countries. Some of the challenges include; insufficient funding, in inadequate stakeholders participation, changes in technology, changes in disease pattern, inaccessibility of health facility, lack of political good will and the risen disease burden which all result in many healthcare projects performance to be minimal (Kumar, 2019). In most developing countries, healthcare structures have been overburdened by the rapid population growth rate and poor education system which results to a population with low economic status hence poor access to health services as well as non-utilization of health services and increase in avoidable risk factors all of which affects healthcare projects negatively (David P Stephens, 2014)
According to Bulatalo et al. (1990), India is the second most populous country in the world and is projected to continue to contribute more to population growth than any other country in the world. Currently, India is experiencing an epidemic of emerging infectious diseases as well as chronic degenerative diseases. The emerging infectious diseases are mainly caused by poor implementation of the public health programs while the chronic illnesses are caused by demographic transition with increase in life expectancy. This transition is forcing healthcare stakeholders to find more innovative ways to reduce costs, improve outcomes and expand access to healthcare. The stakeholders are looking to engage private capital, expertise and resources to improve healthcare services as public financing is no longer enough for all healthcare infrastructure needs. It is therefore important to involve stakeholders in private funding for success of healthcare projects and in meeting public policy goals. Stakeholders’ participation in Public Private Partnership (PPP) therefore, is a major strategy to ensure that investment, risks, resources, skills and assets are shared to accomplish a healthcare objective (Butler, 2012).

According to the Africa Population Health and Research Centre (APHRC) reports, Kenya is experiencing several challenges in health sector ranging from inadequate funding and inadequate stakeholders participation to the spread of non-communicable diseases (Pamela Juma, 2017). The 2014 report also points out an increased rural – urban influx with Nairobi County experiencing highest numbers. About 35 percentage of Nairobi residents live in slums with overburdened social services like education, healthcare, water and food, amongst many others (APHRC, 2014). According to Owino (1997), effective collaboration with healthcare stakeholders in various organs of the government, international agencies, non-governmental organizations and other key stakeholders will help in upgrading healthcare in Kenya. In light of this, the government of Kenya has come up with the Managed Equipment Services (MES) project to aid in solving most of the challenges in the healthcare sector. Through MES, the knowledge and experience on purchasing, installation, training, servicing, asset management and maintaining the medical equipment is outsourced from the healthcare providers (Olotch, 2018).

1.1.1 Project Performance

Project performance refers to creating impact through delivering quality products and services on time, with the right budget /cost, for the benefit of stakeholders while monitoring the project keenly to ensure its success (Adan, 2012). Quality refers to conformance with laid down specifications. If products and services produced are of good quality and as expected, customers will have less or no complaint and hence achieve client satisfaction. If a project doesn’t conform to specifications it will be continually correcting mistakes and will hardly satisfy customer requests. Medical equipment quality is enhanced in designing and development of the medical devices to support safety and performance (Grol, 2001). Safety and performance therefore, enhances durability and in turn durability enables flexibility. Flexibility should lead to desired speed and speed correlates to cost. Quality cannot be achieved without proper equipment planning. Equipment planning starts with defining and identifying the healthcare providers, identifying equipment’s requirement together with the standard of equipment’s performance throughout its life time.

1.1.2 Stakeholder Participation

A stakeholder participation is the involvement of individual, group or institution who has a vested interest in the resources of a given project/ area and/or who potentially will be affected by project activities and have something to gain or lose if conditions change or stay the same (WWF, 2005). Without the support of stakeholders, organizations and projects would cease to exist (Freeman, 2010). Stakeholders would include customers/employee, suppliers, shareholders and the society in which the project is being undertaken or is affecting. Increased project operations complexities like unreliable markets, problematic public affairs, Investor relations and effective management has necessitated the increased demand of stakeholders’ involvement (Freeman 1999, Areni 1994).

According to Mugo (2004), stakeholder involvement is in different phases of the project cycle, at different levels of society and takes different forms which can range from contribution at the implementation stage where the stakeholder needs are identified to appreciate the benefits of the projects, financial analysis and team support; at the planning stage, stakeholders are involved in project requirements, coming up with objectives, determining the quality of the project, resource allocation and scheduling. At the implementation, the stakeholder is actively involved through coordination, efficient utilization of resources, and risk evaluation. During monitoring, the stakeholder is involved in the controlling process, assessment and feedback generation (Magassouba, Tambi, Alkhlaifat, & Abdullah, 2019). Stakeholders’ knowledge and efforts brings value in to the projects processes which in turn results to increased performance of a project. Good stakeholder management enables a project manager to identify unnoticed risks and helps in reduction of most risks (Newton, 2016). The Kenyan constitution has enshrined the stakeholders’ participation concept in systems of governance. Article 174(C) of Kenyan constitution says that devolution should enhance participation of people in making decisions affecting them (Constitution of Kenya, 2010).
1.1.3 Managed Equipment Services Project in Nairobi County

Managed Equipment Services is a partnership between a government/private Institution with a private Institution specialist in provision of medical equipment’s throughout a contract period of between 10-15 years at an annual fee (Siemen, 2015). In Africa, Kenya was the first country to implement Managed Equipment Services in 2013. Under the Managed Equipment Services project, the government entered into a 10-year contract with GE Healthcare Company to supply, install and maintain medical equipment in two medical facilities in each county and for all national hospitals. The project’s cost was Kshs 380 billion with provision of modern state of the art medical equipment namely; Theatre, Dialysis, sterilization and intensive care (MOH, 2019). In Nairobi County, Mbagathi district hospital and Mama Lucy Kibaki hospital are benefitting from the MES project (MOH, 2016). The project has however faced multiple of challenges relating to Stakeholders’ involvement. According to Nyaim (2015), medics were not made aware that the government is procuring the machines and neither have they been involved in installation and training. Stakeholders’ engagement in the project performance remains unaddressed in the managed equipment’s project in Kenya (KMA, 2015). An empirical research is therefore required to determine the extent to which stakeholders’ participation affects performance of the managed equipment services project in Kenya.

1.2 Statement of the Problem

Project’s life cycle requires involvement of key stakeholders throughout the process to ensure increased performance. This therefore means that at the initiation of the project, stakeholders’ needs, interests and expectations are identified through their involvement. At the planning and execution, success is determined when there is effective communication that increases understanding, reduces conflicts and takes care of stakeholder concerns. Project monitoring is then achieved in consultation with the stakeholders (Perumal, Freeman, Louis, & Narasimhan, 2015). Causes of poor project performance was provided by Hyttinen (2017) noting that lack of coordination, ineffective communication, lack of quality control, poor estimation of project duration and costs greatly affected project performance.

Maruhi (2013) study on the effects of stakeholders’ participation on the success of economic stimulus program focusing on education projects in Nakuru County reported that there was a relationship between stakeholders’ participation in project implementation, participation and monitoring. The study also indicated that there was an increased performance when stakeholders were given induction before project initiation. A study by Nyandika and Ngugi (2014) on the effect of stakeholders’ participation on performance of road projects at Kenya National Highways Authority (KeNHA) using a population of 251 consisting of prequalified contractors, consultants and KeNHA senior management. The study found that there was a positive relationship between user involvement and project performance of road projects in KeNHA. The study focused on road projects while this study will focus on medical equipment projects within Nairobi County thus a different results. Despite this huge challenge, there has been few studies conducted to investigate stakeholders’ participation in MES project in Kenya. The study therefore sought to establish the effects that stakeholders have on the performance of Managed Equipment Services Project in Nairobi County, Kenya.

1.3 Objectives of the Study

The general objective of the study was to determine the effect of stakeholders’ participation on the performance of managed equipment services project in Nairobi County, Kenya. Specific objectives were; to establish the effect of stakeholder participation in project identification of Managed Equipment Services project performance in Nairobi County, Kenya, establish the effect of stakeholder participation in project planning of Managed Equipment Services project performance, determine the effect of stakeholder participation in project implementation of Managed Equipment Services project performance and examine the effect of stakeholder participation in project monitoring and evaluation of Managed Equipment Services project performance in Nairobi County, Kenya.

II. Theoretical Review

2.2.1 Stakeholders’ Theory

The theory was developed by Ian Mitroff in 1983, and it was detailed in his book “Stakeholders of the Organizational Mind”. Stakeholders are those people/groups who have an impact in or claim on the firm (Freeman, 2008), they can be categorized into two: primary and secondary. Primary stakeholders are those stakeholders who are directly affected or themselves directly affect a project, activity/operation. The stakeholders’ theory is vital in understanding the project and its environment (Oakley, 2011). It broadens the management vision beyond the profit maximization aspect of the project (Mansuri & Rao, 2004) and stakeholders’ identified in input-output models of the project to further include the interest of non-stock holding groups. According to Freeman (2008), managerial constraints have affected project performance in that they insist on the project being run in the interest of the stockholders. In a project like MES, it is paramount to
construct stakeholders’ analysis. This aids in ensuring that the key stakeholders are satisfied to prevent failures of strategies and policies of the project (Lewis 1991). According to Sequeira and Warner (2007), identification and analysis of stakeholders are key concepts and principles of stakeholders’ engagement since they facilitate in institutional and policy reform process by incorporating the needs of those who have interests in reforms being considered thereby enhancing accounting processes.

2.2.2 Theory of Reasoned Action

Ajzen and Fishbein developed the theory of reasoned action (TRA) in 1967 to connect stakeholders’ involvement in project performance. In 1980, the theory was used to study human behaviour. It states that human beings will engage in certain behaviours with rationality of the understanding from the information provided to them (Yulia, 2005). According to Young (2006), behaviour interactions are immediate antecedents to behaviour and the more convinced a person intentions to participate in certain behaviours, the more the expectations of becoming successful. Intentions are as a result of having information that behavioural intentions are highly preceded by attitude. This is negative or positive belief on individuals on indulging in certain behaviours (Young 2006). This theory can be used in understanding the community involvement with the assumption that the community will consider the impacts that their participation will create before engaging in any behaviour. Therefore, the theory can be used in the engagement of different stakeholders in any project.

2.2.3 The Theory of Performance (ToP).

The theory of performance was developed by Don Elger in the year 2000. The theory relates to six foundational concepts and forms a framework that can be used to explain performance as well as performance improvements. To perform is to produce valued results. Developing performance is a journey and not a one-day event. The level of performance depends on the context, the level of knowledge, level of skills, level of identity, personal factors and fixed factors (Elger, 2009). The performance of a system, for example an entertainment system or a school depends on components of the system and the interactions between the components. This theory is important to the study since it will be used to understand the interactions between the key stakeholders in the MES projects and how those interactions affect project performance.

2.3 Empirical Literature

2.3.1 Stakeholders’ Participation in Project Identification and Project Performance

Maina (2018) study on stakeholder management and project performance of open air market project in Nyeri County, Kenya, used descriptive and exploratory research with a sample size of 55 to carry out the study. Cluster sampling was used to achieve sample representation. Expert opinion, pre-testing and Cronbach’s alpha were used to improve study validity and reliability. Data was collected using questionnaire with respondents being vendors, project staff, suppliers, contractors, general public and local authorities. Quantitative and qualitative methods were used in data analysis. The study reported that stakeholder expectations were identified to some extent before the project commissioning. They also noted that research was conducted before the project began. The study made a conclusion that stakeholders’ expectations should be identified during preliminary stages in an open air market project. This should be done during feasibility study and documented before commencement of the project to increase project performance. The study used a sample size of 55, this study increased the sample size to 60 and was done in Nairobi County with stakeholders from medical field.

Wamugu and Ogollah (2017) did a study on the role of stakeholder participation on the performance of constituency development fund projects in Mathira East constituency in Kenya using descriptive research design with a population consisting of members of constituency development fund committee. Proportionate random sampling was used to determine a sample of 85 whereas, simple random sampling was used to identify respondents. Secondary data was collected using CDF performance reports, journals, internet and other materials relevant to the study variables. Descriptive and inferential statistics were used in data analysis. SPSS and MS Excel assisted in data analysis. The study found that stakeholder involvement at the initiation stage was positive and significantly affecting CDF projects in Mathira East Constituency. The study concluded that stakeholders’ involvement at the initiation stage was important as stakeholders can have the highest effects which also tends to diminish as the project progresses. The study focused on Mathira CDF fund projects, this study focused on medical equipment projects in Nairobi County.

2.3.2 Stakeholders’ Participation in Project Planning and Project Performance

Sulemana (2018) carried out a case study on the assessment of stakeholder participation in monitoring and evaluation of district assembly projects and programs in Savelugu-Nanton Municipality Assembly, Ghana. The study used both qualitative and quantitative using semi structured interview and questionnaire to collect data from 196 respondents. Purposive sampling was used to identify respondents for the interview while simple random sampling was used in quantitative studies. Descriptive and inferential statistics were used in data
analysis. The study found that stakeholder participation in planning stage was considered good. The study focused on Ghana public projects whereas this study considered medical equipment projects in Kenya being a different environment, had different results.

A study by Ruwa (2016) on the effects of stakeholder participation on the performance of donor funded projects, case of Kinango integrated food security and livelihood project in Kwale used descriptive design targeting a population of 430 drawn from Safaricom M-pesa Foundation Academy, Kwale County government and Kenya Red Cross to carry out the study. Simple random sampling was used to select a sample of 70 that consisted of project beneficiaries. Purposive sampling was then used to identify respondents. Questionnaire was used in data collection. Pilot study was done to improve study validity. Descriptive, correlation and regression were used in data analysis. The study established that stakeholder involvement in need analysis, finding solutions and identifying project helped in increasing project’s acceptability. However, the study found that when stakeholders were involved in planning, there was negative project performance. The study focused on food security projects within Kwale whereas this project focused on medical projects within Nairobi County.

2.3.3 Stakeholders’ Participation in Project Implementation and Project Performance

Orimba, Mungai and Awiti (2018) study on stakeholder participation in the project cycle on performance of end child marriage project in Homabay County, Kenya used descriptive design to carry out the study. The population consisted of staff from 51 civil society organizations and community based organizations. The study used a sample size of 113 adopted from Sekeran sample determination. Simple random sampling was used to identify respondents. Analysis was done using descriptive and inferential methods. SPSS assisted in data analysis. Presentation was achieved through frequencies, mean, standard deviation, tables and percentages. The study found that stakeholders were not involved in the planning workshop of the activities that were to be implemented. The study also noted a strong correlation between stakeholder involvement in implementation and project performance with a conclusion that there was no proper engagement of stakeholders in the implementation of end child marriage project in Homabay County. The study focused on civil society and community based organization whereas, this study worked with medical equipment stakeholders in Nairobi County.

2.3.4 Stakeholders’ Participation in Project Monitoring and Evaluation and Project Performance.

Gitamo (2018) study on project management implementation practice in provision of reproductive health services in selected health facilities in Nairobi County used descriptive study with a sample size of 26 derived from Nairobi Women Hospital and Family Health Options facilities in Nairobi County. Census study was used due to the small number of population. Structured Likert scale questionnaire was used in data collection. Pilot study was used to validate the questionnaire by collecting data from 5 project staff to help improve the study instrument. Content analysis assisted in qualitative data analysis. Descriptive, correlation and regression was also used in data analysis with assistance from SPSS software. Presentation was through tables, frequencies, charts and percentages. The study found that monitoring had no significant effect on reproductive health service provision of hospital in Nairobi County. The study used a small sample of 26. This study raised the sample size by using 60 respondents.

Njeru (2018) did a study on the effects of medical camp projects in hospitals in Kenya: A case of Embu North Sub-County. The study adopted cross-sectional method with a target population of 1225. Proportionate random sampling was used to generate the study sample. Questionnaire and interview assisted in data collection. Analysis was done using both quantitative and qualitative with the aid of SPSS software. The study found that stakeholders were adequately involved in monitoring and evaluation. The study focused on medical camp projects whereas, this study carried out a study on medical equipment projects within Nairobi County.
2.5 Conceptual Framework

Figure 2.1 Conceptual framework

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Dependent variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stakeholders Participation</td>
<td>Project Performance</td>
</tr>
<tr>
<td>Project identification</td>
<td>• Less time in service delivery.</td>
</tr>
<tr>
<td>• Need analysis</td>
<td></td>
</tr>
<tr>
<td>• Reviewing the current operations</td>
<td></td>
</tr>
<tr>
<td>• Financial analysis</td>
<td></td>
</tr>
<tr>
<td>Project planning</td>
<td>• Low cost of services</td>
</tr>
<tr>
<td>• Estimating the required resources</td>
<td></td>
</tr>
<tr>
<td>• Identifying activities needed to be done to complete the project</td>
<td></td>
</tr>
<tr>
<td>• Risk planning</td>
<td></td>
</tr>
<tr>
<td>Project implementation</td>
<td>• High quality of services</td>
</tr>
<tr>
<td>• Mobilizing resources</td>
<td></td>
</tr>
<tr>
<td>• Updating risks</td>
<td></td>
</tr>
<tr>
<td>• Performing activities in line with the project plan</td>
<td></td>
</tr>
<tr>
<td>Project monitoring and Evaluation</td>
<td>• Reduced mortality</td>
</tr>
<tr>
<td>• Measuring on-going activities</td>
<td></td>
</tr>
<tr>
<td>• Assessing performance of the project continually</td>
<td></td>
</tr>
<tr>
<td>• Feedback generation</td>
<td></td>
</tr>
</tbody>
</table>

Source: Research (2020)

III. Methodology

3.1 Research Design and Data Collection

Descriptive cross-sectional survey was used in the study. According to Mugenda and Mugenda (2003), a descriptive research design enables the researcher to summarize and organize data in an effective and a meaningful manner. The design was adopted since it was found to be very effective in finding out stakeholders’ participation and performance on managed equipment services.

The study targeted 150 heads of different departments and senior managers from Mbagathi Hospital, Mama Lucy Kibaki Hospital, Mathare Hospital and Kenyatta National Hospital. The study settled on the four hospitals since they were the ones that used MES projects in Nairobi County. Probability sampling technique was used. According to Dooley (2007), a sample size of between 10 percentage and 40 percentage is considered adequate for a detailed study. Stratified proportionate random sampling was employed to select the sample. 40 percentage of respondents were sampled from each category. A total sample of 60 respondents was picked that was distributed proportionately in each hospital. The study employed primary data which was collected through self-structured questionnaire given to the heads of departments and the senior managers from the selected sample. The study used questionnaires since they were convenient, easy to answer, time saving, and they provided detailed information. The questionnaire allowed the researcher to collect the required quantitative data for the research. The questionnaire consisted of main parts: part A consisted of background review; part B of stakeholders’ involvement and part C on project performance.

To ensure that the data collected was valid, a pilot test was carried out in Thika Level 5 hospital in Kiambu County, on 10 respondents and then the necessary adjustments were made to ensure that the instrument measured what it was supposed to measure. From the pilot study, it was discovered that the questionnaire was easy to answer and some questions were shortened to make sure the filling of the questionnaire did not take long.
Validity of a research instrument was improved through expert judgment (Gall & Borg 1996). According to Mugenda and Mugenda (1999), validity is the accuracy and the meaningfulness of the inferences, which are based on research results. The researcher prepared the questionnaire clearly in such a way that the respondents could interpret and respond to the questions. The questionnaires were structured in line with the four stages of the project, identification, planning and implementation, and monitoring and evaluation in order to determine stakeholders’ involvement in each stage. The validity of the questionnaires was determined through the assistance and the expertise opinion of the supervisor.

Reliability in a research indicates the stability and the consistency of the data collection instruments (Mugenda and Mugenda 1999). Hilton et al (2004) provided a cut-off point of reliability where alpha values with (0.90 and above) are considered excellent, (0.70-0.90) are deemed high while (0.50-0.70) are considered moderate (as cited in Taherdoost, 2016). Internal consistency of the data collected was tested using Cronbach’s alpha (Matiangi, Makewa and Role, 2016). Self-administered questionnaire was given to participants by dropping at the respective hospitals and collected at an agreed time. Follow-up was done to ensure increased response rate. One research assistant helped with the follow-up.

3.2 Data Analysis and Presentation
After data collection, processing was done by way of editing to detect errors and omissions where corrections were made to ensure accuracy and consistency. Coding was then done by assigning numbers for easy analysis. Classification ensured the arrangement of data into groups and classes according to their similar characteristics. Tabulation was used to prepare data for further analysis. Descriptive statistics were used to analyse quantitative data while content analysis was used to analyse qualitative data. The researcher used the descriptive statistics such as frequencies, mean, standard deviation and percentages with presentation made using tables, graphs and charts. The statistical package for social sciences (SPSS) and MS Excel was used to carry out analysis. Inferential statistics was applied in analysis where multiple regression and diagnostics tests: Normality, homoscedasticity, linearity and multicollinearity were used to determine the strength of the relationship and correlation between the independent variables. Further Pearson product moment correlation coefficient was used to determine the existence of the relationship and its direction between independent and dependent variables (Kothari, 2004).

3.3 Ethical Considerations
Ethical issues apply to all research approaches and to every stage of research that is, in the identification of the research problem, data collection, data analysis and interpretation, and in the writing and dissemination of the research (Creswell, 2009). This research used research permit, informed consents, acknowledge cited sources, authenticated reporting and confidentiality and anonymity of the respondents. The respondents were assured of their confidentiality that no one would be victimized for information he or she provided.

IV. Study Findings
4.2 Response Rate
The study sought to work with a sample of 60 drawn from four public hospitals’ senior managers and heads of department. The study received 45 completely filled forms while 15 were not returned giving a response rate of 75 percentages. The reliability of the study’s instrument indicated that stakeholder identification was reliable at 0.905, stakeholder planning was at 0.871, stakeholder implementation was at 0.887, stakeholder monitoring was at 0.924 while stakeholder performance was reliable at 0.460. Overall reliability was 0.809 which was considered reliable for data analysis. The study found that male respondents were slightly more at 51% while the female were 49%. This shows that both gender are well represented

4.3 MES Projects Completion
The study sought to find out the completion rate of MES projects where the finding full completion of MES projects at 58% and partial completion at 42%. The usefulness of the project to its stakeholders was at 60% where respondents noted that the MES project was very useful, 38% said that it was useful and 2% indicated that the MES project was not useful. From the findings, 98% respondents were in agreement that the project was useful.

4.4 Factors Affecting MES Projects Completion
The study sought to establish factors that hinder the completion of MES projects where respondents noted various issues that were affecting completion of MES project as follows; communication at 36%, training at 27%, inadequate manpower at 22%, government goodwill at 11%, politics at 2% while timeliness of delivery
at 2%. Communication was considered key as through it, stakeholders couldn’t get information of MES project required, their contribution in regards to patients’ needs and engagement with developers.

4.5 Descriptive Statistics

The study sought to find out the mean for the data set and response rate in each variable that was describing stakeholder project participation. The aggregate mean score for project identification was 4.42 indicating that the participation of stakeholders in project identification in the Likert scale was 4 which is minimal involvement. On stakeholder project planning, the aggregate mean score was 3.99 which when rounded off is 4 indicating minimal stakeholder involvement in the Likert scale. On stakeholder project implementation, the study found an aggregate mean of 2.7 with a standard deviation of 1.13. This means that stakeholders were involved in project implementation to a great extent. Project monitoring had an aggregate mean score of 2.54 with a standard deviation of 1.23 signifying stakeholder involvement to a great extent while MES project performance recorded aggregate mean score of 1.61 with a standard deviation of 0.889 indicating that there was a very great extent of project performance.

4.6 Correlation Analysis

The study sought to find out if there is any relationship between stakeholder participation and performance of medical managed equipment services project in Nairobi County. The study used Karl Pearson correlation coefficient to quantify the degree and direction of the relationship between the study variables. The value of r could be zero to indicate no relationship, negative or positive depending with the direction of relationship, (Zaid, 2012). Table 4.9 provides the findings of the relationship between the two study variables.

<table>
<thead>
<tr>
<th>Table 4.1: Pearson’s Correlation Coefficient.</th>
</tr>
</thead>
<tbody>
<tr>
<td>MES Performance</td>
</tr>
<tr>
<td>Project Identification</td>
</tr>
<tr>
<td>Pearson Correlation</td>
</tr>
<tr>
<td>MES Performance</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
</tr>
<tr>
<td>Project Identification</td>
</tr>
<tr>
<td>-2.26</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
</tr>
<tr>
<td>Project Implementation</td>
</tr>
<tr>
<td>.128</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
</tr>
<tr>
<td>Project Monitoring</td>
</tr>
<tr>
<td>.295**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
</tr>
<tr>
<td>N</td>
</tr>
</tbody>
</table>

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

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

Source: Survey Data (2020)

From Table 4.1, the study found that all the four variables of stakeholder participation were related with project performance in Nairobi County where stakeholder project identification had a positive weak correlation at (r=0.031, p-value 0.838), project planning had a negative correlation (r= -0.226, p-value 0.136), project implementation had a positive correlation (r=0.128, p-value 0.404) and project monitoring had a positive
(r=0.295, p-value 0.049). Only project monitoring had a p value ≤0.05 meaning that it was different from 0 indication that there was a significant relationship between project monitoring and project performance.

4.7 Model Summary-Stakeholder Participation and MES Project Performance
The study used multiple regression analysis to determine the best fit line where the findings were presented in Table 4.2.

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.530</td>
<td>.281</td>
<td>.209</td>
<td>.54601</td>
</tr>
</tbody>
</table>

Source: Survey Data (2020)

From Table 4.2, R = 0.530 is a correlation coefficient indicating the strength of the relationship between stakeholder project participation and MES project performance. R square of 0.281 indicated that 28.1% of stakeholder project participation accounted for MES project performance. The other 71.9% factors were outside the study objective.

4.8 ANOVA
The study performed ANOVA analysis to determine how the model predicts the dependent variable. Table 4.11 provides the results.

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Regression</td>
<td>4.650</td>
<td>4</td>
<td>1.162</td>
<td>3.899</td>
<td>.009</td>
</tr>
<tr>
<td>Residual</td>
<td>11.925</td>
<td>40</td>
<td>.298</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>16.575</td>
<td>44</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Survey Data (2020)

From Table 4.3, the study found that stakeholder project participation was significantly related with MES project performance. This is evident from the (p = 0.006) which was as per the required level of p value ≤ 0.05

4.9 Regression Coefficients
The study sought to find out the effect of stakeholder participation on MES project performance. Table 4.4 provided the findings.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
<th>95.0% Confidence Interval for B</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>1.581</td>
<td>.415</td>
<td>3.811</td>
<td>.000</td>
<td>.743 to 2.419</td>
<td>Tolerance: .474 VIF: 2.112</td>
</tr>
<tr>
<td>Stakeholder Identification</td>
<td>.228</td>
<td>.129</td>
<td>.344</td>
<td>.085</td>
<td>-0.033 to .490</td>
<td></td>
</tr>
<tr>
<td>Stakeholder Planning</td>
<td>-.380</td>
<td>.120</td>
<td>-.629</td>
<td>.003</td>
<td>-.623 to -.137</td>
<td></td>
</tr>
<tr>
<td>Stakeholder Implementation</td>
<td>-.036</td>
<td>.116</td>
<td>-.057</td>
<td>.585</td>
<td>-.271 to .199</td>
<td></td>
</tr>
<tr>
<td>Stakeholder monitoring</td>
<td>.251</td>
<td>.102</td>
<td>.457</td>
<td>.018</td>
<td>.045 to .457</td>
<td></td>
</tr>
</tbody>
</table>

Source: Survey (2020)

The regression model that was used in the analysis was thus:
MES Project Performance = 1.581 + 0.228Project Identification -380 Project Planning -0.36 Project implementation +0.251 Project Monitoring.

From Table 4.4, the variance inflation factor (VIF) was ≤5 indicating that all the independent variables were moderately correlated and within the required limit as they were not inflated hence fit for analysis. Further tolerance values for all the independent variables were above 0.10 which indicated no collinearity hence useful in analysis (Daoud, 2017). When all factors are held constant, MES project performance would increase by 1.581 while one unit increase of project identification would result into 0.228 MES project performance, one unit increase in project planning would lead to (0.380) increase MES project performance, a unit increase in
project implementation would lead to (0.036) increase in MES project performance while a unit increase in project monitoring would lead to 0.251 increase in MES project performance. However, two independent variables were not statistically significant where project identification was (0.085>0.05) and project implementation (0.758>0.05). The study therefore developed a revised model where project identification and implementation were not included in the model as there was no sufficient evidence to support their effect on MES project performance. The model was thus:

\[
\text{MES Project Performance} = 1.581 - 380 \text{ Project Planning} + 0.251 \text{ Project Monitoring}.
\]

4.6.5 Stakeholders’ Participation in Project Identification and Project Performance

The study sought to find out the effect of stakeholder project identification on MES project performance in Nairobi County. From Table 4.4, project identification (\(\beta=0.228, p=0.085>0.05\)). The findings indicated that project identification increased MES project performance by 0.228. The p value was however above 0.05 thus making the variable not significant to MES project performance. Stakeholder project identification also had a weak positive correlation with project performance. The study thus concluded that there was no sufficient evidence to prove that project identification affected MES project performance in Nairobi County. This nullifies Njogu (2016) study that indicated a significant influence of stakeholder project identification on project performance.

4.6.6 Stakeholders’ Participation in Project Planning and Project Performance

The study sought to find out the effects of stakeholder project planning of MES project in Nairobi County. From Table 4.4, project planning (\(\beta=-0.380, p=0.003<0.05\)). The findings indicated that when stakeholders participate in project planning, there was a negative effect by decreasing MES project performance. The p value was however below 0.05 thus making the variable significant to MES project performance. Nyabera (2015) supported the study findings by reporting a negative effect of stakeholder planning in project performance. The study also indicated that there was a negative correlation between stakeholders planning on project performance.

4.6.7 Stakeholders’ Participation in Project Implementation and Project Performance

The study sought to find out the influence of stakeholder project implementation of MES project in Nairobi County. From Table 4.4, project implementation (\(\beta=-0.036, p=0.758>0.05\)). The findings indicated that project implementation increased MES project performance negatively by (0.036). The p value was also above 0.05 thus making the variable not significant to MES project performance. There was also weak and insignificant positive relationship between stakeholder project implementation and project performance. The study thus concluded that there was no sufficient evidence to prove that project implementation affected MES project performance in Nairobi County. Gikombi and Njoroge (2018) found a significant relationship between stakeholder participation in implementation and project performance thus disconfirming the study.

4.6.8 Stakeholders’ Participation in Project Monitoring and Project Performance

The study sought to find out the effects of stakeholder project monitoring of MES project performance in Nairobi County. From Table 4.4, project monitoring (\(\beta=0.251, p=0.018<0.05\)). The findings indicated that project monitoring increased MES project performance by 0.251. The p value was below 0.05 thus making the variable significant to MES project performance. The correlation analysis indicated a positive relationship with project performance. The study thus concluded that there was sufficient evidence to prove that project monitoring affected MES project performance in Nairobi County. This study disconfirmed Gitamo (2018) study having used a sample size of 26, reported no significant effect on stakeholder monitoring on project performance.

V. Conclusion

Professional qualification increases expertise and skills needed in project implementation. MES project is useful to stakeholders. Communication, training and inadequate personnel affect project performance. MES project affects patients more than the employees where it has reduced mortality rate.

Stakeholders are minimally involved in project identification and there is no effect of stakeholder project identification on the MES project performance. There is minimal participation of stakeholders in MES project planning. When stakeholders participate in project planning there is a positive effect on project performance. Stakeholders are greatly involved in project implementation. There is no significant effect of stakeholder implementation on project performance. Stakeholders are greatly involved in project monitoring. There is a positive and significance effect of stakeholder participation in monitoring on project performance.
5.1 Recommendations
The management should enhance Internal and external communication channels to increase awareness and pass information to the staff involved in MES projects and also the patients to become aware of the MES projects to reduce mortality and cost of medical expenses. Provide training to the stakeholders to equip them with the skills needed to work with the MES projects. Build and enhance human capital to reduce staff shortage for the increased performance of MES project. Involve the stakeholder in the entire process for successful completion of the MES projects.

5.2 Suggestion for Further Studies
The study recommends the following for further study; The study was limited to four facilities within Nairobi County; KNH, Mbagathi, Mathare and Mama Lucy Hospital. Future study should be done in other institutions outside Nairobi County to find out the stakeholder effect on MES project performance. The study also used a small sample of 60. Future study can be done with a larger sample than the current study sample. More studies can be done on other factors that effects MES project performance as the current study found that 28.1% variation in stakeholder affects MES performance.

References